Handbook of
ADOLESCENT DEVELOPMENT RESEARCH *and* ITS IMPACT *on* GLOBAL POLICY

Published in partnership with UNICEF Office of Research Innocenti

Edited by

JENNIFER E. LANSFORD
PRERNA BANATI

OXFORD

Handbook of Adolescent Development Research and Its Impact on Global Policy

Handbook of Adolescent Development Research and Its Impact on Global Policy

Edited by
Jennifer E. Lansford
and
Prerna Banati

OXFORD
UNIVERSITY PRESS

OXFORD
UNIVERSITY PRESS

The content of this book does not reflect the official positions of UNICEF or SRCD.

{ CONTENTS }

SECTION 3   Risks and Opportunities

SECTION 4   Interventions and Policies

{ FOREWORD }

Young people have an important voice, and this book would not be complete without their opinions and thoughts.

This foreword presents the words of young people attending the United World College of the Adriatic (UWCAD). UWCAD is a part of the United World Colleges, a global educational movement that brings together students from across the globe with the aim to foster peace, international understanding, and a sustainable future. The school is attended by around 200 students aged between 16 and 19, mostly on full scholarship, from around 90 countries.

Our young contributors took up the challenge to write their responses to the following questions:

- If you could ask a senior politician in your country for attention to one challenge affecting young people, what would it be?
- What could international organizations, governments, and other decision-makers do to help the situation for adolescents in your country?
- What research and information are still needed to better understand adolescents today?
- What would you like adults working on issues for young people to know about this topic?

I ask for attention to the ones whose destinies are pre-determined from the day that they were born. We don't choose to be born in the slums, we don't choose to be born in a community where every lane seems like a thread of the perpetuating loom of poverty. Our lanes stink, our women are beaten up, in schools we have more sticks to be beaten up with than teachers to teach. We are only a part of the adolescent generation of my country but we are huge. Which is why, we deserve to be heard. We need more spaces to learn and keep repeating to ourselves that our community is not the end. It is possible to achieve what we dream of without people telling us that we can't. Adults—government leaders, policy makers, educators, social workers, activists this is an open invitation. Come, observe, understand, study and examine the causes behind why more than half of the kids in my community don't make it to high school, why their annual family income remains the same from generation to generation. Come and help us recreate our own loom where we shall thread our own stories in new colors of dreams and hope.

PRIYANKA, *age 17, India*

The Canadian Mental Health Association estimates that 3.2 million Canadian youth ages 12–19 are at risk for developing depression. Currently only 1/5 of Canadian children requiring mental health services receive them. First Nations youth are five times more likely to commit suicide than non-Aboriginal youth, and Inuit youth have a suicide rate eleven times the national average. This epidemic requires drastic and immediate action from the government. Why might one feel comfortable sharing a diagnosis like diabetes yet suppress sharing a diagnosis for depression? Because there is still a crushing stigma surrounding mental health. Conversations and education are not happening enough and they are not happening early enough. As I sit in a complicated math lesson my classmates dejectedly ask: "when am I ever going to use this?" Now I fully support the importance of math but let's give students a class teaching them skills that they can apply that very afternoon. Let's implement nation-wide mandatory mental health education courses in schools encompassing where to access resources, recognizing signs of mental illness, how to support others with mental illness—something holistic, researched and comprehensive. It could be customized for students from elementary to high school, reflecting relevant and appropriate issues at each level to empower students to better their mental health. For Aboriginal students, it should be in partnership with tribes as to not perpetuate the harmful colonialist attitudes which played a role in structuring the conditions, like residential schools, that contributed to this crisis in the first place.

                                                                    STEPHANIE, *age 17, Canada*

Having more than 50% of all Mexicans under eighteen suffering from poverty has made it impossible to overcome the vicious cycle that starts with economic deficiency, then relates to mediocre nutrition and the underdevelopment of the brain, incrementing the already low rate of education in the country, leading to more dangerous situations for teenagers (e.g., teenage pregnancy, involvement in criminal organizations, and abuse of adolescent immigrants); provoking thousands of deaths each year, and increasing the population and the violence in poor social strata. On the other hand, Mexico has a deep-rooted problem of corrupt management of the country's economic resources by the government, which pays its public servants almost as much as first world countries do, and funds its political parties disregarding how much votes they generate.

I would urge the international community to pressure the Mexican congress to establish a salary for the public servants that is proportionate to the GDP and the minimum salary of the country, and to support initiatives like congressman Manuel Clouthier's "#SinVotoNoHayDinero", which would save more than $2,000,000,000 pesos each year by making the number of valid votes in elections the foundation of the total annual stock, instead of the number of registered electors. All savings would then have to be directed to social development programs that strengthen education, empower women, and provide

information about safe sexual activity and access to contraceptive methods. Tackling corruption is the most urgent step to take if there is to be a change in the Mexican adolescents' reality.

PAULINA, *age 18, Mexico*

If there was one thing I wish politicians and policy makers would focus more on in Norway, it would be mental health. High social and academic pressure has increased stress and mental health related issues over the past years, and many teenagers at home suffer from eating disorders, anxiety and depression. Mental health issues are still considered taboo in Norwegian society, and people shy away from talking about it. I have had many friends who have needed to see a psychiatrist, but disguised it as simply being sick or having to see the dentist. If the stigma is not addressed, and the support is not enhanced, a proportion of the young population will be left without help to diagnose and overcome mental health issues. I think politicians need to prioritize mental health, especially for young people to build a solid foundation for the future. This could be resolved by increasing the number of available school nurses, psychiatrists and doctors specializing in mental health. However, many of the issues are based in a mindset that mental health issues mean weakness, or failure. This means that becoming mentally ill can trap a lot of young people in a vicious cycle of perceived failure. Therefore, I hope policy makers can focus particularly on mild and moderate mental issues to prevent further repercussions in contribution to society in the future.

ELIZABETH, *age 19, Norway*

In my opinion, education is the most important challenge young people (have to) face nowadays. There are two extremes, adolescents having to take decisions about their later future at a far too young age and not pushing young people enough to do what they actually want to do later in life.

In order for the international community to solve, or first better this issue, it has to be ensured that every child on our planet is not deprived of its intrinsic rights. As conflicts and wars are part of many children's lives, tackling this issue can be a difficult one, though it is from utmost importance to ensure the upholding of children's rights, as they are the generations of tomorrow, which ultimately have to live with the burden that is caused right in this particular moment.

On the other hand, children and adolescents in so-called "Western countries" are often, in my opinion, not really able to ultimately decide on their own what they really want to do later on in their lives. Therefore, the international community should encourage adolescents in their passions and desires to ensure content and satisfied future generations; this will ultimately also benefit the international community on a large scale, as satisfaction in their personal lives will result in fewer conflicts amongst citizens.

This leads us to the mission statement of the United World Colleges that says, "UWC makes Education a force to unite people, nations and cultures for peace and a sustainable future."

ADAM, *age 17, Austria*

Approximately 27% of the Peruvian population is young (between 15 and 29 years old) and, every day, many have to face the tough challenges arising from living in a Latin American developing country. Unfortunately, Peru is affected by informality, violence, corruption, discrimination, and very restricted access to suitable health and education. For young people, lack of public safety, early pregnancy and restricted job opportunities are also main concerns.

Despite a vast legal framework that theoretically is oriented to improve quality of life for Peruvians (e.g., public policies to punish discrimination and promote social insertion of traditionally excluded sectors) and relevant efforts to increase infrastructure (for health, education and other areas), none of these actions has been enough. The main problem in Peru is the endemic lack of enforcement of legal rules and, consequently, the weak implementation of new policies because of limited resources available for authorities or continuation of corrupt practices.

In this context, young Peruvians' principal claim is: "Grant us the same opportunities to achieve our personal development within a safe, predictable and equal environment." We do not want privileges to avoid mandatory provisions or receive special treatments; we demand similar conditions for our individual growing according to our expectations, in order to be accurately empowered and with self-confidence to build our future. To obtain this purpose, we require collaboration of authorities, organized civil institutions, private companies and, obviously, our personal effort to assume and comply with our responsibility.

MARÍA, *age 18, Peru*

When we talk about development in a country, one of the main facts that we need to keep in mind is that kids need food to grow up.

In the Western world, the industrialization of the food production has for sure helped in achieving higher health standards that lead to a general increase in living conditions. It was one of the keys that has let Europe escape from a widely diffused child mortality.

However, industrialized food has become, in the recent years, a synonym for "lack of health": the greed of producers acted against the benefit of the poorest parts of the population: too often poor kids in developed countries, such as the US, cannot afford expensive healthy food and they have to rely on cheap low-quality products.

In non-urban contexts, there is another problem: there is not enough food for everyone, and that food is not subject to health standards. This is the case of

sub-Saharan Africa, where there is a lack of a big and controlled food industry. Moreover, often corporate implants tend to be unsustainable and polluting, thus failing in ultimately achieving welfare for everyone.

One of the targets for any organization that aims to help youngsters around the world should be providing good quality food for everyone, with respect of the environment and the local traditions.

NICCOLÒ, *age 18, Italy*

I am writing to you with a major concern. I feel like the Belgian government doesn't address an important issue properly, namely poverty. In Belgium, 18.8% of the kids are born in a family with an income under the poverty threshold (1085€/month). That is almost two babies out of ten. Children experiencing poverty are mostly either from big (20%) or single-parent (36.5%) families. Children whose parents don't have a university degree (53.8%) or are immigrants (37.2%), are especially targeted too. One of the main causes of this poverty is the lack of income during pregnancy and most of all, after the child-birth, which is a vulnerable period for women. Since they do not get access to work, their socio-economic situation degrades. Throughout the whole country, 5% of women have to call for social aid just after giving birth. This indicates a considerable dependency. Despite this financial help, poverty stays alive in our society.

Another problem is that children living in poverty can bear the consequences for their whole life. Often, they do not get access to proper health care and are highly subject to unemployment, which is perceivable in the unemployment rate for the Belgian youth (-25), being 19.2%. Poverty is a vicious circle. In a country like ours, these numbers seem very unfair when looking at the GNP (454 787 million dollars). Thus, I would like to encourage you to spend more money and time to eradicate poverty, as it is severely undermining the pros-perity of our country. The future of Belgium is its youth, and it is intolerable that such a great percentage of this youth lives in poverty. You are the daddy of all Belgian children, please take this matter into consideration. Thank you.

LÉONE, *age 16, Belgium*

One of the challenges that many adolescents face in Italy is the discrimination against homosexuals. Although this issue may seem as one that concerns only a part of the young population, it actually affects the whole society. In Italy the attitude towards homosexuals is really diverse: while in May 2016 a law has been passed that allows civil partnerships between same-sex couples, according to a survey of 2012, almost half of the people interviewed would not agree with an elementary school teacher being homosexual (41.4%) and the homosexuals questioned felt discriminated against almost the double compared to heterosexuals. Although young people are the most open-minded in the society, there are still cases of discrimination by adolescents; this is shown by the fact

that in the recent past a number of Italian youngsters have committed suicide after being victimised by their friends for their homosexuality. Discrimination is a form of violence that goes from verbal insults to cyber-bullying and it is often rooted in ignorance and lack of knowledge. For this reason we need a project of education that would teach the new generations to accept diversity since young age, with experts and trained teachers answering questions and dispelling myths connected with gender issues, sexuality and homosexuality. This way we would help our adolescents now and we would set the ground for a more aware and responsible society of the future.

DOMITILLA, *age 18, Italy*

{ ABOUT THE EDITORS }

Jennifer E. Lansford, PhD, is a research professor at the Sanford School of Public Policy and faculty fellow of the Center for Child and Family Policy at Duke University. A developmental psychologist by training, Lansford leads an international study of parenting and child development in nine countries that is currently in its 10th annual year of data collection. Her research focuses on the development of aggression and other behavior problems in diverse cultural contexts, with an emphasis on how family and peer contexts contribute to or protect against these outcomes. She has consulted with the United Nations Children's Fund (UNICEF) on standards for parenting programs in a number of countries.

Prerna Banati, PhD, is chief of programs at UNICEF's Office of Research—Innocenti. Her research focuses on the social and structural forces that are among the most fundamental determinants of poor well-being among children. She was a Takemi Fellow in the Department of Global Health and Population at Harvard University and has previously worked at the Global Fund to fight AIDS, TB, and Malaria and at the World Health Organization (WHO). Before WHO, she was based in South Africa, leading research on community HIV prevention, and has published in the fields of HIV prevention, reproductive health, health systems, and financing.

{ CONTRIBUTORS }

Esther F. Akinsola, University of Lagos, Nigeria

Prerna Banati, UNICEF Office of Research Innocenti, Italy

Milena Batanova, Tufts University, USA

Theresa S. Betancourt, Boston College, USA

Marc H. Bornstein, Eunice Kennedy Shriver National Institute of Child Health and Human Development, USA

Matilda Branson, *Girls Not Brides*, UK

Sara Brunelle, University of British Columbia, Canada

Mariana Brussoni, University of British Columbia, Canada

Elena Camilletti, UNICEF Office of Research Innocenti, Italy

Hoi Shan Cheung, Yale–National University of Singapore, Singapore

Emily Coles, Harvard University, USA

Katharine Collet, Harvard University, USA

Colette Daiute, City University of New York, USA

Elizabeth Dettori, UNICEF, USA

Elizabeth Dowling, Tufts University, USA

Doran C. French, Purdue University, USA

G. John Geldhof, Oregon State University, USA

Steinunn Gestsdóttir, University of Iceland, Iceland

Geeta Rao Gupta, United Nations Foundation, USA

Susan Herrington, University of British Columbia, Canada

Miriam Hollarek, Vrije Universiteit, The Netherlands

Andrea M. Hussong, University of North Carolina at Chapel Hill, USA

Musu Jambai, Caritas, Sierra Leone

Pamela Ebstyne King, Fuller Theological Seminary, USA

Silvia H. Koller, Universidade Federal do Rio Grande do Sul, Brazil

Lydia Krabbendam, Vrije Universiteit, The Netherlands

Jennifer E. Lansford, Duke University, USA

Nikki C. Lee, Vrije Universiteit, The Netherlands

Jacqueline V. Lerner, Boston College, USA

Richard M. Lerner, Tufts University, USA

M. Kyle Matsuba, Kwantlen Polytechnic University, Canada

Frosso Motti-Stefanidi, National and Kapodistrian University of Athens, Greece

Protap Mukherjee, Young Lives, India

George C. Patton, University of Melbourne and Murdoch Children's Research Institute, Australia

Anne C. Petersen, University of Michigan, USA

Audrey Pettifor, University of North Carolina at Chapel Hill, USA

Michael W. Pratt, Wilfrid Laurier University, Canada

Diane L. Putnick, Eunice Kennedy Shriver National Institute of Child Health and Human Development, USA

Marcela Raffaelli, University of Illinois at Urbana–Champaign, USA

Eugene C. Roehlkepartain, Search Institute, USA

Juliana Prates Santana, Universidade Federal da Bahia, Brazil

Susan M. Sawyer, University of Melbourne and Murdoch Children's Research Institute, Melbourne, Australia

Peter C. Scales, Search Institute, USA

Lorraine Sherr, University College London, UK

Alistair T. R. Sim, Compassion International, USA

Renu Singh, Young Lives, India

Ruth K. Smith, University of North Carolina at Chapel Hill, USA

Hamsa Subramaniam, University of North Carolina at Chapel Hill, USA

Lakshmi Sundaram, *Girls Not Brides*, UK

Jonathan M. Tirrell, Tufts University, USA

Ellen Travers, *Girls Not Brides*, UK

Suman Verma, Panjab University, India

Pamela Wridt, UNICEF, USA

Stephanie Zuilkowski, Florida State University, USA

Handbook of Adolescent Development Research and Its Impact on Global Policy

{ 1 }

Introduction: Adolescence in a Global Context

Prerna Banati and Jennifer E. Lansford

The Challenge of Adolescence

Although an aging world is a frequent preoccupation of economists, humanity as a whole is still young, with most people alive today under 30 (United Nations Population Fund [UNFPA], 2014). An estimated 1.8 billion adolescents are at the crossroads between childhood and the adult world, with 9 of 10 of these young people living in the developing world, more than half in urban areas (United Nations Children's Fund [UNICEF], 2011; UNFPA, 2014). In many settings, they are responsible breadwinners, caregivers in their families and communities, socially and politically engaged change agents, and sometimes parents themselves.

Arguably, today's challenges for adolescents are more complex than those of their parents. They are growing up within a stagnating world economy, where real household incomes are largely sloping downward. Fifteen to twenty-four year-olds form around one quarter of the world's working poor (UNICEF, 2011). Many young girls' unwaged contributions of work within the home or family enterprise—including taking care of siblings or performing domestic duties—are largely unquantified. Technology is predicted to become a driving force of economic growth and social development. Yet, investments in digital education are low, and key principles of protection of privacy and data remain underrespected (Organization for Economic Cooperation and Development [OECD], 2017).

Addressing these challenges requires collective action. The eight Millennium Development Goals (MDGs) spurred significant progress from 2000 to 2015. In the final report of the MDGs, UN Secretary General Ban Ki Moon reflected: "The global mobilization behind the Millennium Development Goals has produced the most successful anti-poverty movement in history" (United Nations, 2015, p. 3). The commitment, collectively agreed on by world leaders in 2000, spoke of "spar(ing) no effort to free our fellow men, women and children from the abject and dehumanizing conditions of extreme poverty." The translation of Sustainable

Development Goals (SDGs) into practical change strategies has enabled people across the world to improve their lives and their future prospects. Despite conflict and environmental threats, young children globally have benefitted from MDG successes. The number of out-of-school children of primary school age worldwide declined by almost half during the period 2000 to 2015, from 100 million to an estimated 57 million, with sub-Saharan Africa showing the best record of improvement; the global under-five mortality rate declined significantly over the same period, dropping from over 70 to 43 deaths per 1,000 live births (United Nations, 2015; UNICEF, 2015).

The value of the MDG framework was in galvanizing stakeholders around new and innovative partnerships motivated for change. The MDG era can be credited with showing how global collective action in partnership can be effectively designed, advocated, and implemented. The successor to the MDGs, the SDGs laid out in "The Road to Dignity by 2030: Ending Poverty, Transforming All Lives and Protecting the Planet" (United Nations, 2014) describes 17 ambitious goals, including ending poverty and ensuring well-being for all ages, inclusive and equitable education, gender equality and empowerment, decent work, reducing inequality within and among countries, and others (United Nations, 2015).

Following from MDG-focused investments in the early years, the SDG framework signals political momentum to promote adolescent development and adolescent rights. The children born at the start of the MDG period have now matured into adolescence. The implementation of the SDGs will affect their life chances, choices, and transitions to adulthood. The implementation of the MDGs left behind many challenges to be addressed. For example, in India, where school enrolment has increased significantly during the MDG period, education quality has declined (Young Lives, 2013). The SDGs are an important, as yet unrealized, instrument to cement the gains of the MDGs and ensure a more secure future for adolescents.

At the same time, scientific advances have contributed to an expanded evidence base on adolescents. This has provided not only better insight into the adolescent life but also new opportunities to improve it. Research has identified this period as a unique window of development and a profound period of social, psychological, economic, and biological transition. Children do not take a direct path to adulthood, and today more is known about the challenges faced and opportunities available during the adolescent period and how these shape life trajectories. Over the last 35 years, specialized journals addressing adolescent issues have been launched, including the *Journal of Adolescence*, the *Journal of Adolescent Research*, and the *Journal of Research on Adolescence*. Unfortunately, often this information is not being translated into evidence-based programming.

Despite a growth in scholarly literature, much is still disproportionately focused on adolescent experience in high-income Western contexts, and comparatively few empirical studies of young people growing up in non-Western nations

are published in English language journals devoted to the field of adolescent development (Arnett, 2008; Larson et al., 2009). Much scientific evidence developed in the global north lacks reflection on the diverse experiences of adolescents around the world, including in harsh situations of war, conflict, chronic stress, or malnutrition.

As the field of adolescent development research matures, the application of findings to interventions will face an important challenge of how to understand the complex relations between developmental biology and the environments in which adolescents live. Interdisciplinary research is needed to fill knowledge gaps, situate evidence from research within a larger body of science, and consider a range of biological, behavioral, socioeconomic, and contextual factors to build a broader and more inclusive understanding of developmental processes.

Defining Adolescence

There is no universal agreement on the nature of adolescence, when adulthood begins, or the values to ascribe to this period of life, although adolescence is often defined as the developmental period from the onset of puberty until the transition to adulthood as marked by marriage, parenthood, completion of formal education, financial independence from parents, or a combination of these milestones (approximately ages 10–20). Arguably a social construction, the initial widespread use of "adolescence" carried gender, race, and class connotations and implications: "The "adolescent boy" was to be managed and contained, while allowed to be "wild"; the "adolescent girl" was to be trained and domesticated (Morrow, 2015). In modern times, adolescence has largely had a bad reputation. Used interchangeably with "teenager," Western notions tend to describe a period of "storm and stress" (Hall, 1904), involving hormones, drama, unsafe experimentation, and irresponsibility. However, in many parts of the world, arriving at adolescence marks increasing responsibility—with many hurtling toward adulthood by entering the workforce, marriage, or parenthood. Adolescents in one country may be protected from economic or domestic responsibilities; in another, such responsibilities not only may be the norm, but also may be considered beneficial for both the adolescent and the family.

Adolescence, from the Latin *adolescere*, means "to grow to maturity" (Shute & Slee, 2015) and is usually associated with the teenage years or the second decade of life. The physical, psychological, and cultural expressions of adolescence can appear at different times in a young person's life, adding to confusion in applying narrow definitions to this period. The biological phenomena associated with adolescence are likely to be the most recognized, but encompass within the biology a number of domains, including neuroscientific, hormonal, and cognitive. The onset of puberty is considered the main marker of the initiation of the adolescent period. Physical and sexual maturation is accompanied by social and economic

independence, development of identity, the acquisition of skills needed to fulfill adult relationships and roles, and the capacity for abstract reasoning (World Health Organization [WHO], 2016). Arguably, the distinctive part of adolescence occurs at the interface of the child and society. During this period of life, children are persuasively influenced by the opportunities and risks provided by their context, culture, norms, and environment. Importantly, gender roles are solidified during this time, male and female responsibilities are assigned, and gender differences entrenched. Normative processes that construct adolescence as a rite of passage into adulthood will undeniably shape context-specific definitions.

There have been a number of conventional approaches to understanding adolescence by "stages," best exemplified by the early work of Piaget (1970). Many of the life stage approaches rely on specific (often European or North American) assumptions defining stages and transitions between them. Such constructions of adolescence have had a significant impact on frameworks for understanding and responding to adolescents. Implicit in such approaches is a somewhat prescribed and largely static description of the nature of each stage and an assumption of linear graduation between stages. Model deviations can be damaging. The rhetoric of "children left behind" can negatively characterize adolescents who have not followed prescribed trajectories and risk undermining their worth and dignity (Morrow, 2013).

Arguably, life stage models can be counterproductive and, rather than serving to provide useful concepts, can constrict scientific understanding of reality. In low-income countries, and especially in rural areas, despite increased school enrollment, children's work is still expected, and large numbers of children combine school and work. As such, Western normative assumptions—such as exclusivity of work and school—undermine the validity of these models in different cultural contexts. Furthermore, factors such as class, poverty, intergenerational interdependence, or power relations that are underpinned by economic structures and inequality shape social life through dynamic nonlinear processes. Increasingly, traditional linear sequences of social role transitions such as finishing school, getting a job, getting married, and having children are also less well defined (Eisenberg et al., 2015).

Heterogeneity of capacities within the second decade further complicates attempts at a universal definition. The notion of evolving capacities, first introduced in the Convention on the Rights of the Child (CRC) in 1990, advises that adolescents will require varying degrees of protection, participation, and opportunity for autonomous decision-making at different ages, in different contexts, and across different areas of decision-making. Depending on age, context and the decision under question, domains of evolving capacity might differ—including the capacity to understand available alternatives; express preferences; articulate concerns; exercise choice; assess potential for benefit, risk, and harm; understand consequences of different courses of action, how they will affect him or her, the risks involved, and the short- and long-term implications; as well as the ability to

represent a value base (Lansdown, 2005). Taking these differences into account when thinking about interventions will be critical for improving their impact. Across the different domains of adolescence (e.g., physical, neurological, emotional, and social) capabilities will vary, and benchmarks for presumed capacity will differ (e.g., sexual consent/medical consent; conscription/voting).

Despite the absence of a unifying global definition, on the whole, history tells us that adolescence now takes up a larger proportion of the life course than ever before. As a consequence of changing patterns of childhood, infectious disease, and the resulting lowering of pubertal age, as well as delayed transitions to marriage and parenthood, the period of life between early childhood and adulthood is expanding, placing adolescence more centrally in the creation of well-being and human capital than previously (Schlegel & Barry, 1991). Progress in poverty reduction, industrialization, and rapid urbanization are among a number of drivers that have been implicated in the extension of this period.

For the purposes of this book, adolescence is considered to take place during the second decade of life, between the ages of 10 and 19, and is understood as a unique part of childhood. Early and later adolescence may have different influences and necessitate different policy and program approaches to improve well-being.

Conceptualizing Adolescent Development

With the rise of scientific inquiry into adolescents, the number of conceptual models to understand them has grown. This section does not seek to describe these models exhaustively. Instead, we describe three complementary frames to conceptualize adolescent well-being, drawing from commonly employed models seen in the literature, with the goal of providing a foundation for the chapters that follow in this volume. In doing so, we present some limitations to current conceptual thinking on adolescents.

A LIFE COURSE PERSPECTIVE OF ADOLESCENCE

Life course approaches have emerged over the past 50 years across several disciplines, including neurobiology, child psychology, sociology, and population sciences. Early empiric evidence to support such an approach came from demographic longitudinal studies of children and their exposure to events, family, education, and work roles. Developmental psychology introduced notions of life stages and turning points, while sociology added concepts of evolving history, adaptation, and social conditions. Despite varying disciplinary origins, these fields have shaped a framework with many common features.

Life course analyses are driven by concepts such as life trajectories, transitions, events, and turning points (Elder, 1985; Settersten & Mayer, 1997). *Life trajectory* refers to the pathway of progression through the aging process (Elder, 1985;

Elder et al., 2003; Liefbroer & Dykstra, 2000). The individual life course is made up of many interdependent trajectories, such as work, family, and educational trajectories that encompass life events and transitions (Settersten & Mayer, 1997). Each transition influences the probability of the next occurring. An event is usually conceptualized as a relatively abrupt change, whereas a transition is usually conceptualized as a more gradual change that evolves over time. Transitions and events are always placed within a larger trajectory, and the trajectory gives them a clear meaning (Elder, 1985; Settersten & Mayer, 1997). Turning points denote a substantial change in the direction of one's life and can be determined either subjectively or objectively (Hareven, 2000; Settersten & Mayer, 1997). Critical periods are a phase within the life span during which there is a heightened sensitivity to exogenous stimuli. These periods are particularly conducive to programmatic interventions, and growing evidence indicates that critical periods exist beyond prenatal development into early childhood and even adolescence (such as substance abuse; see Chambers et al., 2003).

Three key points emerge from the literature on the life course that are particularly relevant for adolescence. First, circumstances experienced in one phase of life can have consequences for later phases. Evidence shows that early childhood experiences can predict adolescent outcomes. For example, low birthweight predicts depression in adolescent girls (Costello et al., 2007). Similarly, experiences during adolescence can predict later life outcomes. The work of Falconi et al. (2014) showed that early adolescence is a sensitive developmental period for males, with stressors between 10 and 14 years of age being related more strongly to a shorter life span than stressors experienced earlier in life or after age 15.

It is also important to note that later consequences might occur in different domains of life. For example, links between different aspects of children's development have been modeled in the Young Lives project, identifying children's height at age 12 as associated with cognitive outcomes during adolescence (Sanchez, 2013). Specifically, in Ethiopia, India, Peru, and Vietnam, an increase of 1 standard deviation in early height for age predicted an increase of cognitive skills by 6%–17% during adolescence (Sanchez, 2013). In addition, how children report feeling about themselves and their opportunities (psychosocial well-being) can relate to their later learning outcomes. Stunted or less healthy children may not achieve the same learning outcomes as their peers for many reasons—they might not go to school regularly, may start school later, or may learn less in school. Policy approaches to achieve success within one sector (education in this example) have a crucial interest in engaging beyond that sector (such as earlier health and nutrition) (Dornan, 2014).

Furthermore, the impact of stressors on an individual are cumulative, making it difficult for individuals to catch up once they fall behind. For example, in Vietnam 48% of those in the bottom quartile of math scores at age 12 had left school by age 15 (Rolleston et al., 2013), further limiting their life chances. Benefits in one age group can be derived from interventions in an earlier age group, with sustainable

improvement sometimes requiring multiple interventions. Longitudinal research also showed that gender differences emerge at particular points in time, interact with other forms of disadvantage, and accumulate. Disadvantage is transmitted intergenerationally, often through the educational or health status of the mother. Young people are particularly vulnerable to the impact of childhood and chronic poverty, which is often transmitted intergenerationally.

THE SOCIAL ECOLOGY OF ADOLESCENT DEVELOPMENT

Bronfenbrenner's bioecological model has compellingly illustrated the social ecology of the family as a context for human development (Bronfenbrenner, 1986, 2005; Bronfenbrenner & Crouter, 1983). The bioecological model of human development recognizes the importance of individual characteristics and relationships within the family, as well as those influencing the family unit from external sources. Through a number of well-developed examples, Bronfenbrenner described nested interactions—endogenous to the individual (adolescent), and interactions between the individual and family and between the family and peer groups, school, employment, and the community.

The emphasis in such a framework is placed on a multilevel, ecological model where micro-level actions are nested within broader macro contexts, appreciating the interplay of determinants operating in macro, meso-, and micro levels. As such, the framework must be dynamic across levels, operating multidirectionally. One can conceptualize the framework with three levels of influence. At the macro level, the importance is attributed to the context of society, including the broad set of structural and functional features that affect adolescents directly via mesolevel mediators. The macro level includes politics, history, economy, environment, social norms, values, and beliefs. At the mesolevel, institutions and policy processes, both public and private operating at community and national levels, constitute important dimensions. The mesolevel is at the interface of the macro-level contextual elements and outcomes at the individual (micro) level. This space represents a critical entry point for program and policy interventions to improve adolescent well-being. The micro level is the immediate interpersonal and individual contextual environment, which includes individual factors and interactions, including life histories.

Determinants of well-being manifest at different levels. For example, education and learning are particularly emphasized as important determinants of future livelihoods, and children's access to and individual performance in formal schooling is an important predictor of future success. At the mesolevel, the education system is an important institutional entry point for the delivery of programs to adolescents. Learning is also a key component of accelerating behavior change and shifting societal norms at the macro level.

Power has resonance across the framework, operating at all levels. Many notions of power and its role in shaping social hierarchies exist. The role of power

is recognized as a critical factor in the creation of societal inequities, operating at the macro and mesolevels, and has significant bearing on adolescent outcomes in the micro environment, such as in the case of interpersonal violence. In contrast, empowerment can also be a driver of positive change among adolescents.

Gender, closely linked to the distribution of power, is a normative social construct that has the ability to create systematic discrimination for girls and boys. Like power, gender is a strong determinant that operates across the framework. Girls and women are disproportionately affected, with limitations often placed on access to services, employment, and freedoms. Gender norms can be closely tied to cultural and religious practices and can give rise to intractable and deeply rooted forms of discrimination. The transition from childhood into adolescence is a particularly challenging and critical period for girls. Physical changes are often accompanied by body objectification from their social world, with implications for self-esteem, sense of self, and position as an individual. During adolescence, girls are at risk of losing confidence and optimism as they are pressured to submit to demands of adult femininity (Pipher, 1994). Concepts and labels of femininity as applied through critical feminist thought need to be brought to bear on the lives and experiences of girls to better understand how they become women. Examining the context of girls' lives from a feminist perspective can move beyond viewing girls and their experiences as a problem to contextualizing the vexed experience of growing up as a girl, particularly within patriarchal societies.

RIGHTS-BASED APPROACHES FOR ADOLESCENTS

Adolescent rights—the human rights of adolescents—include a range of key economic, social, cultural, and political entitlements that are transformational in the achievement of social justice. There is no single rights-based approach to development. However, human rights approaches share a number of common principles, including being based on the realization of normative standards, the recognition of the State as ultimate duty bearer (responsible for securing human rights); the availability of services, their accessibility, their acceptability and quality; participation; equality; nondiscrimination; and accountability. The child rights–based approach, under which adolescents' rights are protected, adds additional core principles: the responsibility of parents, families, and wider civil society as well as the State (although not replacing the State as main duty bearer), the best interests of the child, the right to survival and development, and respect for the views of the child.

There are a number of challenges associated with the implementation of rights-based approaches, such as when achieving the realization of one right violates another. The universality and indivisibility of rights infer that implementation strategies take into account the impact on rights in a holistic and comprehensive manner. A genuine rights-based approach has to consider the unintended consequences of interventions as well as whether or not it is achieving its main

goal. However, the trend toward strategies that focus strictly on desired results (e.g., "results-based management") among international development agencies has inadvertently driven programming to ignore unintended consequences, leaving these rarely measured and poorly understood. For adolescents, this case is most acute in trade-offs between the need for protection (e.g., from hazardous or exploitative labor practices) on the one hand with the benefits of participation (e.g., in income-generating activities) on the other. Additional critiques include the disconnection between the principles underpinning rights-based approaches and their application. For example, risk-averse institutions may be uncomfortable challenging the political and social status quo, thereby reducing impact at the project level rather than at national levels that support systemic change.

The landmark CRC introduced an important concept for adolescents. The principle of best interests of the child (defined in Article 3) "shall be a primary consideration in all actions affecting children." This umbrella provision has far-reaching implications throughout the CRC and has been widely studied and used in matters of adoption, migration and trafficking, juvenile justice, and medical consent. The benevolent underpinning of the best interest concept poses some practical challenges—largely in the potential for value-laden determinations of what is the best interest, particularly given considerations of evolving capacity and context (Alston & Gilmour-Walsh, 1996). Unlike younger children, adolescents can voice their opinion, which alleviates some of the difficulties in determining their best interest. Evolving capacities of the child and the child's ability to reason through choices when making decisions present some challenges, and adolescents' inherent need to engage in some types of risk-taking behavior might result in competing determinations of what is in their best interest. The inherent vulnerabilities of adolescence, the psychological instability, and the responsiveness to peer pressure all present legitimate difficulties in adolescents being able to determine their own best interest but are also reasons that checking on their best interest is so important.

Central to any rights-based framework is the concept of human capabilities. Human capabilities (i.e., what people are actually able to do and to be) are indicative of quality of life (Sen, 1999). Sen's capabilities approach challenges existing paradigms of development to look beyond economic growth as the marker of development success. This approach to well-being emphasizes the importance of agency and participation, freedom of choice, individual heterogeneity, and the multiple dimensions of welfare (Nussbaum & Sen, 1993; Sen, 1999, 2001).

The capabilities approach has been concerned with social institutions, laws, norms, and practices as they relate to discriminations that deny adolescents the ability to reach their full potential. One can seek to understand how this potential is both constructed and limited in ways that promote or forestall equalities. Indeed, the capabilities framework has been applied to young people in some limited domains (Stoecklin & Bonvin, 2014), including child labor (Biggeri et al., 2006) and gender inequality (Nussbaum, 2001). Advancing the positive capabilities of adolescents requires the application of a strengths perspective. Initially proposed

by Weick et al. (1989), this was described as a model that aimed to move beyond problem-focused reference points, even among children diagnosed with emotional or behavioral difficulties. This approach aims to shift the discourse toward a recognition of the inherent abilities within children to adapt and respond. The focus on positive factors in adolescents' lives is transformed into change strategies designed to enhance strengths. Fergus and Zimmerman (2005) identified two types of promotive factors: assets and resources. Assets include individuals' positive internal attributes, such as self-efficacy and self-esteem; resources include factors in the environment such as supportive parents, adult mentors, and programs that promote positive youth development by teaching new skills (Zimmerman et al., 2013).

This section described three overarching conceptual frameworks. While originating from different disciplines, they are naturally coherent and form the bases on which research on adolescence has been built and from which the chapters presented in this book have drawn. Importantly, these frameworks have common themes that inform this book. First, adolescence as a period is one part of a life course. Second, numerous factors, including individual, institutional, and structural, affect adolescents both directly and through their families and peers. And, last but not least, our support to adolescents should be grounded in a rights-based framework that acknowledges both the assets of adolescence and protection from risks.

Shaping the Policy Landscape for Adolescents

While most policymakers are convinced that human rights must be respected and that poverty and inequality must be reduced, it is not always clear how to achieve these goals. Global development agendas, such as the SDGs, do not provide a road map, but rather a menu of options. The SDGs in particular aim to encourage policymakers to take a broad view of how policy can affect a wide range of social progress measures for their populations (Figure 1.1). The imbalance between policy options and the number of targets they should achieve means that effective responses will require much innovation and planning. To do this well, a greater understanding is needed of how targets can complement one another—across sectors and across time—and how policies might be coordinated to achieve better

FIGURE 1.1 *The United Nation's Sustainable Development Goal framework.*

outcomes most efficiently. Delivering sectoral results alone is not enough to ensure social progress, and monitoring the well-being of adolescents as a constituency growing up in a particular social context will tell us more about social progress beyond the sum of its sectoral parts.

Such an analysis is particularly relevant in our discussion of adolescence, where myriad policies and programs bear on this stage of life, contributing to the choices and chances that adolescents can take advantage of. The obligations of the States to protect all adolescents from potential risks and harms should be coupled with the need to recognize their evolving capacities—increasing understanding, competencies, and levels of agency—and to recognize adolescence as a positive developmental stage of life. At the same time, the recognition of the principle of evolving capacities should not discourage States from guaranteeing appropriate protection, as adolescence is a stage of life when many risks for well-being, development, and rights are present.

To explore the enabling policy environment for adolescents and identify some themes for consideration in a discussion on substantive and redistributive policies that promote adolescent well-being, we provide as examples key international frameworks and legal conventions that are relevant for adolescents (Table 1.1). We also provide examples from the region with the largest number of adolescents: South Asia (Table 1.2). Exploring the lives and environments of adolescents in this region has highlighted the wide variability of experiences and responses and the importance of context in ensuring adequate interventions that respond to adolescents' needs.

In examining the delicate balance between protective and empowering rights, analysis has pointed to a number of key findings. First, children under 10 tend to be covered by more protective national child policies, whereas youth over 16 tend to be covered by national youth policies that seek to empower young people to enter the workforce or contribute economically. Adolescents between 10 and 16 tend to slip through the cracks in many countries. Policies that do cover adolescents tend to be focused on risky behaviors, particularly sexual and reproductive behavior, HIV, alcohol, drugs, and tobacco consumption.

Second, evidence points to a challenge in ensuring policy coherence. This is particularly notable when analyzing minimum ages—and exceptions—across a wide array of issues, such as majority, voting and candidacy, marriage, and employment. A recent study covering Central and Eastern Europe identified a number of such inconsistencies (UNICEF, 2016). For example, in general the minimum age for accessing services in the area of health is higher than in other domains, such as civic and social participation, highlighting an inconsistency in the presumed capacity of the adolescent. High age barriers in accessing sexual and reproductive health services are also contrary to the often lower age of consent to sexual relationships and even marriage at younger ages (Camilletti, 2017; UNICEF, 2016). Education policies and employment policies also tend to be asynchronous (UNICEF, 2016).

TABLE 1.1 Major International Conventions, Related Articles, and Protocols Relevant to Adolescents

Category	Item	Category	Item
Child Rights	Convention on the Rights of the Child (CRC) and Amendment to Art 43 (2) of the CRC (approved in 1995)	Refugees and Migrant Workers	International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families: 2003
	Optional Protocol to the Convention on the Rights of the Child on the involvement of children in armed conflict: 2002 (CRC–OP-AC)		International Convention for the Protection of All Persons From Enforced Disappearance: 2010
	Optional Protocol to the Convention on the Rights of the Child on the sale of children, child prostitution, and child pornography: 2002 (CRC–OP-SC)		Conventions Relating to the Status of Refugees: 1951
	General Comment on Adolescence (January 2017)	Organized Crime	Convention Relating to the Status of Stateless Persons: 1954
	Optional Protocol to the Convention on the Rights of the Child on a communications procedure: 2014		Convention Against Transnational Organized Crime: 2000
Discrimination Against Women	Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW): 1979		Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, Supplement the UN Convention Against Transnational Organized Crime: 2000
	Amendment to Art. 20: approved in 1995		Protocol Against the Smuggling of Migrants by Land, Sea and Air, Supplementing the United Nations Convention Against Transnational Organized Crime: 2000
	Optional Protocol to the Convention on the Elimination of All Forms of Discrimination Against Women: 2000		Protocol Against the Illicit Manufacturing of and Trafficking in Firearms, Their Parts and Components and Ammunition, Supplementing the United Nations Convention Against Transnational Organized Crime: 2001
	Acceptance of individual complaints procedure	Child Labor	Convention Concerning Minimum Age for Admission to Employment, 1973 (No. 138)
	Acceptance of the inquiry procedure (art. 8–9)		Convention Concerning the Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labour: 1999 (No. 182)
Racial Discrimination	International Convention on the Elimination of All Forms of Racial Discrimination: 1969		C102 - Social Security (Minimum Standards) Convention: 1952 (No. 102)

Category	Convention
Civil and Political Rights	International Covenant on Civil and Political Rights: 1976 Optional Protocol to the International Covenant on Civil and Political Rights: 1976 Second Optional Protocol to the International Covenant on Civil and Political Rights, aiming at the abolition of the death penalty: 1991
Economic, Social, and Cultural Rights	International Covenant on Economic, Social and Cultural Rights: 1976 Optional Protocol to the International Covenant on Economic, Social and Cultural Rights: 2013
Torture	Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment: 1987 Optional Protocol to the Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment: 2006
Parental Responsibilities	Hague Convention on Parental Responsibilities (HHCH) Convention on Protection of Children and Co-operation in Respect of Intercountry Adoption: 1993 Convention on the Civil Aspects of International Child Abduction: 1980
Child Marriage	Convention on Consent to Marriage, Minimum Age for Marriage and Registration of Marriages: 1962
Disabilities	Convention on the Rights of Persons With Disabilities: 2008 Optional Protocol to the Convention on the Rights of Persons With Disabilities: 2008 Acceptance of the Inquiry Procedure (Art. 6–7)

TABLE 1.2 Description of Key Legal and Policy Frameworks in South Asia

Country	Age of Majority[a]	Age of Criminal Responsibility[b]	Death Penalty[c]	Minimum Age of Marriage[d]	Exceptions for General Minimum Age of Marriage[d]	Minimum Age for Full-Time and Light Work[e]
Afghanistan	18	12	No for individuals under 18 at the time of crime	18 for boys, 16 for girls; no exceptions to minimum age legislation based on parental consent	For girls, earlier marriage is legal under religious law	18 for general work, 15 for light work, 14 for those wanting to learn a profession
Bangladesh	18	9	Yes	21 for boys, 18 for girls; no exceptions to minimum age legislation based on parental consent	None	12 for light work, 14 for work in general
Bhutan	18	12	N/A	18 for both; no exceptions to minimum age legislation based on parental consent	None	18, although 13–17 allowed for some work and workplaces other than worst forms of child labor
India	18	Varies according to offense: 7 or 12, or 16 for a heinous offense	No for individuals under 18 at the time of crime	21 for boys, 18 for girls; no exceptions to minimum age legislation based on parental consent	None	No legislated national minimum age for work in general or for light work
Maldives	18	Different interpretations; however, 15 is the age at which immaturity is presumed	Yes	18 for both; no exceptions based on parental consent, but the registrar of marriages has the discretion to allow for earlier marriage if the child has attained puberty	None	16, except when in connection with training associated with their education or deportment and when participating in the family's line of work
Nepal	16; however, the definition of child varies in different legislation	10	No	20; no exceptions to minimum age legislation based on parental consent	Not available	14, but no provision for minimum age for light work

Country					
Pakistan	18	7, however national discussions under way to increase age to 10	Yes	18 for boys, 16 for girls; no exceptions to minimum age legislation based on parental consent	Yes, the parties must have a Quazi's permission to marry before contracting into marriage if they are Muslims	Province specific, no legislated national minimum age
Sri Lanka	18	8	No	18 for both, except for Muslims (no minimum age); earlier marriage is legal with parental consent (regardless of child's gender)	No minimum age of marriage for Muslims, but rule and practice has been to be 12 years old	14, but with major exceptions allowing younger children to work

Country	Voting Age (Lower–Upper Houses)[f]	Beginning Secondary Education?[g]	Completing Secondary Education?[g]	Age of Sexual Consent[h]	Youth Public Institutions[i]
Afghanistan	18–N/A (indirect elections)	Tuition free and compulsory	Tuition free but not compulsory	None: sexual activity outside marriage is illegal	Office of the Deputy Ministry of Youth Affairs (DMoYA), part of the Ministry of Information and Culture
Bangladesh	18–N/A (unicameral)	Tuition reported, and not compulsory; no tuition fee for all girls attending public schools outside metropolitan areas; Core books free for all	Tuition reported and not compulsory; no tuition fee for all girls from outside metropolitan areas for government-supported schools; core books are free for all	None for male, 14 for female (or 13 if married); sexual relations are only legally allowed and religiously allowed between married couples	Department of Youth Development (DYD), Ministry of Youth and Sports
Bhutan	18–18	Tuition free but not compulsory	Tuition free but not compulsory	If the child is under 12, the person he/she had sexual intercourse with is accused of statutory rape	Department of Youth and Sports (DYS) within the Ministry of Education

TABLE 1.2 Continued

Country	Voting Age (Lower–Upper Houses)[f]	Beginning Secondary Education?[g]	Completing Secondary Education?[g]	Age of Sexual Consent[h]	Youth Public Institutions[i]
India	18–25	Tuition free and compulsory; right to free and compulsory education to all children ages 6–14	Tuition reported and not compulsory	N/A for male, 16 for female	Ministry of Youth and Sports, supported by the respective departments in the states and its Department of Youth Affairs
Maldives	18–N/A (unicameral)	Tuition free and not compulsory	Tuition free but not compulsory	None: sexual activity outside marriage is illegal	Ministry of Youth and Sports, however, unclear mandate
Nepal	18–N/A (indirect elections)	Tuition free and not compulsory; tuition free and compulsory up to Grade 8	Tuition free and compulsory up to Grade 8 and free up to Grade 12	N/A for male, 16 for female (based on the definition of rape—consent by person under 16 is not considered)	Ministry of Youth and Sports (MoYS)
Pakistan	21–N/A (indirect elections)	Tuition reported and not compulsory (WORLD Policy Analysis Center)	Tuition reported and not compulsory (WORLD Policy Analysis Center)	No set minimum age; Islam does not permit sex before marriage	Provincial-level departments
Sri Lanka	18–N/A (unicameral)	Tuition free and compulsory	Tuition free and compulsory	Not mentioned for males, 16 for females	Youth Development Division within the Ministry of Youth Affairs and Skill Development

[a]**Age of majority:** *Afghanistan:* Civil Law of the Republic of Afghanistan (Civil Code)—Official Gazette No. 353, published January 5, 1977 (1355/10/15 A.P); *Bangladesh:* Government of Bangladesh. (1875). Age of Majority Act. *Bhutan:* Section 16, Child Care and Protection Act of Bhutan 2011; *India:* The Indian Majority Act, 1875; *Maldives:* CRC Committee (2006), Forty-Fifth Session: Consideration of Reports Submitted by States Parties Under Article 44 of the Convention. Concluding Observations: Maldives; *Nepal:* Children Act 1992; *Pakistan:* Government of Pakistan. (1860), Pakistan Penal Code, Article 299; *Sri Lanka:* CRC Committee (2008). Consideration of Reports Submitted by States Parties Under Article 44 of the Convention Third and Fourth Periodic Report of States Parties Due in 2003. Sri Lanka.

[b]**Age of criminal responsibility:** *Afghanistan:* Article 10, Juvenile Law (Juvenile Code)—Official Gazette No. 846, published March 23, 2005 (1384/01/03 A.P.); *Bangladesh:* Government of Bangladesh (1860), Penal Code, Section 83; *Bhutan:* Government of Bhutan (2004). Penal code of Bhutan, Section 114; Amendment Act of Bhutan 2011; *India:* The Indian Penal Code, 1860 Act No. 45 of 1860 1 * [6th October, 1860.]; the Code of Criminal Procedure Code, 1973 (CrPC); Juvenile Justice (Care and Protection for Children) Act, 2000 (JJ Act); *Maldives:* Government of Maldives. (2003), Penal Code. Regulation on Conducting Trials, Investigations and Sentencing Fairly for Offences Committed by Minors, Art. 4(b), 5(a)–(c). 6. According to another translation a person under the age of 15 is presumed immature and thus excused, https://www.law.upenn.edu/live/files/4203-maldives-penal-code-2014; *Nepal:* Children's Act of Nepal (1992), Section 11(1) and (2); *Pakistan:* Pakistan Penal Code (Act XLV of 1860), Sections 82 and 83; *Sri Lanka:* Government of Sri Lanka (1883), Penal Code, Sections 75 and 76.

c Death penalty/capital punishment: *Afghanistan:* Afghanistan Juvenile Code (2005), Art. 31; *Bangladesh:* Children Act 2013, Section 33(1); *Bhutan:* 2008 Constitution (Article 7, Section 18); *India:* The Juvenile Justice (Care and Protection of Children) Act 2000, Section 21, http://trackthemissingchild.gov.in/trackchild/readwrite/JJAct_2015.pdf; *Maldives:* Penal Code; 2014 Regulation on Investigation & Execution of Sentence for Willful Murder; *Nepal:* The Constitution of the Kingdom of Nepal (1990); *Pakistan:* Juvenile Justice System Ordinance, 2000; *Sri Lanka:* Sri Lanka (1885), Penal Code, Section 53.

d Minimum age of marriage and exceptions to the general minimum marriageable age under customary or religious law: *Afghanistan:* Afghan Civil Code (1977) Article 70; *Bangladesh:* The Child Marriage Restraint Act 1929; The Child Marriage Restraint (Amendment) Ordinance, 1984, sections 2 and 4; WORLD Policy Analysis Centre; *Bhutan:* Marriage Act of Bhutan, 1980; *India:* The Prohibition of Child Marriage Act 2007; *Maldives:* Family Act 2000. However, the Registrar of Marriages has the discretion to allow for earlier marriage if puberty has been attained by the child in question; *Nepal:* Marriage Registration Act 2006; Act to Amend and Repeal Some Nepal Act 2072 (2015) Amending the Chapter on Marriage in the General Code (Muluki Ain), 2020 (1964); *Pakistan:* Child Marriage Restraint Act (CMRA) 1929; *Sri Lanka:* Marriage Registration (Amendment) Act No. 18 of 1995, Kandyan Marriage and Divorce (Amendment) Act, No. 19 of 1995, Muslim Marriages and Divorce Act (1951); Marriages Ordinance 1997.

e Minimum age for full-time and light work: *Afghanistan:* Labour Law, 2007, Art 13; *Bangladesh:* Bangladesh Labour Act 2006, Sections 34 and 44; *Bhutan:* Labor and Employment Act, 2007, Section 171; *India:* US Department of Labour, India, http://www.dol.gov/ilab/reports/child-labor/India.htm; *Maldives:* Employment Act, 2008, Art 6; *Nepal:* Child Labor (Prohibition and Regulation) Act, 200; *Pakistan:* US Department of Labour, Pakistan, http://www.dol.gov/ilab/reports/child-labor/Pakistan.htm#_ENREF_37; *Sri Lanka:* Employment of Women, Young Persons and Children (Amendment) Act No. 8 of 2003.

f Voting age: Source for all countries: http://www.ipu.org/parline-e/parlinesearch.asp.

g Beginning and completing secondary education: *Bangladesh:* Compulsory Primary Education Act 1990. The revision of the act is under way to extend primary education up to grade VIII; *India:* Right to Education Bill (draft); 86th Constitution Amendment Act, Article 21A; Constitution of India (1949, and amendments in 2007): Article 45; *Nepal:* Education Act (Amendment Bill) 2072 (2016); *Rest of the countries:* WORLD Policy Analysis Centre; UNICEF specialists.

h Age of sexual consent: *Bangladesh:* Penal Code, Sections 366A, 375 and 376; *Bhutan:* Penal Code of Bhutan, Sections 181—on statutory rape—and 183 on rape; *Nepal:* Penal Code Nepal, Chapter 14, On Rape: Number 1.479; *Sri Lanka:* Penal Code Sri Lanka, section 363. *For the rest of the countries:* FOSIGRID; UNICEF consultations.

Youth public institutions: For all countries, information was found on http://www.youthpolicy.org. Links to the website of specific authorities: *Afghanistan:* http://moic.gov.af/en/page/1293; *Bangladesh:* http://www.dyd.gov.bd/site/view/policies/Youth-Policy; http://www.moysports.gov.bd/; *Bhutan:* http://www.dys.gov.bt/; *India:* http://yas.nic.in/ and department at http://yas.nic.in/youth; *Maldives:* http://youth.gov.mv/en; *Nepal:* http://www.moys.gov.np/; *Pakistan:* provincial-level links are the following: Punjab, https://www.punjab.gov.pk/yasat; Sindh, http://www.moya.gov.pk/; Balochistan, http://www.balochistan.gov.pk/index.php?option=com_content&view=category&id=31&Itemid=493; Kybher Pakhtunkhwa, http://kp.gov.pk/Departments/RIC/page.php?PageId=144; Gilgit Baltistan, link not available; Azad Jammu and Kashmir, link not available.

Note: This section has been supported by analysis from Elena Camilletti.

To be effective, policy responses will need to engage with the profoundly inter-dependent and complex nature of adolescent development embedded in context (Figure 1.2). In Bangladesh, flooding and other natural disasters have been key drivers of the harmful practice of child marriage. There, almost one in three girls is married before age 15 (UNFPA, 2016). In an ideal scenario, mutually reinforcing policies will be in place at all levels—institutional, community, national, and even international. Examples of multisectoral action (e.g., in HIV/AIDS response in sub-Saharan Africa) can provide lessons on integrated approaches—particularly unified budget and results frameworks—that are relevant for the challenges of ad-olescent programming.

Third, the ways in which policies are designed tend to be lacking in life course evidence. However, it would be wrong to suggest that policymakers ignore life course implications. Rather, policy and program choices and how they sequence or play out across an adolescent's life are not well mapped or well understood. Social policy needs to have a long-term horizon. This involves governments and international organizations moving beyond short-term goals aligned to political cycles and demanding evidence that considers the interconnectedness and depen-dencies across different life stages.

Finally, and importantly, substantive policies need to engage head-on with difficult issues of adolescent development, including how to respond to the most
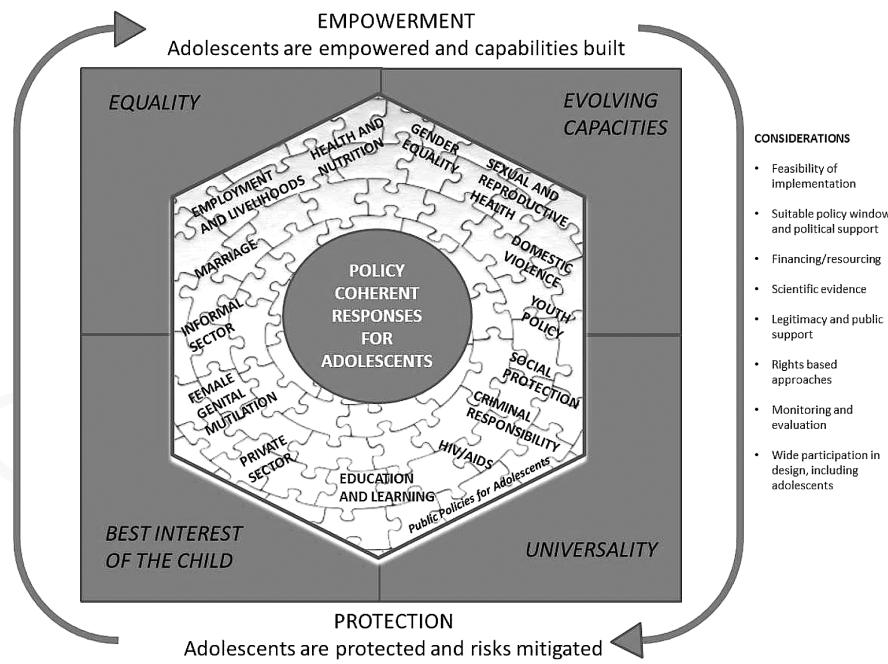

FIGURE 1.2 *A framework for policy-coherent responses for adolescents.*

marginalized, out-of-school children, LGBT (lesbian, gay, bisexual, transgender) youth, and migrant populations, for example. Most evident in the analyses of policies conducted here was the different treatment of adolescent girls and boys. Half of the countries explored in the analysis of South Asia have discordant minimum marriage ages between boys and girls. This regional picture shows that even de jure, there are still discrimination and gender disparities between boys and girls in terms of marriage protection. This is further complicated in situations where the law considers the possibility of a lower marriage age with parental consent or of exceptions based on certain issues. In relation to parental consent, in the case of Afghanistan, for example, there are circumstances when the father's consent or the competent court can grant the right to marry to a girl younger than 16, but not less than 15 years old. Under religious law, adolescent girls may be allowed to marry even earlier. Policy approaches need to address discrimination through a set of strategies and approaches, operating under an umbrella of universal coverage.

Legal and policy frameworks provide the background for action by government, profit and not-for-profit actors, civil society organizations, and single individuals, including adolescents themselves, for ensuring and upholding adolescents' well-being. Legal coverage of rights and protection is only the first step in understanding whether adolescents are not only protected but also offered opportunities to achieve their potential and aspirations. A crucial step—not undertaken here—would then be to assess the actual implementation and therefore the effective coverage of adolescents' rights and identify implementation gaps that impede effective protection and the realization of adolescents' rights.

Policy and program interventions that successfully address the largest cohort of adolescents in history can shape the future of nations. To be effective, social policies must be strongly grounded in human rights. This necessitates the active involvement of all sectors of society, including government, civil society, communities, and others to be engaged in realizing the rights of young people.

Translating Research to Global Policy

This volume forges a potent collaboration between the Society for Research in Child Development (SRCD) and UNICEF, two different organizations with shared aims and interests. The volume is designed to bring together cutting-edge research on adolescent development with policies and interventions directed toward adolescents, with a global focus. Blending scientific knowledge on adolescent development with evidence from practical program and policy experience from the field aims to inform understanding of how to promote adolescents' positive development globally.

The first part of the volume Domains of Adolescent Development captures the state of the evidence in key areas of adolescent well-being. Some domains, such as sexual and reproductive health, have been working with adolescents for longer, while others, such as neuroscience, are relatively new. The second part of the volume focuses on Social Relationships and reviews evidence and models operating in macro and mesospaces, exploring the influences of family and non-family members in promoting adolescent wellbeing. The third part of the volume focuses on risks that adolescents face, and also the opportunities that exist to improve their wellbeing. The chapters in this section engage with issues of child marriage, conflict, and migration, and span a variety of social and cultural contexts, highlighting the complexity of the world where adolescents grow up. The fourth part of the volume, Interventions and Policies describes services, systems, and policy responses for and with adolescents, identifying promising interventions and approaches. The final part of the volume explores the empowerment of adolescents, through participatory monitoring and evaluation and capacity building initiatives.

As a whole, this work reinforces the notion of adolescent protection and adolescent empowerment as two sides of a coin. The chapters therefore engage with major risk factors such as violence, poverty, social exclusion, early marriage, and pregnancy, as well as major protective factors, including education, families, peers, and communities. A diverse set of authors from different countries and disciplinary backgrounds have contributed chapters to this volume. This diversity not only reflects the complexity of adolescence, but also allows the volume to situate adolescents within broader cultural contexts and to engage more widely with policy debates and political decision-making regarding when, why, and how some programs and interventions should be tailored to better serve the needs of their intended recipients.

The diverse contributions collectively relay a powerful underlying narrative seen across the chapters, which describes adolescents as a positive force, to be valued and understood in their own right. In challenging historical interpretations of adolescence, the volume has engaged with contemporary issues explicitly, and sometimes implicitly across the chapters, including the topics of migration and human security, technology and inequality.

Such a volume can never be comprehensive. There are many areas in which evidence is lacking or implementation does not respond to local realities. Evidence on the challenges and opportunities of multisectoral programs has a large gap, and increasingly, we should be engaged in dialogue with practitioners to strengthen the role of practice (particularly in low- and middle-income countries) in guiding scientific frameworks. Research on adolescence has also not gone far enough in listening to adolescents themselves. Occasions for adolescents to provide input into defining their lived experiences, opportunities, hopes, and challenges are few, and more space could be made for their meaningful inclusion in research and policy processes.

References

Alston, P., & Gilmour-Walsh, B. (1996). *The best interests of the child: Towards a synthesis of children's rights and cultural values* (Innocenti Studies, UNICEF). Retrieved from https://www.unicef-irc.org/publications/108/

Arnett, J. J. (2008). The neglected 95%: Why American psychology needs to become less American. *American Psychologist*, *63*, 602–614.

Biggeri, M., Libanora, R., Mariani, S., & Menhini, L. (2006). Children conceptualizing their capabilities: Results of a survey conducted during the First Children's World Congress on Child Labour. *Journal of Human Development*, *7*, 59–83.

Bronfenbrenner, U. (1986). Ecology of the family as a context for human-development: Research perspectives. *Developmental Psychology*, *22*, 723–742.

Bronfenbrenner, U. (2005). *Making human beings human: Bioecological perspectives on human development*. Thousand Oaks, CA: Sage.

Bronfenbrenner, U., & Crouter, A. C. (1983). The evolution of environmental models in developmental research. In P. H. Mussen (Series Ed.) & W. Kessen (Vol. Ed.), *Handbook of child psychology, Vol. 1: History, theory, methods* (4th ed., pp. 357–414). New York, NY: Wiley.

Camilletti, E. (2017). *Enabling environments for adolescents: An analysis of legal and policy frameworks in South Asia*. Unpublished manuscript prepared for UNICEF Innocenti.

Chambers, R. A., Taylor, J. R., & Potenza, M. N. (2003). Developmental neurocircuitry of motivation in adolescence: A critical period of addiction vulnerability. *American Journal of Psychiatry*, *160*, 1041–1052.

Costello, E. J., Worthman, C., Erkanli, A., & Angold, A. (2007). Prediction from low birth weight to female adolescent depression: A test of competing hypotheses. *Archives of General Psychiatry, 64*, 338–344. doi:10.1001/archpsyc.64.3.338

Dornan, P. (2014). *Life-course perspectives on child poverty*. Retrieved from https://www.younglives.org.uk/content/%E2%80%98life-course%E2%80%98-perspectives-child-poverty

Eisenberg, M. E., Spry, E., & Patton, G. C. (2015). From emerging to established: Longitudinal patterns in the timing of transition events among Australian emerging adults. *Emerging Adulthood*, *3*, 277–281. doi:10.1177/2167696815574639

Elder, G. (1985). *Perspectives on the life course*. Ithaca, NY: Cornell University Press.

Elder, G. H., Johnson, M. K., & Crosnoe, R. (2003). *Handbook of the life course*. New York, NY: Springer.

Falconi, A., Gemmill, A., Dahl, R. E., & Catalano, R. (2014). Adolescent experience predicts longevity: Evidence from historical epidemiology. *Journal of Developmental Origins of Health and Disease*, *5*, 171–177. doi:10.1017/S2040174414000105

Fergus, S., & Zimmerman, M. A. (2005). Adolescent resilience: A framework for understanding healthy development in the face of risk. *Annual Review of Public Health*, *26*, 399–419.

Hall, G. S. (1904). *Adolescence: Its psychology and its relations to physiology, anthropology, sociology, sex, crime, religion and education*. New York, NY: Appleton.

Hareven, T. K. (2000). *Families, history, and social change: Life course and cross-cultural perspectives*. Boulder, CO: Westview Press.

Lansdown, G. (2005). The evolving capacities of the child (Innocenti Insight). Retrieved from https://www.unicef-irc.org/publications/pdf/evolving-eng.pdf

Larson, R. W., Wilson, S., & Rickman, A. (2009). Globalization, societal change, and adolescence across the world. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (pp. 590–622). Hoboken, NJ: Wiley.

Liefbroer, A. C., & Dykstra, P. A. (2000). *Levenslopen in verandering: Een studie naar ontwikkelingen in de levenslopen van Nederlanders geboren tussen 1900 en 1970* (WRR serie Voorstudies en achtergronden V 107). The Hague, Netherlands: Sdu Uitgevers.

Morrow, V. (2013). Troubling transitions? Young people's experiences of growing up in poverty in rural Andhra Pradesh, India. *Journal of Youth Studies*, *16*, 86–100. doi:10.1080/13676261.2012.704986

Morrow, V. (2015). Moving goals: Towards an age of measurement, in times of great derangement? Implications for childhood (and other categories . . .). *Childhood*, *22*, 295–299.

Nussbaum, M. C. (2001). *Women and human development: The capabilities approach* (Vol. 3). Cambridge, England: Cambridge University Press.

Nussbaum, M. C., & Sen, A. (1993). *The quality of life*. New York, NY: Oxford University Press.

Organization for Economic Cooperation and Development (OECD). (2017). Key issues for digital transformation in the G20. Retrieved from https://www.oecd.org/g20/key-issues-for-digital-transformation-in-the-g20.pdf

Piaget, J. (1970). *Science of education and the psychology of the child*. Trans. D. Coltman. New York, NY: Orion Press.

Pipher, M. (1994). *Reviving Ophelia: Saving the selves of adolescent girls*. New York, NY: Ballantine Books.

Rolleston, C., James, Z., Pasquier-Doumer, L., Tran Ngo Thi Minh Tam, & Le Thuc Duc. (2013). *Making progress: Report of the Young Lives School Survey in Vietnam*. Retrieved from http://www.younglives.org.uk/content/making-progress-report-young-lives-school-survey-vietnam-0

Sanchez, A. (2013). *The structural relationship between nutrition, cognitive and non-cognitive skills. Evidence from four developing countries* (Young Lives Working Paper 111). Retrieved from https://www.younglives.org.uk/content/structural-relationship-between-nutrition-cognitive-and-non-cognitive-skills.

Schlegel, A., & Barry, H. (1991). *Adolescence: An anthropological inquiry*. New York, NY: Free Press.

Sen, A. (1999). *Commodities and capabilities*. New York, NY: Oxford University Press.

Sen, A. (2001). *Development as freedom*. New York, NY: Oxford University Press.

Settersten, R. A., Jr., & Mayer, K. U. (1997). The measurement of age, age structuring, and the life course. *Annual Review of Sociology*, *23*, 233–261.

Shute, R. H., & Slee, P. T. (2015). *Child development: Theories and critical perspectives*. New York, NY: Routledge.

Stoecklin, D., & Bonvin, J. (2014). *Children's rights and the capability approach: Challenges and prospects*. Dordrecht, Netherlands: Springer.

United Nations. (2014). *The road to dignity by 2030* (Synthesis Report of the Secretary General). Retrieved from http://www.un.org/disabilities/documents/reports/SG_Synthesis_Report_Road_to_Dignity_by_2030.pdf

United Nations. (2015). *The Millennium Development Goals report*. Retrieved from http://www.un.org/millenniumgoals/2015_MDG_Report/pdf/MDG%202015%20rev%20(July%201).pdf

United Nations Children's Fund (UNICEF). (2011). *Adolescence: An age of opportunity. The state of the world's children 2011*. Retrieved from http://www.unicef.org/adolescence/files/SOWC_2011_Main_Report_EN_02092011.pdf

United Nations Children's Fund (UNICEF). (2015). *Committing to child survival: A promise renewed—progress report 2014*. Retrieved from https://www.unicef.org/publications/index_75736.html

United Nations Children's Fund (UNICEF). (2016). *Age matters! Age-related barriers to service access and the realisation of rights for children, adolescents and youth*. (Youth Policy Working Paper November 2016). Retrieved from http://www.youthpolicy.org/library/wp-content/uploads/library/2016_YPL_Working_Paper_4_Age_Matters_Eng.pdf

United Nations Population Fund (UNFPA). (2014). *The power of 1.8 billion. Adolescents, youth and the transformation of the future* (State of the World's Population 2014). Retrieved from http://www.unfpa.org/sites/default/files/pub-pdf/EN-SWOP14-Report_FINAL-web.pdf

United Nations Population Fund (UNFPA). (2016). *10: How our future depends on a girl at this decisive age* (State of the World's Population). Retrieved from https://www.unfpa.org/sites/default/files/pub-pdf/The_State_of_World_Population_2016_-_English.pdf

Weick, A., Rapp, C., Sullivan, W. P., & Kisthardt, W. (1989). A strengths perspective for social work practice. *Social Work*, *34*, 350–354.

World Health Organization (WHO). (2016). *Adolescents: Health risks and solutions*. Retrieved from http://www.who.int/mediacentre/factsheets/fs345/en/

Young Lives. (2013). *Education and learning: Preliminary findings from the 2013 Young Lives Survey (Round 4): United Andhra Pradesh*. Retrieved from https://www.younglives.org.uk/sites/www.younglives.org.uk/files/INDIA-UAP-Education%26Learning-Factsheet.pdf

Zimmerman, M. A., Stoddard, S. A., Eisman, A. B., Caldwell, C. H., Aiyer, S. M., & Miller, A. (2013). Adolescent resilience: Promotive factors that inform prevention. *Child Development Perspectives*, *7*, 215–220.

{ SECTION 1 }

Domains of Adolescent Development

{ 2 }

Health and Well-Being in Adolescence

A DYNAMIC PROFILE

Susan M. Sawyer and George C. Patton

The global health and development community is poised to invest in the second decade of life as the importance of adolescent health and well-being has leapt to prominence. A series of high-impact reports over the past decade has helped shape this new global agenda (Levine et al., 2008; Patton et al., 2016; United Nations Children's Fund [UNICEF], 2011; World Bank, 2007; World Health Organization [WHO], 2014b). The success of the child survival agenda within the Millennium Development Goals (MDGs; 2000–2015) has further galvanized this agenda, with many countries having more children in the second decade of life than the first. The transition to the 2030 Agenda for Sustainable Development and the inclusion of adolescent health within the new Global Strategy for Women's, Children's and Adolescents' Health (Every Women Every Child, 2015) present for the first time an opportunity for governments to develop integrated strategies for the health and well-being of adolescents and young adults. The publication of the first case for global investment in the capabilities of adolescents affirms the value of national investments, given the size of the benefit–cost ratios (Sheehan et al., 2017).

Within the MDG era, the global health community focused on conditions that caused large numbers of premature deaths, such as under-five mortality. In addressing adolescent health, it is also important to consider the causes of premature death as approximately 2.6 million 10- to 24-year-olds die each year (Patton et al., 2009). However, the Lancet Commission on Adolescent Health and Wellbeing described the wider benefits of investing in adolescent health in terms of a "triple dividend" (Patton et al., 2016). The notion of the triple dividend refers to benefits gained from investing in adolescence during adolescence itself (such as from reduced mortality and disability), as adolescents mature into healthier adults (such as by reduced risks for noncommunicable diseases [NCDs]), and for the health and well-being of the next generation when these parents are more educated and healthy when they conceive and parent (Figure 2.1).
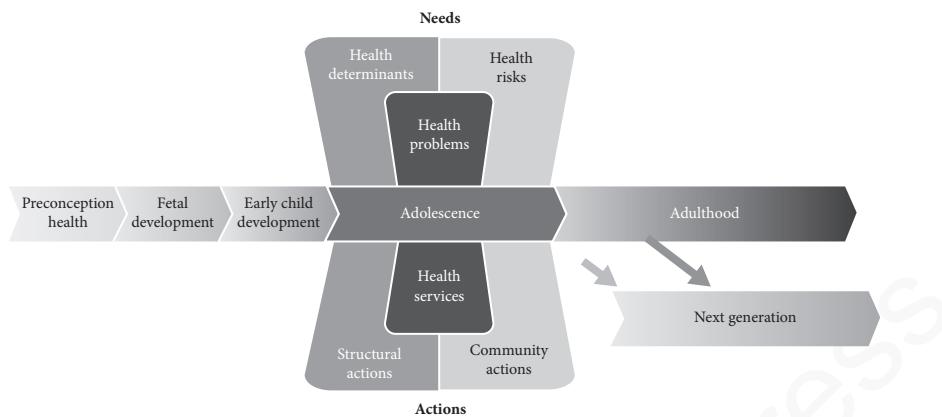
Needs

FIGURE 2.1 *A life course approach to adolescent health frames the opportunity of a "triple dividend" from investments that match health actions with health needs.*

Given the historic lack of focus on adolescent health and well-being, especially in low- and middle-income countries (LMICs), a rapid "phase shift" is required to educate and orient policymakers, politicians, and parents toward the second decade and the health issues that adolescents experience. Particular investments will be required by ministries of health if health service systems are to adequately respond to health problems during adolescence. However, ministries of education, health, family welfare, and transport are equally required to engage in the adolescent health agenda given that the most effective preventive actions for adolescent health address social and structural determinants and health risks through intersectoral, multicomponent interventions (Patton et al., 2016).

The definition of health and well-being embodied within the triple dividend extends well beyond reductions in mortality (as important as that is) to include a focus on the assets and capabilities required for healthy growth and development, for learning and employment, for intimate relationships and parenting, and for civic participation. Adolescent health therefore requires an understanding of the importance of healthy development (including growth and nutrition), physical and mental health (including risks to future physical and mental health), and sexual and reproductive health (including risks from early pregnancy, female genital mutilation, and sexually transmitted infections, including HIV). It also requires understanding the complex interlinkages between health and education, as quality secondary education is one of the best investments in adolescent health (Patton et al., 2016), while good health and well-being are an essential resource for learning. Furthermore, it requires understanding the challenges faced by adolescents in accessing the current health system and how these barriers might be overcome to ensure that adolescents have access to universal health coverage.

This chapter begins with a description of the biological context of healthy adolescent growth and development. It then uses the framework of the Lancet Commission on Adolescent Health to present a picture of the dynamic pattern of health across the adolescent and young adult years. This includes highlighting the differences in adolescent health outcomes that vary by national wealth, age, and sex. Major differences within countries are also evident, both by geography and for groups of socially marginalized adolescents. Finally, we describe the implications of this dynamic health profile for actions to improve the health of adolescents, including specific actions by health services to promote access to quality health services and consideration of the role of schools as a platform to deliver multiple actions for health.

In this chapter, the term *adolescents and young adults* is used to refer to the 10- to 24-year-old age group, which is often shortened to adolescents. Within this age span, we report data for three subcategories of age and stage: young adolescents/ early adolescence (10–14 years), older adolescents/late adolescence (15–19 years), and young adults/early adulthood (20–24 years).

The Biological Underpinnings of Adolescence

On the one hand, adolescence is a social construction that is determined by how communities and cultures perceive and define this developmental period. Yet, conversely, adolescence involves the growth and maturation of body systems that are universally experienced by all adolescents, regardless of country and culture.

Adolescence has historically been conceptualized as beginning with the onset of puberty, a biological event, and ending with the social role transitions that signify adulthood, such as employment, financial independence, and parenting. Pubertal development starts in late childhood when a cascade of complex, interlinked hormonal changes brings sexual and reproductive maturity. This is accompanied by a marked increase in the rate of physical growth and immense brain development, together with the maturation of many other body systems.

Over the past 150 years or so, there has been a downward secular trend in the age of onset of puberty that is thought to largely reflect improved health and nutrition across childhood. Thus, adolescence now starts earlier than it did for previous generations. In high-income countries (HICs), the mean age of menarche (first menstruation) has stabilized at around 12–13 years, with little evidence of any further downward trend. The same trend is true in boys, although the age of spermarche (first ejaculation) has been less well assessed. In these countries, while the early features of gonadarche (e.g., breast budding in girls) commonly start around 10 years old, the earliest endocrine changes (which are largely invisible and known as adrenarche) commence around 7–8 years of age in both boys and girls.

In the context of good health and nutrition, the mean age of peak linear growth (commonly referred to as the adolescent growth spurt) is a year before the mean

age of menarche and is relatively short lived in girls, who gain most of their linear height by the time of menarche. For boys, the mean age of peak linear growth is 2 years later than for girls, and their growth spurt continues for longer. These differences explain why many girls are taller than boys at the age of 12–14 years but end up shorter than boys by the end of adolescence. Continued physical changes occur across adolescence, including growth of muscle mass, strengthening of bone, eruption of teeth, and dimorphic patterns of body hair.

In conditions of good health and nutrition, early puberty is associated with risks of adult short stature due to the earlier cessation of bone growth. While there is a normal variation in the timing of onset of puberty of 4–5 years (Parent et al., 2003), surprisingly little is known about the timing of pubertal transitions in LMICs in conditions of poor health and malnutrition. This is despite the significance of pubertal timing for final adult height, the density of the adult skeleton, mental health, and future cancer and cardiovascular risk (Patton & Viner, 2007). There is growing research interest in the effects of childhood stunting on the timing of onset of puberty, on the trajectory of growth and development through puberty, and on weight patterns in childhood, adolescence, and adulthood. There is also interest in the effect of nutritional supplementation at different developmental windows across childhood and adolescence in maximizing linear growth while not contributing to obesity.

After infancy, adolescence is the most dynamic period of brain development. Some aspects of brain development precede and initiate puberty, while other aspects continue well beyond. There is some evidence that both age and pubertal stage influence subcortical brain maturation (Goddings et al., 2014). During adolescence, the brain's reward system is remodeled, which results in reduced emotional regulation at this time. In comparison with adults, adolescents have lower resistance to peer influences, which likely reflects their greater sensitivity to social standing and threats to social reputation, especially in the context of their peers (Crone & Dahl, 2012). A more limited capacity to think about the future consequences of actions and altered perception of risk can result in their engagement in risky behaviors when emotionally aroused (Suleiman & Dahl, 2017).

The brain continues to develop across later adolescence, particularly in the prefrontal cortex, where there is increasing connectivity between neural networks. This leads to continued development of executive and self-regulatory skills required for adolescents to think about and plan for the future and weigh the short- and long-term implications of decisions. Brain development continues to a lesser extent into the mid-20s, which in many parts of the world corresponds to the adoption of adult roles and responsibilities. Brain development is affected by social and nutritional environments, as well as by exposures, such as substance use, high conflict, and stress. Remarkably little is known about the impact of childhood stunting on brain maturation or of the opportunities for amelioration during adolescence.

Interactions Between Biology and Social Context

Powerful interactions between the structural and social determinants of health with biological growth and maturation result in a dynamic profile of health during the adolescent and young adult years (Sawyer et al., 2012). A simple but significant example is how biology and social context come together around the impact of menstruation. Once girls reach menarche, appropriate water and sanitation facilities are required to ensure their full participation in education and employment, the most powerful influences on girls' future health and economic well-being. Without these facilities at schools and workplaces, and combined by social norms, girls are more likely to be absent from school each month at the time of menstruation, fall behind academically and risk early school completion and early parenting.

A more complex example is the association of puberty and emotional well-being, as the onset of puberty signals greater risk for behavioral problems and mental disorders, including substance abuse, in ways that are not fully understood (Patton & Viner, 2007). Around 50% of adult mental disorder starts before 14 years and 75% before 25 (Kessler et al., 2005). Anxiety is the most common mental disorder. It often first emerges in childhood, but the pattern of manifestation changes over adolescence. For example, social anxiety commonly commences in childhood, while panic disorder is more commonly first experienced in adolescence and young adulthood (Beesdo et al., 2009). Depression becomes more prominent after puberty, especially in girls. Indeed, by older adolescence, girls have double the rate of depression than boys, a pattern that continues in adulthood (Angold et al., 1998). The onset of puberty is associated with more behavioral problems in boys, such as conduct disorder. In addition to biological risks, there are social risks for mental disorders in adolescence. Thus, bullying is a major social risk factor for depression in girls (Bond et al., 2001). Just as early puberty is a risk factor for depression, so it is for substance use, which rarely occurs before puberty. Substance use is also a risk factor for mental disorder, with marijuana increasing the risk of psychosis (Moore et al., 2007). And, just like the impact of menstruation on education completion, mental disorder is also a risk factor for failure to complete education. A study of a US national sample found that 12 of 14 psychiatric disorders were associated with subsequent failure to complete 12 years of education by age 18, after adjustment for other early life predictors of educational attainment (Breslau et al., 2008). However, when adjusting for co-occurring disorders, only conduct disorder and attention deficit hyperactivity disorder (ADHD) were associated with failure to complete secondary school (Breslau et al., 2011), which are both more prevalent in boys.

Adolescents need high-quality, secure, and stable environments in order to acquire skills in emotional processing and social cognitions, such as the capacity to infer the thoughts, intentions, and beliefs of others (Suleiman & Dahl, 2017). However, brain development also drives adolescents to engage with and challenge

their social environments. Parents and schools are required to balance their protective role with one that enables adolescents to engage safely with their communities and the wider world, as it is through this engagement that social, emotional, and cognitive learning take place (Patton et al., 2016). Increasing participation in education means that schools have become the main site of peer relationships, with teachers becoming important adult figures, in addition to parents and other family members. The social and economic contexts in which young people mature profoundly influence their health and well-being (Viner et al., 2012). For example, social media expands the reach of peers and is an important context for peer relationships through which identity is shaped and that influences health and well-being. However, there are also downsides of social media, including possible effects on sleep, mental health, and well-being (Woods & Scott, 2016). Consistent with the importance of social standing, teasing, bullying, and peer victimization become more common in adolescence, which can cause social exclusion and increase the risk of mental disorders, self-harm, and even suicide (Bond et al., 2001). Any perceived difference can be the cause of bullying, but adolescents who are already socially marginalized, such as from disability, sexual minority status, ethnicity, or indigenous status are especially vulnerable.

The biological amplification of sexual attraction during adolescence results in this period being a normative time for sexual exploration and experimentation (Halpern, 2010). Homosexual and heterosexual experimentation are common in early adolescence, as is uncertainty of sexual orientation. For example, in a large representative study of US students (Grades 7 to 12), 88% described themselves as predominantly heterosexual, 11% were "unsure" of their sexual orientation, and 1% described themselves as bisexual or predominantly homosexual. In that study, reports of those who experienced homosexual attractions (4.5%) exceeded those with homosexual fantasies (2.6%), those who had engaged in sexual behaviors (1%), and those who affiliated as homosexual (0.4%). Uncertainty about sexual orientation diminished with increasing age, with corresponding increases in both heterosexual and homosexual affiliation (Remafedi et al., 1992). Young people who are gay, lesbian, or bisexual face major psychological, social, and medical issues, almost all of which arise from the discrimination and stigmatization that face sexual minorities (Meyer, 2013).

A large representative population study of Canadian adolescents reported that 1.5% of boys identified as "bisexual, mostly homosexual or 100% homosexual," and that 3.5% of sexually active boys reported having had sex with someone of the same gender in the past year. Of girls, 3% reported they were "bisexual, mostly homosexual, or 100% homosexual," and 6.4% of sexually active girls reported having sex with someone of the same gender in the past year (Saewyc et al., 2007). The majority of heterosexual and homosexual adolescents have a male or female identity that matches their anatomy. People whose gender identity does not match their anatomy are referred to as transgendered. A large representative study in New Zealand reported that 1.2% of adolescents identified as transgender (Clark et al.,

2014). Those who are transgender can be heterosexual, homosexual, or bisexual in their sexual orientation.

Poverty and homelessness contribute to social marginalization and poor health at all ages but pose additional risks in the context of adolescent development. Poverty increases risks of violence and substance abuse. For girls, poverty also increases the likelihood of early pregnancy, both within and outside of marriage. Poor health in adolescence (e.g., disability, HIV, mental disorders) can of itself then become a risk for social exclusion and a further source of inequality.

Health Profiles Change Across Adolescence

A detailed analysis of mortality in 10- to 24-year-olds (Mokdad et al., 2016) showed that using GBD (Global Burden of Disease) 2013 data, the leading causes of death for 10- to 24-year-old males were road injuries (18%), followed by self-harm (7.8%). For females, HIV/AIDS was the leading cause of death (7.5%), followed by self-harm (7.4%). For males, injuries and violence were the most common causes of death in all three age categories (10–14, 15–19, 20–24). Drowning was the third leading cause of death in young adolescents; self-harm was the second and third leading cause of death in young adults and older adolescents, respectively. While road injuries are also a highly prominent cause of death for female adolescents of all ages, self-harm is also prominent, as are infectious diseases, including intestinal infectious diseases, HIV/AIDS, and tuberculosis.

The Lancet Commission on Adolescent Health and Wellbeing set out to describe how the profile of adolescent health changes with the epidemiological transition, that is, the process by which the pattern of disease in communities changes from one that is characterized by high rates of infectious diseases and high mortality in very young children, to one characterized by increased longevity and a greater proportion of deaths from NCDs. Using data from the 2013 GBD study, the authors grouped 236 causes of disability-adjusted life years (DALYs) into nine categories of disease that were further aggregated into three broad categories (Patton et al., 2016). DALYs are a form of health metric that describe the gap between current and ideal health status in a population; lower DALY levels equate to longer, healthier lives with less disability and disease. Countries were then classified according to their excess burden of disease as shown in Figure 2.2. Multiburden countries were defined as having 2,500 or more DALYs per 100,000 population per year due to disorders that were grouped as diseases of poverty. Injury-excess countries were defined as having 2,500 or more DALYs per 100,000 population per year due to injury and less than 2,500 due to diseases of poverty. NCD-predominant countries were defined as having less than 2,500 DALYs per 100,000 population due to injury and less than 2,500 due to diseases of poverty. This framework included HIV/AIDS as a separate category (rather than group it within infectious diseases or sexual and reproductive health) due to

Diseases of poverty	Injuries	Noncommunicable diseases
Infectious and vaccine preventable diseases		Physical disorders
Undernutrition	Unintentional injuries	Mental disorders
HIV	Violence	Substance use disorders
Sexual and reproductive health		
Multiburden	**Injury excess**	**NCD predominant**
≥2,500 diseases of poverty DALYs per 100,000 per year	≥2,500 injuries <2,500 diseases of poverty DALYs per 100,000 per year	<2,500 injuries <2,500 diseases of poverty DALYs per 100,000 per year

FIGURE 2.2 *Derivation of countries according to the burden of disease per 100,000 adolescents, reflecting passage through the epidemiological transition. DALY, disability-adjusted life year; NCD, noncommunicable disease.*

Note: Reprinted from Patton, G. C., et al. (2016). Our future: A *Lancet* commission on adolescent health and wellbeing. *The Lancet*, *387*, 2423–2478. Copyright 2016, with permission from Elsevier.

the significance of HIV/AIDS for policy and programming responses. The framework also included the burden of suicide within mental disorders, rather than grouping it with unintentional injuries or violence as is commonly done, again due to the fact that policy and programming actions to reduce suicide are more aligned with broader understandings of emotional distress and mental disorder than with policy approaches to reduce other forms of injuries (e.g., road traffic injuries). The GBD study does not consider behaviors that influence adult health without an impact in adolescence. Thus, the burden of disease from tobacco use is not included in these analyses, notwithstanding the importance of the adolescent and young adult years to future patterns of adult smoking.

The majority of countries in sub-Saharan Africa, South Asia, and the Pacific region have a multiburden profile. Many countries in Central and Latin America and ex–Soviet countries have an injury excess profile. HICs have an NCD-predominant profile of adolescent health.

The disease burden for each of the three country groups from 1990 to 2013 is shown in Figure 2.3 for males and females. It shows that adolescents in multiburden countries have a higher burden of disease, due to high rates of all nine conditions, than adolescents within the other two country groupings. It also demonstrates the change in disease burden from 1990 to 2013. In multiburden countries, there has been a significant reduction in the DALY rate across this period, most notably in females, largely due to a reduction in infectious diseases and improvements in sexual and reproductive health. It is noteworthy that there has been little improvement across this same period from unintentional injuries and violence in injury-excess countries. Similarly, within each of the three country groups, there has been
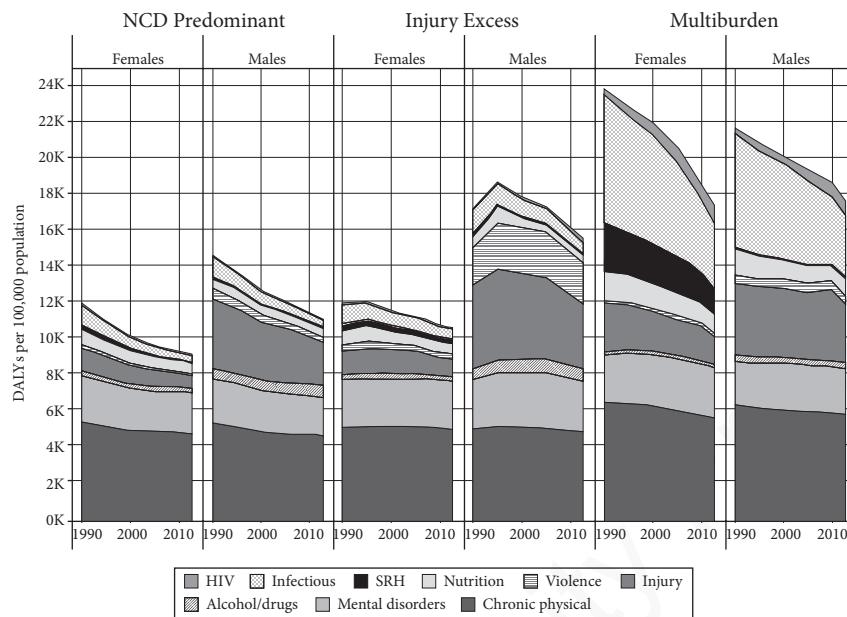
FIGURE 2.3 *Disease burden in 0- to 24-year-olds by country groups, by year (1990–2013) and sex. DALY, disability-adjusted life year; NCD, noncommunicable disease; SRH, sexual and reproductive health.*

Note: Reprinted from Patton, G. C., et al. (2016). Our future: A *Lancet* commission on adolescent health and wellbeing. *The Lancet*, *387*, 2423–2478. Copyright 2016, with permission from Elsevier.

remarkably little improvement in the mental health and physical health profile of adolescents, notwithstanding growing appreciation of the importance of NCDs in adults in this same period.

In all country groupings, the disease burden increased across the adolescent and young adult years. This is shown in more detail in Figure 2.4, which illustrates how the health profile changes with age according to the nine disease groupings. For adolescents within each country group, the number of DALYS from mental disorders and chronic physical disorders increases with age. Other changes are more variable by country group but are no less impressive in terms of scale, such as the increases with age of injury in injury-excess and multiburden countries and increases with age of violence in injury-excess countries.

Mokdad et al. (2016) ranked the leading global risk factors for death by age, showing how these had changed from 1990 to 2013. Table 2.1 illustrates the three highest ranked risks for male and female adolescents and young adults. This demonstrates the importance of water and sanitation in preventing gastrointestinal infectious conditions in younger adolescents, and the emergence of new health risks in older adolescents and young adults. For males, this includes substance use and occupational risks, while interpersonal violence and unsafe sex become prominent in female adolescents.
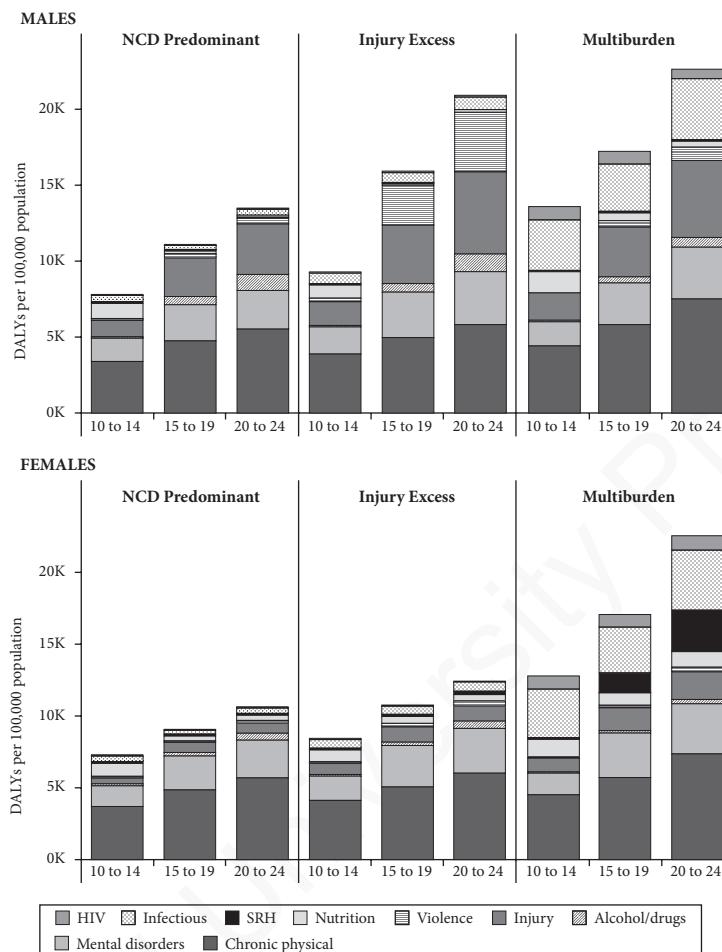
FIGURE 2.4 *Patterns of disease burden by age and gender. DALY, disability-adjusted life year; NCD, noncommunicable disease; SRH, sexual and reproductive health.*

Note: Reprinted from Patton, G. C., et al. (2016). Our future: A *Lancet* commission on adolescent health and wellbeing. *The Lancet*, *387*, 2423–2478. Copyright 2016, with permission from Elsevier.

TABLE 2.1 Leading Global Risk Factors for Death

10- to 14-Year-Olds		15- to 19-Year-Olds		20- to 24-Year-Olds	
Males	Females	Males	Females	Males	Females
Unsafe water	Unsafe water	Alcohol use	Unsafe sex	Alcohol use	Unsafe sex
Unsafe sanitation	Unsafe sanitation	Unsafe sex	Unsafe water	Occupational injury	Interpersonal violence
Handwashing	Handwashing	Unsafe water	Interpersonal violence	Unsafe water	Unsafe water

Source: Modified from Mokdad et al., 2016.

Within the Lancet Commission on Adolescent Health and Wellbeing, unmet need for contraception was particularly high in multiburden as well as injury-excess countries. It is noteworthy that while there were improvements in the unmet need for contraception in multiburden countries from 1990 to 2013, remarkably little change has been seen over the same period in injury-excess countries.

The prevalence of overweight and obesity in adolescence has risen substantially worldwide. In HICs, overweight and obesity now affect about one third of adolescents (Lobstein et al., 2015), with both more prevalent in families which are socially and economically disadvantaged. Overweight and obesity are rapidly emerging health risks in LMICs, many of which are still grappling with childhood stunting and food insecurity. Studies of Latin American children and adolescents suggested that, in the past decade, between a quarter and a fifth are overweight or obese, with higher rates of obesity in more socially advantaged cohorts (McDonald et al., 2009). Obesity can coexist with stunting. In Vietnam, for example, 5% of overweight children were also stunted, while in Brazil obesity associated with stunting was more common than obesity without stunting in one study of children and adolescents (Lobstein et al., 2015).

The extent of variation in the profile of adolescent health and health risks between countries (Gore et al., 2011; Mokdad et al., 2016; Patton et al., 2009, 2016) reinforces the scope and opportunities for preventive actions. In multiburden countries, health actions need to target the diseases of poverty, while avoiding further rises in injuries, violence, and NCDs. In these countries, addressing the unmet need for contraception should be a priority (see Patton et al., 2016). Injury-excess countries need to prioritize actions that address their high rates of injury and violence as well as high birth rates among adolescents (see Patton et al., 2016). Given their burden of disease, NCD-predominant countries need to prioritize actions that address chronic mental health conditions, substance use disorders, and chronic physical conditions, including obesity.

Providing Universal Health Coverage to Adolescents

One would be forgiven for thinking that adolescents experience few needs for health services, given how little health services research focuses on this age group in LMICs. Yet, as shown in this chapter, the profile of health and well-being in adolescents and young adults is one that demonstrates a significant need for health services. As illustrated in Figure 2.5, the health profile they experience spans a far wider set of domains than the narrow focus on sexual and reproductive health that has traditionally defined investments in adolescent health services in LMICs.

Furthermore, gains in any one health domain are unlikely to be successful without understanding the importance of complex linkages between different health domains, many of which arise from exposure to shared social and structural determinants of health. For example, in LMICs early marriage increases the

Focus of current attention on
adolescent health

HIV   SRH   *Mental Health*

Nutrition   *Infectious diseases*   *Violence*

Substance Abuse   Injury   Chronic Physical Illness

Breadth of interrelated
adolescent health domains

HIV   SRH   Mental Health

Nutrition   Infectious Diseases   Violence

Substance Abuse   Injury   Chronic Physical Illness
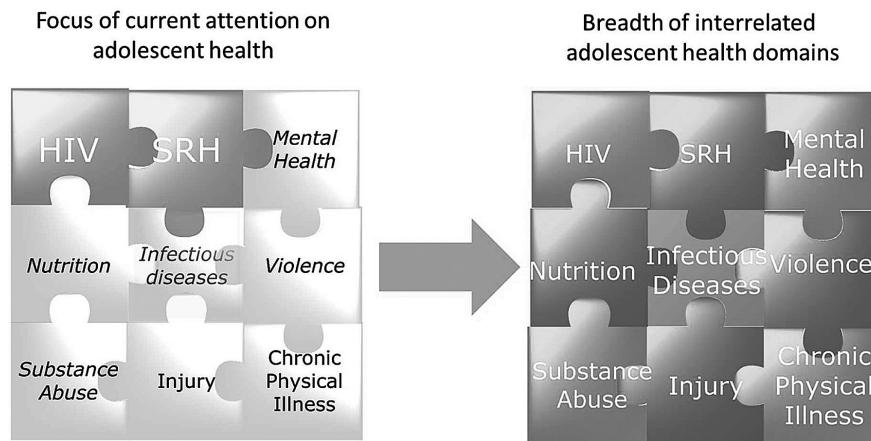
FIGURE 2.5 *The focus of where past adolescent health investments have been and where future investments might lie. SRH, sexual and reproductive health.*

risk of HIV and too early pregnancy, which increase the mortality risk for both the adolescent mother and her infant. The experience of interpersonal violence also increases risks for HIV; early pregnancy; mental illness, including substance abuse; as well as injury, disability, and chronic illness. Poor nutrition and stunting in adolescence are also a risk factor for poor sexual and reproductive health in terms of maternal and infant mortality, as well as increasing the likelihood of infectious diseases.

Understanding how to provide universal health coverage to adolescents requires sound knowledge of adolescent development, as adolescent development informs how young people engage with health services and why they experience particular barriers to accessing them. Barriers to access reside within the health care system, within health care providers, within families and communities, and within adolescents themselves. As a consequence of age and development, adolescents lack life experiences, have poor health literacy, and can have difficulty understanding their emotional states, limiting adolescents' ability to know when they should seek health care. Adolescents desire privacy and confidentiality around health care (Ford et al., 1997) and are quick to feel embarrassment and shame. These aspects further limit their access, even if they think they should attend services. Most adolescents rely on family for transportation and payment of health care. This makes free health care particularly valuable for them. The direct and indirect costs of health care are also significant barriers for adolescents to sustain health behaviors. This includes challenges around regular medication use and medical appointments, as adolescents do not place the same value on future health, have poor organizational skills, and can struggle to prioritize payments for health care over other priorities. It is therefore not surprising that, as a group,

adolescents and young adults have the highest rate of unmet need for, and the poorest adherence with, health care.

For these reasons, the responsibility lies with health services to manage adolescents' conspicuous health needs, identify and respond to their emerging health issues (e.g., to identify and address mental health states such as suicidality), and deliver preventive interventions (e.g., vaccination).

Many health care providers have not learned the required competencies to manage adolescents' health as this has not been a feature of their training, especially in preservice education in LMICs. Yet, universally, health care providers across the world require the same set of competencies (attitudes, knowledge, skills) to work effectively with adolescents for them to provide patient- and family-centered care in which adolescents feel respected, safe (confidential care), and involved in decision-making (Ambresin et al., 2013). Routine psychosocial assessment, using approaches like HEADSS, an acronym for Home, Education, Activities, Drugs and Alcohol, Sexuality, Suicide, and Self-harm (Rosen & Goldenring, 2004), improves the identification of health risks (Sanci et al., 2000) and provides a context for delivering anticipatory guidance (e.g., acne, substance use) and responding to emerging health needs (e.g., contraception) and preventive health needs (e.g., vaccination).

Much access to and provision of health care for adolescents takes place in the context of families, including parents, caregivers, and partners. A unique feature of clinical practice with adolescents is the need to also work closely with their families. Yet, adolescents are typically concerned that their parents will be informed about their worries and anxieties, let alone about more sensitive issues such as concerning sexuality and substance use. Adolescents are more likely to share concerns about physical health issues with parents than they will concerns about sexual and reproductive health or mental health (Berhane et al., 2005), which places a particular responsibility on health care professionals to address these issues. Health care providers require training to remain nonjudgmental and able to maintain adolescent confidentiality when required, while also appropriately engaging families. These approaches are supported by the United Nations Convention on the Rights of the Child, which reinforces the value of adolescents becoming increasingly involved in their health care as they mature (United Nations Committee on the Rights of the Child, 2016). Health care providers must also understand the legal and ethical challenges and obligations of providing health care to minors. Some national laws limit adolescents' access to certain services because of age (e.g., under 18 years) or marital status (e.g., unmarried adolescents in many LMICs are unable to access contraception through health services). Health care providers must ensure they are familiar with appropriate laws, yet ensure that they provide health care that adolescents are legally able to access (even if it is inconsistent with their personal beliefs).

More than a decade ago, WHO (2002) developed a framework for delivering quality primary health care to adolescents. This emphasized the importance of

adolescent- or youth-friendly health care that promotes equity of access and is effective, accessible, and acceptable to young people and appropriate to their needs. The principles of quality health care for adolescents apply to all levels of health care (e.g., clinics, hospitals) and to all types of health services (e.g., physical health care, mental health care) (Sawyer et al., 2010). Recently, WHO has developed policy guidelines, standards, and competencies for delivering quality health care to adolescents from the perspective of individual providers (WHO, 2014a) and health services (WHO, 2015). In LMICs, some governments are using these guidelines to improve the quality of health care for adolescents, with some evidence of benefit (Chandra-Mouli et al., 2016). In LMICs, there is also growing interest in community health workers and extension workers to supplement primary health providers (Mullan & Frehywot, 2008). This has been mostly framed around sexual and reproductive health care, but there are opportunities to extend to other health problems. Ensuring community health workers are appropriately trained to work with adolescents is also required.

Specialist children's health services historically ceased around the time of puberty, resulting in adolescents from age 12 to age 14 being managed by adult providers in adult settings. These practices continue in many LMICs, many of which remain overwhelmed by the burden of disease in young children. In many HICs, specialty pediatric services now extend up to the age of 18–21 years. While practices are gradually changing in LMICs, proactive approaches to lifting the upper age of specialist children's services to be more inclusive of the second decade are indicated. For example, in contrast to Saudi Arabia, where adolescents requiring inpatient care continue to be nursed with adults from the age of 14 (AlBuhairan & Olsson, 2014), the Indian Academy of Pediatrics raised the upper age of pediatrics to 19 years in 1999 and is increasingly investing in training to support this policy shift. Regardless of the age at which specialist children's services cease, care pathways need to be established with adult specialist services to prevent adolescents with complex health conditions (e.g., HIV, Type 1 and 2 diabetes) dropping out of care during this transition (Lee et al., 2015).

In HICs, health services for physical and mental health conditions have developed in parallel. It is hoped that the efficiencies that can be gained by more integrated service models will be a feature of emerging adolescent health services in LMICs. An opportunity for closer integration in primary care services comes from the establishment of larger primary care clinics that include doctors, nurses, and allied health staff. These "one-stop shops" are expected to promote more accessible care for otherwise-stigmatized conditions (e.g., mental disorders).

Leadership models for adolescent health and medicine first emerged in the United States over 50 years ago. Various countries have embedded adolescent health competencies within generalist pediatric, family medicine, and obstetric and gynecology specialties. In addition to this, an increasing number of countries (e.g., Argentina, Australia, Malaysia) now support specialist training for their future leaders in adolescent and young adult health and medicine.

Intersectoral Actions for Health

As the settings in which adolescents grow up, play, learn, and work are so influential to their health and well-being, preventive health actions are needed in these environments. Families, peers, schools, and communities provide the critical context for how structural and social determinants "get under one's skin" during adolescence to influence health outcomes (Viner et al., 2012). For younger children, it is important that these environments provide protection from harm. For adolescents, the challenge is to continue to protect while also providing an enabling environment that encourages young people's participation in the wider world as it is through participation that young people acquire the sense of agency that is essential for health and success in life.

At no other time in the life course is there as much change in the social and structural determinants of health as during adolescence (Patton et al., 2016). While family, the dominant social determinant for young children, continues to be an important influence, peers, school social environments, and educational participation emerge as important determinants of health and well-being during adolescence, as does the community and the workplace. Rapid economic and social developments have resulted in major changes to these structural and social determinants, including changes to the family unit, the extent of participation in education especially for girls, and patterns of employment for both males and females. Many of these changes are closely intertwined with changing gender norms, especially for adolescent girls and young women. There have also been remarkably rapid changes around access to social media and the extent of marketing of products explicitly directed to adolescents, such as foods with added salt, sugar, and fat.

During adolescence, actions are required that are matched to both health problems, health risks and health determinants, as illustrated in Figure 2.1. While the importance of health services that address both conspicuous and emerging health problems is clear (see Providing universal health coverage to adolescents), wider investments are also required, many of which are articulated in other chapters within this book.

One of the most important investments that governments can make is in education, given that it is among the strongest determinants of health across the life course (Viner et al., 2012). In all countries, those with higher levels of education live longer due to better health, including less disability. It has been estimated that up to half of the global improvement in child mortality since 1970 is due to the better education of women (Gakidou et al., 2010). While increasing access to primary education was a major focus of the MDGs, improving access to quality secondary education is a priority within for the SDGs. National investments to build schools and train secondary school teachers are required, as are investments to improve the quality of schooling. As traditional gender responsibilities limit girls' access to full economic and social participation, financial and legal drivers

will also influence families' decisions to allow girls to remain at school. School stipends or cash transfers, which pay socially disadvantaged or poor mothers when their daughters remain at school, have been shown to increase girls' attendance. This is thought to be especially important in countries where dowries are lower for younger girls, such as in Bangladesh, which pioneered school stipends (Schurmann, 2009). However, social changes are also required, whether in relation to the dowry system or to the risks of harassment, violence, and injury that girls can experience on the way to and from school. Implementation of and compliance to laws that prevent early marriage are important aspects of promoting social change, especially in rural and socially disadvantaged communities. Changes to community transportation systems are an additional requirement for safe travel to and from school. Finally, increasing educational participation of adolescents also increases the opportunities for schools to explicitly promote health. This includes improvements to the quality of the school environment to shape health risks (e.g., school policies around bullying) or specific health-promoting interventions, such as for nutrition (e.g., administration of iron and folate to prevent anemia), physical activity (e.g., programs that promote physical fitness), sexual and reproductive health (e.g., comprehensive sexuality education), and physical health (e.g., school-based immunization programs).

Across the world, the burden of disease affecting adolescents and young adults is rapidly changing. This requires national governments to think differently about the type of investments that are needed, as these are very different from those that have benefitted younger children's health, as outlined in this chapter. The Lancet Commission on Adolescent Health and Wellbeing recommended that comprehensive, evidence-informed, multisectoral interventions are required (Patton et al., 2016), which Sheehan and colleagues (2017) have recently demonstrated have impressive benefit–cost ratios. Governments, especially those in resource-poor settings, also need to invest in building the technical and human capacity for this work as a critical challenge is ensuring that interventions can be sustainable and taken to scale. To support this, governments need access to data that are disaggregated by age and gender in order that investments target where the excess burden lies. Such data form one element of an accountability strategy. Beyond this, a different level of engagement with young people and civil society will be required as participation of the community is an additional and important aspect of accountability.

References

AlBuhairan, F. S., & Olsson, T. M. (2014). Advancing adolescent health and health services in Saudi Arabia: Exploring health-care providers' training, interest, and perceptions of the health-care needs of young people. *Advances in Medical Education and Practice,5*, 281–287.

Ambresin, A. E., Bennett, K., Patton, G. C., Sanci, L. A., & Sawyer, S. M. (2013) Assessment of youth-friendly health care: A systematic review of indicators drawn from young people's perspectives. *Journal of Adolescent Health*, *52*(6), 670–681.

Angold, A., Costello, E. J., & Worthman, C. M. (1998). Puberty and depression: The roles of age, pubertal status and pubertal timing. *Psychological Medicine*, *28*(1), 51–61.

Beesdo, K., Knappe, S., & Pine, D. S. (2009). Anxiety and anxiety disorders in children and adolescents: Developmental issues and implications for *DSM-V*. *Psychiatric Clinics of North America*, *32*(3), 483–524.

Berhane, F., Berhane, Y., & Fantahun, M. (2005). Adolescents' health service utilization pattern and preferences: Consultation for reproductive health problems and mental stress are less likely. *Ethiopian Journal of Health Development*, 19(1), 29–37.

Bond, L., Carlin, J. B., Thomas, L., Rubin, K., & Patton, G. (2001). Does bullying cause emotional problems? A prospective study of young teenagers. *BMJ*, *323*(7311), 480–484.

Breslau, J., Lane, M., Sampson, N., & Kessler, R.C. (2008). Mental disorders and subsequent educational attainment in a US national sample. *Journal of Psychiatric Research*, *42*(9), 708–716.

Breslau, J., Miller, E., Chung, W. J. J., & Schweitzer, J. B. (2011). Childhood and adolescent onset psychiatric disorders, substance use, and failure to graduate high school on time. *Journal of Psychiatric Research*, *45*(3), 295–301.

Chandra-Mouli, V., Chatterjee, S., & Bose, K. (2016). Do efforts to standardize, assess and improve the quality of health service provision to adolescents by government-run health services in low and middle income countries, lead to improvements in service-quality and service-utilization by adolescents? *Reproductive Health*, *13*(1), 10.

Clark, T. C., Lucassen, M. F., Bullen, P., Denny, S. J., Fleming, T. M., Robinson, E. M., & Rossen, F. V. (2014). The health and well-being of transgender high school students: Results from the New Zealand adolescent health survey (Youth'12). *Journal of Adolescent Health*, *55*(1), 93–99.

Crone E. A., & Dahl, R. E. (2012). Understanding adolescence as a period of social–affective engagement and goal flexibility. *Nature Reviews Neuroscience*, *13*, 636–650.

Every Woman Every Child. (2015). *The Global Strategy for Women's, Children and Adolescents' Health (2016–2030)*. New York: United Nations. www.everywomaneverychild.org/wp-content/uploads/2016/12/EWEC_Global_Strategy_EN_inside_LogoOK_web.pdf

Ford, C. A., Millstein, S. G., Halpern-Felsher, B. L., & Irwin, C. E., Jr. (1997). Influence of physician confidentiality assurances on adolescents' willingness to disclose information and seek future health care. *JAMA*, *278*(12), 1029–1034.

Gakidou, E., Cowling, K., Lozano, R., & Murray, C. J. (2010). Increased educational attainment and its effect on child mortality in 175 countries between 1970 and 2009: A systematic analysis. *The Lancet*, *376*(9745), 959–974.

Goddings, A. L., Mills, K. L., Clasen, L. S., Giedd, J. N., Viner, R. M., & Blakemore, S. J. (2014). The influence of puberty on subcortical brain development. *Neuroimage*, *88*, 242–251.

Gore, F. M., Bloem, P. J., Patton, G. C., Ferguson, J., Joseph, V., Coffey, C., . . . Mathers, C. D. (2011). Global burden of disease in young people aged 10–24 years: A systematic analysis. *The Lancet*, *377*(9783), 2093–2102.

Halpern, C. T. (2010). Reframing research on adolescent sexuality: Healthy sexual development as part of the life course. *Perspectives on Sexual and Reproductive Health*, *42*(1), 6–7.

Kessler, R., Bergland, P., Demler, O., Jin, R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of *DSM-IV* disorders in the National Comoridity Survey Replication. *Archives of General Psychiatry*, *62*, 593–602.

Lee, L., Agwu, A. L., Castelnouvo, B., Trent, M., & Kambugu A. D. (2015). Improved retention in care for Ugandan youth living with HIV utilizing a youth-targeted clinic at entry to adult care: Outcomes and implications for a transition model. *Journal of Adolescent Health*, *56*(2), S50.

Levine, R., Lloyd, C., Greene, M., & Grown, C. 2008. *Girls count: A global investment and action agenda; a Girls Count report on adolescent girls*. Washington, DC: Center for Global Development

Lobstein, T., Jackson-Leach, R., Moodie, M. L., Hall, K. D., Gortmaker, S. L., Swinburn, B. A., . . . McPherson, K. (2015). Child and adolescent obesity: Part of a bigger picture. *The Lancet*, *385*(9986), 2510–2520.

McDonald, C. M., Baylin, A., Arsenault, J. E., Mora-Plazas, M., & Villamor, E. (2009). Overweight is more prevalent than stunting and is associated with socioeconomic status, maternal obesity, and a snacking dietary pattern in school children from Bogota, Colombia. *Journal of Nutrition*, *139*(2), 370–376.

Meyer, I. H. (2013). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychology of Sexual Orientation and Gender Diversity*, *1*(S), 3–26.

Mokdad, A. H., Forouzanfar, M. H., Daoud, F., Mokdad, A. A., El Bcheraoui, C., Moradi-Lakeh, M., . . . Kravitz, H. (2016). Global burden of diseases, injuries, and risk factors for young people's health during 1990–2013: A systematic analysis for the Global Burden of Disease Study 2013. *The Lancet*, *387*(10036), 2383–2401.

Moore, T. H., Zammit, S., Lingford-Hughes, A., Barnes, T. R., Jones, P. B., Burke, M., & Lewis, G. (2007). Cannabis use and risk of psychotic or affective mental health outcomes: A systematic review. *The Lancet*, *370*(9584), 319–328.

Mullan, F., & Frehywot, S. (2008). Non-physician clinicians in 47 sub-Saharan African countries. *The Lancet*, *370*(9605), 2158–2163.

Parent, A. S., Teilmann, G., Juul, A., Skakkebaek, N. E., Toppari, J., & Bourguignon, J. P. (2003). The timing of normal puberty and the age limits of sexual precocity: Variations around the world, secular trends, and changes after migration. *Endocrine Reviews*, *24*(5), 668–693.

Patton, G. C., Coffey, C., Sawyer, S. M., Viner, R. M., Haller, D. M., Bose, K., . . . Mathers, C. D. (2009). Global patterns of mortality in young people: A systematic analysis of population health data. *The Lancet*, *374*(9693), 881–892.

Patton, G. C., Sawyer, S. M., Santelli, J. S., Ross, D. A, Afifi, R., Allen, N. B., . . . Viner, R. M. (2016). Our future: A *Lancet* commission on adolescent health and wellbeing. *The Lancet*, *387*, 2423–2478

Patton, G. C., & Viner, R. (2007). Pubertal transitions in health. *The Lancet*, *369*(9567), 1130–1139.

Remafedi, G., Resnick, M., Blum, R., & Harris, L. (1992). Demography of sexual orientation in adolescents. *Pediatrics*, *89*(4), 714–721.

Rosen, D. S., & Goldenring, J. M. (2004). Getting into adolescent heads: An essential update. *Contemporary Pediatrics*, *21*, 64.

Saewyc, E., Poon, C., Wang, N., Homma, Y., Smith, A., & McCreary Centre Society. (2007). *Not yet equal: The health of lesbian, gay, and bisexual youth in BC*. Vancouver, Canada: McCreary Centre Society.

Sanci, L. A., Ker, J., Coffey, C. M. M., Veit, F. C. M., Carr-Gregg, M., Patton, G. C., . . . Bowes, G. (2000). Evaluation of the effectiveness of an educational intervention for general practitioners in adolescent health care: randomised controlled trial. *BMJ*, *320*(7229), 224–230.

Sawyer, S. M., Afifi, R. A., Bearinger, L. H., Blakemore, S. J., Dick, B., Ezeh, A. C., & Patton, G. C. (2012). Adolescence: A foundation for future health. *The Lancet*, *379*(9826), 1630–1640

Sawyer, S. M., Proimos, J., & Towns, S. J. (2010). Adolescent-friendly health services: What have children's hospitals got to do with it? *Journal of Paediatrics and Child Health*, *46*(5), 214–216

Schurmann, A. T. (2009). Review of the Bangladesh Female Secondary School Stipend project using a social exclusion framework. *Journal of Health*, *Population*, *and Nutrition*,*27*(4), 505–517.

Sheehan, P., Sweeny, K., Rasmussen, B., Wils, A., Friedman, H.S., Mahon, J., . . . Laski, L. (2017). Building the foundations for sustainable development: A case for global investment in the capabilities of adolescents. *The Lancet*, *390*, 792–806.

Suleiman, A. B., & Dahl, R. E. (2017). Leveraging neuroscience to inform adolescent health: The need for an innovative transdisciplinary developmental science of adolescence. *Journal of Adolescent Health*, *60*(3), 240–248.

United Nations Committee on the Rights of the Child. (2016). *General comment No. 20 (2016) on the implementation of the rights of the child during adolescence* (Convention on the Rights of the Child). Retrieved from http://tbinternet.ohchr.org/_layouts/ treatybodyexternal/Download.aspx?symbolno=CRC%2fC%2fGC%2f20&Lang=en

United Nations Childrens Fund (UNICEF). (2011). *The state of the world's children 2011: Adolescence, an age of opportunity.* New York, NY: UNICEF.

Viner, R. M., Ozer, E. M., Denny, S., Marmot, M., Resnick, M., Fatusi, A., & Currie, C. (2012). Adolescence and the social determinants of health. *The Lancet*, *379*(9826), 1641–1652.

Woods, H. C., & Scott, H. (2016). # Sleepyteens: Social media use in adolescence is associated with poor sleep quality, anxiety, depression and low self-esteem. *Journal of Adolescence*, *51*, 41–49.

World Bank. (2007). *World Development Report 2007: Development and the next generation.*Washington, DC: Author.

World Health Organization (WHO). (2002). *Adolescent friendly health services. An agenda for change*. http://whqlibdoc.who.int/hq/2003/WHO_FCH_CAH_02.14.pdf

World Health Organization (WHO). (2014a). *Core competencies in adolescent health and development for primary care providers*. Geneva, Switzerland: Author.

World Health Organization (WHO). (2014b). *Second chance for the second decade*. Geneva, Switzerland: Author.

World Health Organization (WHO). (2015). *Global standards for quality health-care services for adolescents*. Geneva, Switzerland: Author.

Neurocognitive Development During Adolescence

Nikki C. Lee, Miriam Hollarek, and Lydia Krabbendam

Adolescence is a period during which an interplay of biological, psychological, and environmental changes provide an opportunity for both adaptive and maladaptive developmental outcomes. It is commonly defined as beginning with the onset of puberty and is generally thought to end at the time when an individual has obtained an adult role in society. Although the point at which this is achieved varies greatly between cultures, it is generally considered to be somewhere in the third decade of life. The scientific study of adolescence began well over 100 years ago in 1904, when G. Stanley Hall published his seminal two-volume work *Adolescence*. He characterized adolescence as a period of storm and stress, typified by conflict with parents, mood disruptions, and risky behavior (Hall, 1904). This conceptualization was not new, as adolescence has long been a source of fascination for writers and philosophers. The ancient Greek philosopher Aristotle noted that "youth are heated by Nature as drunken men by wine." And, Shakespeare's classic love story of Romeo and Juliet is essentially a tale of adolescent romance, risk-taking, and recklessness.

Research in adolescence over the years has suggested that the characterization of adolescence as a period of heightened turmoil and stress is an accurate representation of day-to-day life for many adolescents. Numerous psychiatric illnesses, such as depression, schizophrenia, and anxiety disorders, have their onset in adolescence (Paus et al., 2008). Mortality rates increase sharply during this period, as do instances of unintentional injuries, road traffic accidents, unsafe sexual behavior, and substance abuse. However, increasingly adolescence is also being conceptualized as a transition period during which adolescents' strong needs for novelty and exploration, their drive to form new relationships, and their ability to rapidly adapt to their changing environment can be leveraged to encourage positive developmental trajectories.

These behavioral changes during adolescence are driven by both internal and external factors (Guyer et al., 2016). Externally, adolescents are confronted

with shifts in their relationships with parents and peers, an abundance of novel experiences, and a growing responsibility for their own behavior. Concurrently, internal developmental processes driven by hormonal changes result in immense structural and functional changes in the brain, especially in the neural networks involved in higher order cognitive processes and emotion processing. This chapter gives an overview of how recent neurocognitive research into these internal and external processes can further our understanding of adolescent behavior. We first outline recent findings regarding brain maturation during adolescence and the techniques that have been used to study this. Then, we discuss brain–behavior relationships, which elucidate how cognitive control and socioemotional processing develop during this period. Finally, we review work explaining how individual differences in neurocognitive development can occur in the interplay between external influences, such as peers, parents, and the sociocultural environment were adolescents grow up.

Brain Development

The suggestion that the brain continues to develop during adolescence is relatively new. Half a century ago, researchers had to rely on postmortem human brains of various ages to investigate differences in the developing brain. These early studies were the first to find that the human brain still undergoes substantial reorganization during adolescence (Yakovlev & Lecours, 1967). The most prominent age-dependent variations in postmortem brains were found in the prefrontal cortex (PFC), a region associated with higher order cognitive functions. Now, developmental changes can be studied in the living human brain and in much greater detail as a result of rapid advances in neuroimaging techniques. These techniques have increasingly been used in the field of developmental cognitive neuroscience, enabling neuroscientists to track brain development in vivo from childhood throughout adolescence and into adulthood (Mills et al., 2016). Both cross-sectional and longitudinal studies employing neuroimaging techniques have demonstrated that drastic neural maturation continues to take place during adolescence. Neural maturation can be observed in the form of changes in the anatomical structure of the brain as well as changes in the functional recruitment of brain areas and their associated networks (Blakemore, 2012; Sturman & Moghaddam, 2011).

Structural development during adolescence is especially pronounced in prefrontal and parietal regions of the brain (Mills et al., 2016). These regions are involved in working memory, socioemotional ability, and executive functions, such as inhibitory control or cognitive flexibility (Crone & Dahl, 2012), which are discussed in more detail further in this chapter. Structural brain development can be studied using magnetic resonance imaging (MRI). The data obtained from an MRI scan can be used to create a three-dimensional (3D) anatomical map of the living human brain. These 3D maps differentiate between two different types of

brain tissue: gray matter and white matter. The development in the prefrontal and parietal regions during adolescence is the result of two concomitant processes: a white matter increase in combination with gray matter thinning.

Adolescence has been postulated as a sensitive stage for white matter development. White matter is mainly made up of axons, which form the connections between the bodies of the neurons. Bundles of white matter that run from one brain region to another can be visualized with diffusion-weighted imaging. This technique uses the MRI signal to determine the direction in which water is diffusing and provides information on which brain regions are interconnected. White matter volume and white matter integrity increase steadily in prefrontal and parietal regions throughout childhood and adolescence. In other words, connections between brain cells and regions become stronger and information can be transmitted more smoothly. The integrity of these connecting axons is often measured with fractional anisotropy (FA), which quantifies the strength of connections in the brain. The underlying process of this white matter increase is believed to be due to continued myelination of axons.

Axons conduct information in the form of electrical impulses from one body cell of a neuron to another (Crone, 2017). Myelin leads to faster transmission of information through the axon. Transmission between myelinated neurons is up to 100 times the speed of that between unmyelinated neurons, leading to more efficient information processing (Blakemore, 2012). White matter networks, that is, the connections between distinct brain regions, also continue to mature during adolescence. Connectivity between subcortical and cortical regions increases, promoting top-down control. Generally, there seems to be a shift from anatomically close connections to more globally distributed networks. In this mature state, both hemispheres are well integrated, and strong long-range connections of selected pathways are utilized for efficient communication (Asato et al., 2010).

In contrast to the steady increase in white matter, gray matter volume decreases during adolescence. Gray matter mainly comprises brain cells, that is, the cell bodies of neurons. Lifetime development of gray matter volume follows an inverted U shape, and the trajectory is specific to each region of the brain. It first increases during childhood, peaks in early adolescence, and then starts to decrease in a nonlinear manner (Giedd et al., 2012). Gray matter thinning during adolescence is a result of synaptic pruning, during which frequently used connections are strengthened and less frequently used connections are eliminated. It is thought that synaptic pruning "fine-tunes" networks in the brain, making them more efficient by removing redundant connections and strengthening useful ones with development and experience (Giedd et al., 2009).

EFFECTS OF PUBERTY

Many changes in structural brain development not only depend on chronological age but also are heavily influenced by pubertal stage (Goddings, 2015). Pubertal

stage has been found to account for brain maturation independently of chrono-logical age. For example, pubertal development has been related to brain volume of subcortical regions and white matter integrity. Pubertal stage has also been re-lated to changes in the levels of the neurotransmitters dopamine and serotonin (Steinberg, 2008). These neurotransmitters are especially influential in the limbic subcortical areas of the brain, involved in the processing of arousal, emotion, and reward sensitivity (Casey, 2015; Crone & Dahl, 2012). It has been suggested that these hormonal changes may constitute the onset of structural reorganiza-tion in multiple brain regions. However, the specific mechanisms through which pubertal hormones shape brain development are so far not well understood (Blakemore, 2012).

SEX DIFFERENCES

The trajectory of structural brain development differs between girls and boys. Overall brain volume seems to peak earlier in girls than in boys, and white matter also matures earlier in girls than in boys. Across all ages, brain size seems to be about 10% larger in males than in females (Asato et al., 2010). Regions showing the most pronounced sex differences include the basal ganglia, hippocampus, and amygdala. Noticeably, these regions have a high density of sex hormone receptors and might thus be specifically sensitive to different levels of androgen, estrogen, and testosterone (Giedd et al., 2012). Many other sex differences in brain develop-ment have been reported in specific subregions of the developing brain. However, variation in neural growth rate, pubertal stage, and body size complicate direct comparison between sexes. These factors might explain why findings often differ depending on how the data were analyzed and how participants were selected. Last, it is important to note that all results concern group averages. There is sub-stantial overlap between girls and boys; therefore, it is impossible to draw any conclusions from a single person's brain scan about his or her gender (Lenroot & Giedd, 2010). Using the words of Joel and colleagues (2015, p. 15468), "Human brains do not belong to one of two distinct categories: male brain/female brain."

Cognitive and Socioemotional Development During Adolescence

Developmental changes in behavior during adolescence have been extensively examined over the past decade, particularly in the domains of cognitive, affective, and social development and their interactions. A widely used tool to study these processes has been functional magnetic resonance imaging (fMRI). Functional imaging measures activity in specific brain regions by recording changes in the blood-oxygen-level-dependent (BOLD) signals. This technique enables researchers to noninvasively observe which areas of the brain are active when participants are

performing a certain task (Tremel & Wheeler, 2015). For example, many studies found that the fusiform face area reliably shows strong activation when a picture of a face is presented (Gauthier et al., 2000). In the case of social cognition and other executive functions, several brain regions are often recruited simultaneously. Functional connectivity analysis can identify the brain circuits that interact during these cognitive processes. Key findings from these lines of research are discussed in the next sections of this chapter.

EXECUTIVE FUNCTIONS

In line with the continued structural development of the brain, cognitive abilities also show a protracted trajectory of development during adolescence. Much attention has been paid to the development of so-called executive functions (also known as cognitive control), an umbrella term for the collection of cognitive abilities that are crucial for goal-directed and adaptive behavior (Huizinga & Smidts, 2011). Executive functions allow individuals to show contextually appropriate behavior. They are essential for performing complex and novel tasks and form the basis of many complex social, emotional, and cognitive skills. These abilities are mediated by some of the networks in the brain that show the greatest development during adolescence, namely, those involving the frontal cortex. This area of the brain is strongly interconnected with other cortical and subcortical regions. Interest in the development of executive functions has increased in recent years as research has shown that individual differences in executive functions are a consistent influence on behavior over the course of the life span. Higher levels of executive functioning are related to more positive developmental outcomes in multiple domains, ranging from academic achievement (Clark et al., 2010; Lee et al., 2012) to socioemotional abilities (Denham et al., 2012; Miller & Hinshaw, 2010).

Various models of executive functions have been proposed, all of which suggest that these functions consist of a number of related but separable components that each reach adult levels at different ages. These include the capacity to suppress prepotent or dominant responses (i.e., inhibition), to switch flexibly between different tasks (i.e., cognitive flexibility), and to hold information in mind and update this when necessary (i.e., working memory; Miyake & Friedman, 2012). These models assume that executive functions enable the top-down regulation of lower order reflexive responses, thereby increasing cognitive control on behavior. Adult levels of cognitive control are then achieved as these functions mature and integration improves.

The building blocks of executive functions emerge in infancy, for example, when infants learn to control their reflexive motor responses in order to grasp a specific object (Diamond, 1990). Rapid improvements in executive abilities take place during early childhood. Performance on lower level skills, such as inhibitory control and working memory, reaches adult levels first, usually by late childhood or early adolescence (Anderson et al., 2001). fMRI studies have shown

that during adolescence recruitment of the lateral PFC during inhibitory control tasks increases, and this is related to improved performance on this type of task. It appears that with age a shift occurs from diffuse to more focused activation of the PFC (Durston et al., 2006). Basic forms of working memory show the greatest improvements during childhood. After age 14–15, there are few improvements in the amount of information individuals can recall and the duration for which they are able to retrieve it. These skills enable the development of more complex forms of working memory, such as monitoring and manipulating complex information, combining it with previous knowledge, and using it to guide decision-making. These more intricate forms continue to develop during adolescence and into adulthood (e.g., Kwon et al., 2002).

Distinct regions of the prefrontal and parietal cortex have been implicated in the various aspects of working memory. The prefrontal regions are thought to be involved in the overall executive components of working memory, such as manipulating information, while regions in the parietal cortex underlie the mnemonic working memory processes (Luna et al., 2010). When engaging in relatively simple working memory tasks, children and adolescents recruit these regions to the same extent as adults. As task complexity increases, age-related differences become more apparent. While adolescents often demonstrate levels of executive function equivalent to that of adults, their neural activation patterns often appear similar to those of adults performing a more complex task. As with the development of inhibitory control, activation within the working memory network appears to become less diffuse and more specialized with age.

These changes in activation of the PFC and its associated networks are described by the theory of interactive specialization (Johnson, 2011). It postulates that in infancy and childhood the roles of many cortical regions are poorly defined, and thus they are involved in a variety of cognitive tasks. Over the course of development, the recruitment of these regions, as well as the manner in which they are interconnected, becomes more specialized through activity-dependent interactions. The resulting specialization enables faster processing of information and, in the case of executive functions, improvements in cognitive control.

The more complex aspects of executive functions, such as cognitive flexibility, show longer developmental trajectories and continue to develop through middle and late adolescence and into adulthood (Luna et al., 2004). Maturation of these functions forms the basis for improvements in higher order abilities, such as planning and problem-solving. Results from studies examining the development of cognitive flexibility at a neural level have been less clear-cut than those examining inhibition and working memory (Dajani & Uddin, 2015). A number of studies have reported higher levels of more focused activation with age in the frontoparietal network as well as the basal ganglia. Other studies have failed to find these differences in brain activation with age, and more research is needed to examine this development.

A particularly relevant aspect of cognitive flexibility during adolescence is the ability to learn from feedback and to use this information to adapt behavior. Sensitivity to negative feedback is particularly high in early childhood and then shows a linear decrease, resulting in lower negative-feedback sensitivity in adolescence (Humphreys et al., 2015). Consistent with behavioral results, neuroimaging studies showed that the dorsolateral prefrontal cortex (DLPFC), parietal cortex, and anterior cingulate cortex (ACC) are less active following feedback on incorrect answers in adolescents than in adults. The differences in the ACC are of particular interest, as this region is involved in error processing and conflict monitoring. Decreased recruitment of this region may reflect such a reduced sensitivity to negative feedback; interestingly, those adolescents who showed stronger activation of these regions were better at adapting their responses in light of the changing task demands than those who showed lower levels of activation (e.g., Peters, Braams, et al., 2014; Peters, Koolschijn, et al., 2014). This reduced sensitivity to negative feedback can lead to more exploration in risky conditions, which can have a positive outcome under certain circumstances (Humphreys et al., 2015). Positive feedback seems to differ in the way in which it is processed during adolescence. Studies of activation following positive feedback showed that recruitment of the lateral prefrontal and parietal cortices decreased with age, meaning that these regions are more active in adolescents than adults (e.g., Peters, Braams et al., 2014). Combined, these findings suggest that adolescents may learn more from praise and encouragement than punishment.

HOT VERSUS COLD EXECUTIVE FUNCTIONS

Initial studies of executive function focused on examining these abilities in so-called cold situations characterized by low levels of emotional arousal. This work showed developmental improvements on cold executive function tasks, which provide a decontextualized measure of executive function abilities, without the presence of emotional stimuli that could undermine cognitive control. For example, a standard go-no-go task is a well-studied measure of inhibition. During this task a participant is asked to push a button each time a letter (e.g., an *A* or *B*) appears on a computer screen. They are also instructed not to push the button when a particular letter, termed the no-go stimulus, appears (e.g., an *X*). The go stimuli are presented on the majority of the trials, with the no-go stimulus appearing infrequently (usually on 10%–20% of trials). Consequently, the participant builds up a dominant response to push the button each time a letter appears and is only occasionally required to override this prepotent response by inhibiting his or her behavior. Accuracy on no-go trials is used as a measure of inhibitory control. It is known to improve with age, and adult levels of performance are typically reached by midadolescence (Rubia et al., 2006).

The way in which executive functions are measured by this type of cold executive function task seems to differ from the reality of the adolescent experience.

The transition from childhood to adolescence is characterized by changes in personal drives and the accompanying motivational influences on behavior. Over time, adolescents begin to develop their own identity: The focus of their attention shifts from parents to peers, and the importance of friendships and romantic relationships increases. While children's emotions are often buffered and guided by their parents, adolescents need to learn to regulate their own responses to intense and volatile emotions, both positive and negative. During this period of social reorientation, adolescents frequently find themselves in emotionally laden situations as they strive for acceptance from their peers. The increased motivational salience of social cues heightens the demands on their still-developing executive function abilities. This suggests that more complex motivationally and affectively relevant tasks are needed to examine executive function abilities in these "hot" contexts. Various tasks, such as an emotional version of the go-no-go task (e.g., Somerville et al., 2011), have been specifically designed to assess the development of hot executive functions. This task requires participants to respond to stimuli displaying a particular emotion (e.g., words or faces) while inhibiting their response to stimuli displaying other emotions. This enables assessment of the effects of the affective context on task performance. Studies using these types of tasks have frequently found a high sensitivity to emotional information during adolescence, leading to impairments in cognitive control in the context of affectively valenced information (e.g., Somerville et al., 2011). Other studies have shown effects of rewards, incentives, threats, and peers on performance during cognitive control tasks (Cohen et al., 2016). These effects seem to be related to the relevance of the stimuli. A study using an emotional go-no-go task showed that a relevant affective context had a greater effect on cognitive control than when the emotions were irrelevant (Schel & Crone, 2013).

The development of hot executive functions is thought to lag behind that of cold executive functions and therefore reach maturity at a later age, possibly not until early adulthood. Both processes are assumed to work in tandem in many behavioral contexts: Many emotionally significant decisions are made through careful deliberation. However, studies comparing the developmental courses by using both hot and cold tasks have found weak correlations between the two, as well as differences in change over time between the trajectories, suggesting that they develop somewhat independently. This distinction was supported by brain lesion studies, as well as neuroimaging studies comparing performance in adolescents and adults (Zelazo & Carlson, 2012).

The distinction between hot and cold executive functions is grounded in the assumption that motivationally and emotionally salient contexts often require different top-down processes than affectively neutral contexts do (Cunningham & Zelazo, 2007). The processes recruited during cold tasks are presumed to be more reflective and therefore less automatic than those recruited during hot tasks. Due to their still-emerging cognitive control abilities, adolescents are expected to find it more difficult than adults to generate reflective responses instead of relying

on automatic responses. This is especially true in the social situations in which adolescents frequently find themselves. Consequently, the development of social–cognitive skills interacts with the development of executive functions to create the unique patterns of behavior often observed during adolescence.

SOCIAL-COGNITIVE DEVELOPMENT

Behavior does not occur in a social vacuum, particularly during adolescence. As has been discussed, adolescence is a period of social change. Studies have shown that adolescents become increasingly concerned with the opinions of others (Adams & Berzonsky, 2003). During this period, friendships with peers become more intense, social relationships become more important, and as a result, peer acceptance becomes a powerful motivator for adolescents to conform to patterns of behavior that receive approval from their peer group. Consequently, adolescents are more sensitive than adults to social exclusion, and ostracism during adolescence has been linked to lowered mood and increased anxiety in adolescent girls (Sebastian et al., 2010). With age, adolescents become increasingly adept at reading emotional cues as well as modulating emotional responses. This is reflected in improvements in performance on, for example, tasks measuring facial emotion processing (Thomas et al., 2007) or taking the perspective of others (Dumontheil et al., 2010).

The changes in social competence and social behavior during adolescence are paralleled by extensive development of the network known as the social brain (Blakemore, 2008). This network includes the posterior superior temporal sulcus (pSTS), the temporoparietal junction (TPJ), the medial prefrontal cortex (mPFC), and the anterior temporal cortex (ATC). The pSTS is associated with the perception of biological motion, such as complex social gestures and body movements. The TPJ is involved in understanding the thoughts and intentions of others. The mPFC has been implicated in multiple aspects of social cognition, including perspective-taking, self-referential processing, as well as reflecting on traits of others. Finally, the ATC is involved in processing social knowledge and scripts (reviewed by Kilford et al., 2016). These regions of the social brain are among the last to mature, showing developmental changes into early adulthood. Activation in the pSTS and TPJ, the more posterior regions of the social brain network, appears to increase across adolescence. Conversely, recruitment of the mPFC appears to decrease from adolescence to adulthood, with adolescents showing activation in the region in response to both social and nonsocial cues, perhaps reflecting the strong relevance of social processes during this period. The decreased recruitment of the mPFC may reflect increasing specialization within the network with age, as well as the maturation of regulatory abilities such as cognitive control (Blakemore, 2008).

Improvements in social cognitive abilities, such as perspective-taking, allow adolescents to experience more complex emotions. In order to experience social emotions such as guilt and embarrassment, you need a representation of another's

mental state and their assessment of your behavior. Adolescents recruit the mPFC more than adults when processing social emotions and recruit the left ATC less (Burnett et al., 2009). This suggests that adolescents may rely on their perspective-taking abilities in these situations, while adults are able to use their knowledge of social interactions, possibly also making these tasks less demanding. Interestingly, perspective-taking abilities during adolescence have also been related to interpersonal trust. Those adolescents with higher perspective-taking abilities appear to use these skills to determine who they can and cannot trust, while adolescents with lower levels of perspective-taking abilities show less differentiated social behavior (Fett et al., 2014). These findings suggest that refinement of social cognitive skills during adolescence may be conducive to more flexible and sophisticated responses within social interactions.

NEUROCOGNITIVE MODELS OF ADOLESCENT DEVELOPMENT

Various dual-system models have been proposed to address the complex changes in brain and behavior relationships during adolescence and to explain how these changes occur (for recent overviews, see Casey, 2015; Crone & Dahl, 2012; Luna & Wright, 2016; Shulman et al., 2016). Each of these models acknowledges that adolescence is characterized by a developmental mismatch between the development of an affective system comprising striatal and limbic circuitry involved in the processing of arousal, emotion, and reward sensitivity and the prefrontal regulatory circuitry, which exerts cognitive control over these behaviors and emotions. These models suggest that the cognitive control system is slow to develop during adolescence and does not reach maturity until late adolescence or early adulthood (Mills et al., 2014). Consequently, in situations where the activation of the affective system is heightened, the influence of the cognitive control circuitry is not yet strong enough to enable top-down control of affective and motivational drives. This is reflected in a multitude of instances of adolescent behavior, which often seem to be characterized by an affinity for novel or risky situations without due consideration of the potential negative consequences of these behaviors.

The various models differ in the way they propose that the cognitive control and affective systems mature. Both the models conceptualized by Casey et al. (2008) and Steinberg (2008) propose that the cognitive control system develops slowly and steadily during adolescence. With regard to the affective system, Casey et al.'s (2008) model proposes that this increases in arousability until midadolescence and then remains at this level until adulthood. Based on this model, the behavioral decline in risk-taking and other adolescent typical behaviors is the result of increased cognitive control, thereby reducing affective influences on behavior. The model suggested by Steinberg (2008) proposes that arousability follows an inverted-U-shaped trajectory, peaking during midadolescence and subsequently declining. This occurs independently of changes in cognitive control, suggesting that reductions in risk-taking behaviors are the result of decreased emotional

arousability. Another variation on the model, proposed by Luna and Wright (2016), also endorses the inverted-U-shaped developmental course of emotional arousability but suggests that cognitive control plateaus at an earlier time point in development, namely, around midadolescence.

Other models have stressed the importance of motivation and contextual factors (e.g., Crone & Dahl, 2012), suggesting that the imbalance between the systems may be determined by the motivational and affective salience of the context. They presume that cognitive control is more variable and therefore less automatic during adolescence. Factors such as peer pressure or the value of a specific reward may influence the degree to which adolescents are willing and able to assert cognitive control. While an adolescent may rationally understand the negative consequences of risky behaviors such as drinking or smoking, the expected reward in the form of increased social approval is difficult for them to ignore. In fact, from a developmental perspective, it may be more adaptive for an adolescent to prioritize the short-term social gains over the long-term negative consequences of engaging in these behaviors. For example, though adolescents showed an increased ability with age to delay gratification in favor of a larger reward (Lee et al., 2013), studies have shown that adolescents in the presence of their peers show a greater preference for immediate over delayed rewards (O'Brien et al., 2011) as well as make more risky decisions than when they are alone (Gardner & Steinberg, 2005; van Hoorn et al., 2016). This flexibility to adjust their behavior has been suggested to be a crucial skill in enabling adolescents to understand and adapt to their changing social environment (Crone & Dahl, 2012).

Recently, dual-process models have been under discussion in the literature for being relatively simple and somewhat speculative heuristic models of development (Pfeifer & Allen, 2016; van den Bos & Eppinger, 2016). However, within the relatively young field of developmental cognitive neuroscience, they have been helpful in generating initial hypotheses about the nature of brain–behavior relationships during adolescence. As more research findings are incorporated into these models, more specific and falsifiable hypotheses should be generated to allow for refinement of the underlying theories.

Explaining Individual Differences in Adolescent Development: The Effects of Peers, Parents, and Environmental Influences

Though there are many overarching similarities, the developmental trajectories of both cognitive processes and neural circuits during adolescence are also characterized by individual differences, resulting from variations in external influences. These differences are possible due to so-called neuroplasticity, the brain's ability to change and adapt based on experience. This process underpins learning: The connections between neurons are strengthened when these neurons are frequently simultaneously active, an effect known as experience-dependent

plasticity (Greenough et al., 1987). Though plasticity decreases with age, adolescence appears to be a period during which the brain is able to flexibly adapt to the environment. The basic systems of executive functioning, social cognition, and emotion regulation are largely matured, but the connections between these systems are still forming. This makes adolescence a unique period of opportunity for social and motivational learning (Zelazo & Carlson, 2012). While numerous influences on this development can be distinguished, we focus on those that have received an extensive amount of attention in the literature, namely, the influences of peers and parents, as well as environmental influences such as socioeconomic status (SES) and culture.

SOCIAL CONTEXT AND THE INFLUENCE OF PEERS

An often-cited problem in adolescents' behavior is their propensity for risky and reckless actions, and much of this risk-taking behavior occurs in the presence of their peers. For instance, crime statistics show that adolescents generally commit criminal offenses in peer groups, while adults typically offend on their own (Zimring, 1998), and affiliation with alcohol-using peers is highly predictive of adolescent alcohol use (Leung et al., 2011). These real-life behaviors correspond with the results of experimental research, which has frequently shown increases in risk-taking behaviors in the presence of peers.

One of the first studies to demonstrate this effect used a computerized driving task. Early adolescents, late adolescents, and adults took comparable amounts of risk during this task when tested alone. However, in the presence of two same-aged peers, the adolescent groups showed substantial increases in their levels of risk-taking. This was especially the case in the early adolescent group, who took almost twice as much risk with peers compared to without. These peer-related changes were not observed in adults (Gardner & Steinberg, 2005). Subsequent studies using a variety of tasks have confirmed this effect.

In the presence of their peers, adolescents become less future oriented and more inclined to gamble (van Hoorn et al., 2016). Neuroimaging studies suggested that these effects are due to an increased motivational salience of rewards in the presence of peers. Adolescents show enhanced activation in the ventral striatum (VS), a key reward-processing region, when taking risks with peers. This peer-related VS activation has not been observed in adults (Chein et al., 2011).

The presence of peers appears not only to modify neural reward processing, but also to influence regions of the social brain. When adolescents were told they were being observed by a peer via a live video feed, they reported higher levels of embarrassment than children and adults and showed a stronger recruitment of the mPFC than the other age groups (Somerville et al., 2013). This suggests that possible social evaluation is highly salient during adolescence, leading to enhanced engagement of socioaffective networks in conditions with minimal peer influence. In certain situations, an interaction between the peer influence effects on

both social cognition and reward processes may contribute to increases in risk-taking. A recent study showed that activation in the social brain (including TPJ and mPFC) during a computerized social exclusion task was positively correlated with increased risk-taking on a driving task performed with peers relative to alone (Falk et al., 2014). This suggests that those adolescents with high levels of self-awareness or concerns regarding how others view them may be more susceptible to the influence of their peers.

While many studies of peer interactions during adolescence have focused on negative influences such as increases in risk-taking behaviors, a growing body of literature suggests that peers may also positively influence behavior. Though risk-taking has the potential to result in negative consequences, increases in exploratory behavior also give adolescents the opportunity to learn from their mistakes and adapt their behavior accordingly. For example, during a gambling task, late adolescents in the presence of their peers made decisions to play more frequently and therefore showed higher learning rates as a consequence of receiving more positive and negative task feedback (Silva et al., 2015). Other work has shown that adolescents also adopt positive behaviors shown by those around them. Adolescents' intentions to volunteer increase when their peers endorse volunteering, especially when these peers have high status within the peer group. These effects appear to subsist when the adolescents are no longer in direct contact with their peers (Choukas-Bradley et al., 2015). A similar effect was observed in a study showing that adolescents invested more during a group investment task when this behavior was endorsed by same-age peers. Furthermore, investment behavior in the presence of peers was positively correlated with engagement of areas of the social brain, such as the mPFC, TPJ, and superior temporal sulcus (van Hoorn et al., 2016). This suggests that adolescents consider the thoughts and intentions of their peers when they are observed while making decisions. Taken together, these findings suggest that peer relationships are a strong determinant of adolescent behavior, both by increasing the motivational salience of potential rewards and by modulating responses of social brain regions.

PARENTAL INFLUENCE

Although peer relationships become more prominent during adolescence, parents still play a big role in adolescents' lives. The reorientation from the influence of parents to that of peers that takes places during adolescence is necessary to enable adolescents to become independent and individuated from their parents. Consequently, adolescents show stronger responses in affective processing regions when taking the perspective of their peers compared to that of their parents (Saxbe et al., 2015). However, the relationship with parents continues to be meaningful, and close relationships with parents during adolescence may even be risk protective.

Previous research on the role of parents in neurocognitive development has often focused on childhood. There is a large body of research on how attachment

to parents during early childhood can influence later life outcomes and how aversive experiences during childhood can mediate psychopathology (Dozier et al., 2008). Comparably little research has been conducted looking at adolescents. The existing studies suggest that parenting style, parental warmth, or simply the presence of a parent can influence brain activity and structural brain development during this period. Parents appear to have a protective effect on risk-taking behaviors, in contrast to the negative effects often associated with peer influence. One study found that adolescents made fewer risky decisions when their mother was present, compared to when they were alone. Neural activation was increased in the PFC, suggesting that the presence of the mother reduced risk-taking by facilitating conscious decision-making using top-down cognitive control (Telzer et al., 2015). Parental interactions can also have an influence on reward processing in other social interactions, such as peer evaluations.

In another study, adolescents and their mothers discussed a topic on which the adolescent hoped to receive parental support. Adolescents who experienced negative affect during this interaction showed reduced activity during peer evaluations in specific reward-processing regions (ACC, amygdala, and anterior insula; Tan et al., 2014). Even these relatively mild encounters with negative maternal affect seem to alter the reward adolescents would typically experience from positive peer interactions.

In line with this, another study found that low parental warmth in early adolescence was associated with increased activity in regions related to reward anticipation during a monetary reward task at the age of 16 (mPFC, VS, and amygdala; Casement et al., 2014). Notably, increased activity in these regions was also predictive of later depressive symptoms, illustrating the detrimental effects of lacking warmth and support from parents during adolescence.

Parenting has also been related to structural brain development. A longitudinal study found that positive maternal behavior during early adolescence was associated with accelerated thinning of regions involved in reward processing and emotion regulation, such as the OFC and ACC (Whittle et al., 2014). Taken together, these studies demonstrate that a positive and supportive relationship with parents, especially during early adolescence, is beneficial to the experience of social reward and can buffer the effects of negative social evaluations later in life.

SOCIOECONOMIC STATUS

Recent studies have investigated the relationship between brain maturation and SES during development. Given that adolescence is a time during which exploration increases and sensitivity to environment is very high, a lack of experiences during this time might be especially detrimental to healthy brain development. SES has been measured using many different approximations. In the context of developmental neuroscience, researchers have most commonly used parental education and household income. Using these measures, there seems to be a clear

link between SES during childhood and adolescence and brain development. Throughout development as well as in adulthood, lower parental SES has consistently been associated with smaller volume of the hippocampus, a region related to memory. Parental education predicted cortical thickness and was negatively correlated to amygdala volume in children and adolescents (Brito & Noble, 2014). Higher SES is positively correlated with white matter volume and integrity. In one study children from lower income families showed less white matter volume and integrity and exhibited less cognitive flexibility, whereas children from higher income families with similar levels of white matter volume and integrity did not exhibit less cognitive flexibility. This suggests that high SES can buffer the effects of decreased white matter volume and integrity (Czernochowski et al., 2008). Many factors have been suggested to drive this relationship. Adolescents of lower SES are often exposed less to language and have fewer novel experiences. They are more likely to suffer from various stressors, face high levels of unpredictability, often receive less parental attention, and have fewer resources to overcome any deficiencies (Hackman & Farah, 2009; Hair et al., 2015). Taken together, research has shown that SES is related to neural structure and may influence the link between neural structure and cognitive and behavioral outcomes (Ursache & Noble, 2016).

CULTURAL INFLUENCES

Adolescence has been proposed as a particularly sensitive period for cultural learning (Choudhury, 2009). Any individual's experiences will heavily depend on the culture they live in, but adolescents seem to adjust to cultural influences more readily than other age groups. For example, adolescent immigrants acculturate faster to their new environment than adults (Blakemore & Mills, 2014). The field of cultural neuroscience is relatively new. It aims to investigate how culture may shape the structure and function of the brain. A particularly relevant time for the emergence of neural differences between cultures may be adolescence because the brain still shows high plasticity and seems to be especially sensitive to environmental influences. Therefore, culturally relevant behavior and the corresponding neural pathways could be more easily modified (Choudhury, 2009).

There are some initial studies showing cultural differences in functional brain activity in adolescence. In one study, European American and Latino American adolescents could distribute money either to themselves or to their family. These groups were assumed to differ culturally with regard to their perceptions of family obligation. In Latino cultures, a high value is placed on family obligation, and Latino adolescents spend more time helping their families than their European American peers. Though behaviorally their monetary distributions did not differ, the neural activity in reward-processing regions (VS) showed higher activity in the Latino adolescents when giving money to their family (Telzer et al., 2010). This suggests that culture can modulate underlying neurocognitive processes like experienced reward, although the observed behaviors are the same.

A number of studies have been conducted with adults that have suggested that there are cultural differences in the regions of the brain that are recruited during certain tasks, as well as the way in which particular regions are recruited. For example, during perspective-taking tasks, the mPFC was recruited by Western adults during self-representation, while Chinese adults recruited this region for the representation of both the self and close others (Zhu & Han, 2008). This suggests that cultural differences in the way the self is construed also influence the way information about the self is processed.

So far, only a few studies have investigated the effect of culture on neurocognitive development. Moreover, the vast majority of these studies have only included participants from the global north, mainly comparing Asian against Western culture. This selection bias is partially responsible for a lack of knowledge on the effect of harsh situations on neurocognitive development (e.g., of war, conflict, chronic stress, or malnutrition). Fortunately, cultural neuroscience is believed to see a great increase in the near future. We hope that this will encourage more studies to consider a wide range of contextual factors and cultures. It is hoped that researchers will see this as an opportunity to expand their work to reflect the diverse experiences of adolescents all around the world. In doing so, researchers would contribute to a more general and inclusive understanding of how behavioral and neural changes during adolescence are shaped by context and culture.

Conclusions and Future Directions

This chapter has highlighted current findings regarding neurocognitive development during adolescence. Research has shown that the transition from childhood to adulthood is characterized by a multitude of changes in the structure and function of the brain. It is a period of refinement of both cognitive control and socioaffective circuitry, resulting in a unique set of adolescent-typical behaviors. These are characterized by a heightened sensitivity to motivational and affective cues, refinement of social cognitive abilities, and a strong responsiveness to the influence of their peers. These changes occur against a backdrop of slow but steady improvement in cognitive control, resulting in a shift toward more adult patterns of behavior. As adolescents approach adulthood, they are increasingly able to flexibly regulate their behavior in order to navigate the demands of their social environment.

Adolescence is in essence a transitional period. Individual differences between adolescents, in behavior, brain maturation, and social environment, shape this period into unique developmental trajectories for each individual. Enabling adolescents to transition safely into adulthood is of course of vital importance, and any research that may support this should be continued. However, it is important to consider that not all adolescent behavior is problematic or dangerous. Low-level risk-taking, for example, is also the cause of the willingness adolescents often demonstrate to try

new things, to explore and discover the world around them. And, while adolescents' lack of cognitive control may sometimes pose problems in decision-making contexts, it also gives them the cognitive flexibility to think creatively and "outside the box." Adolescence should thus be viewed as a period of unique opportunities for self-development, supported by the biopsychological and psychosocial changes the individual goes through. The challenge for future adolescent research will be to find ways to inspire and motivate adolescents to harness their creative abilities and youthful exuberance in the direction of positive life course trajectories.

References

Adams, G. R., & Berzonsky, M. D. (2003). *The Blackwell handbook of adolescence*. Oxford, England: Blackwell.

Anderson, V. A., Anderson, P., Northam, E., Jacobs, R., & Catroppa, C. (2001). Development of executive functions through late childhood and adolescence in an Australian sample. *Developmental Neuropsychology*, *20*, 385–406.

Asato, M. R., Terwilliger, R., Woo, J., & Luna, B. (2010). White matter development in adolescence: A DTI study. *Cerebral Cortex*, *20*, 2122–2131.

Blakemore, S.-J. (2008). The social brain in adolescence. *Nature Reviews Neuroscience*, *9*, 267–277.

Blakemore, S.-J. (2012). Imaging brain development: The adolescent brain. *NeuroImage*, *61*, 397–406.

Blakemore, S.-J., & Mills, K. L. (2014). Is adolescence a sensitive period for sociocultural processing? *Annual Review of Psychology*, *65*, 187–207.

Brito, N. H., & Noble, K. G. (2014). Socioeconomic status and structural brain development. *Frontiers in Neuroscience*, *8*, 1–12.

Burnett, S., Bird, G., Moll, J., Frith, C., & Blakemore, S.-J. (2009). Development during adolescence of the neural processing of social emotion. *Journal of Cognitive Neuroscience, 21*, 1736–1750.

Casement, M. D., Guyer, A. E., Hipwell, A. E., McAloon, R. L., Hoffmann, A. M., Keenan, K. E., & Forbes, E. E. (2014). Girls' challenging social experiences in early adolescence predict neural response to rewards and depressive symptoms. *Developmental Cognitive Neuroscience*, *8*, 18–27.

Casey, B. J. (2015). Beyond simplistic models of self-control to circuit-based accounts of adolescent behaviour. *Annual Review of Psychology*, *66*, 295–319.

Casey, B. J., Getz, S., & Galvan, A. (2008). The adolescent brain. *Annals of the New York Academy of Sciences*, *1124*, 111–126.

Chein, J., Albert, D., O'Brien, L., Uckert, K., & Steinberg, L. (2011). Peers increase adolescent risk taking by enhancing activity in the brain's reward circuitry. *Developmental Science*, *14*, F1–F10.

Choudhury, S. (2009). Culturing the adolescent brain: What can neuroscience learn from anthropology? *Social Cognitive and Affective Neuroscience*, *5*, 159–167.

Choukas-Bradley, S., Giletta, M., Cohen, G. F., & Prinstein, M. J. (2015). Peer influence, peer status and prosocial behaviour: An experimental investigation of peer socialization of adolescents' intentions to volunteer. *Journal of Youth and Adolescence*, *43*, 5–14.

Clark, C. A., Pritchard, V. E., & Woodward, L. J. (2010). Preschool executive functioning abilities predict early mathematics achievement. *Developmental Psychology*, 46, 1176–1191.

Cohen, A.O., Breiner, K., Steinberg. L., Bonnie, R. J., Scott, E. S., Taylor-Thompson, K. A., . . . Casey, B. J. (2016). When is an adolescent an adult? Assessing cognitive control in emotional and nonemotional contexts. *Psychological Science*, 27, 1–14.

Crone, E. A (2017). *The adolescent brain: Changes in learning, decision-making and social relations*. Abingdon, England: Routledge.

Crone, E. A., & Dahl, R. E. (2012). Understanding adolescence as a period of social-affective engagement and goal flexibility. *Nature Reviews Neuroscience*, 13, 636–650.

Cunningham, W. A., & Zelazo, P. D. (2007). Attitudes and evaluations: a social cognitive neuroscience perspective. *Trends in Cognitive Sciences*, 11(3), 97–104.

Czernochowski, D., Fabiani, M., & Friedman, D. (2008). Use it or lose it? SES mitigates age-related decline in a recency/recognition task. *Neurobiology of Aging*, 29, 945–958.

Dajani, D. R., & Uddin, L. Q. (2015). Demystifying cognitive flexibility: Implications for clinical and developmental neuroscience. *Trends in Neurosciences*, 38, 571–578.

Denham, S. A., Warren-Khot, H. K., Bassett, H. H., Wyatt, T., & Perna, A. (2012). Factor structure of self-regulation in preschoolers: Testing models of a field-based assessment for predicting early school readiness. *Journal of Experimental Child Psychology, 11*, 386–404.

Diamond, A. (1990). Developmental time course in human infants and infant monkeys, and the neural bases of inhibitory control in reaching. *Annals of the New York Academy of Sciences*, 608, 637–676.

Dozier, M., Stovall-McClough, K. C., & Albus, K. E. (2008). Attachment and psychopathology in adulthood. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (Chapter 30). New York, NY: Guilford Press.

Dumontheil, I., Apperly, I. A., & Blakemore, S.-J. (2010). Online usage of theory of mind continues to develop in late adolescence. *Developmental Science*, 13, 331–338.

Durston, S., Davidson, M. C., Tottenham, N., Galván, A., Spicer, J., Fossella, J. A., & Casey, B. J. (2006). A shift from diffuse to focal cortical activity with development. *Developmental Science*, 9, 1–8.

Falk, E. B., Cascio, C. N., O'Donnell, M. B., Carp, J., Tinney, F. J., Bingham, C. R., . . . Simons-Morton, B. G. (2014). Neural responses to exclusion predict susceptibility to social influence. *Journal of Adolescent Health*, 54, S22–S31.

Fett, A.-K. J., Shergill, S. S., Gromann, P. M., Dumontheil, I., Blakemore, S.-J., Yakub, F., & Krabbendam, L. (2014). Trust and social reciprocity in adolescence—A matter of perspective-taking. *Journal of Adolescence*, 37, 175–184.

Gardner, M., & Steinberg, L. (2005). Peer influence on risk taking, risk preference, and risky decision making in adolescence and adulthood: An experimental study. *Developmental Psychology*, 41, 625–635.

Gauthier, I., Tarr, M. J., Moylan, J., Skudlarski, P., Gore, J. C., & Anderson, A. W. (2000). The fusiform "face area" is part of a network that processes faces at the individual level. *Journal of Cognitive Neuroscience*, 12, 495–504.

Giedd, J. N., Lalonde, F. M., Celano, M. J., White, S. L., Wallace, G. L., Lee, N. R., & Lenroot, R. K. (2009). Anatomical brain magnetic resonance imaging of typically developing children and adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 48, 465–470.

Giedd, J. N., Raznahan, A., Mills, K. L., & Lenroot, R. K. (2012). Magnetic resonance imaging of male/female differences in human adolescent brain anatomy. *Biology of Sex Differences*, *3*, 19.

Goddings, A.-L. (2015). The role of puberty in human adolescent brain development. In J.-P. Bourguignon, J.-C. Carel, & Y. Christen (Eds.), *Research and Perspectives in Endocrine Interactions* (Vol. 13, pp. 75–83). New York, NY: Springer.

Greenough, W. T., Black, J. E., & Wallace, C. S. (1987). Experience and brain development. *Child Development*, *58*, 539–559.

Guyer, A. E., Silk, J. S., & Nelson, E. E. (2016). The neurobiology of the emotional adolescent: From the inside out. *Neuroscience and Biobehavioural Reviews*, *70*, 74–85.

Hackman, D. A., & Farah, M. J. (2009). Socioeconomic status and the developing brain. *Trends in Cognitive Sciences*, *13*(2), 65–73.

Hair, N. L., Hanson, J. L., Wolfe, B. L., & Pollak, S. D. (2015). Association of child poverty, brain development, and academic achievement. *JAMA Pediatrics*, *53706*(9), 1–8.

Hall, G. S. (1904). *Adolescence: It's psychology and it's relations to physiology, anthropology, sociology, sex, crime, religion, and education.* New York, NY: Appleton.

Humphreys, K. L., Telzer, E. H., Flannery, J., Goff, B., Gabard-Durnam, L., . . . Tottenham, N. (2015). Risky decision making from childhood through adulthood: Contributions of learning and sensitivity to negative feedback. *Emotion*, *16*(1), 101–109.

Huizinga, M., & Smidts, D. P. (2011). Age-related changes in executive function: A normative study with the dutch version of the Behavior Rating Inventory of Executive Function (BRIEF). *Child Neuropsychology*, *17*(1), 51–66.

Joel, D., Berman, Z., Tavor, I., Wexler, N., Gaber, O., Stein, Y., . . . Assaf, Y. (2015). Sex beyond the genitalia : The human brain mosaic. *Proceedings of the National Academy of Sciences of the United States of America*, *112*(50), 15468–15473.

Johnson, M. (2011). Interactive specialisation: A domain-general framework for human functional brain development. *Developmental Cognitive Neuroscience*, *1*, 7–21.

Kilford, E. J., Garrett, E., & Blakemore, S.-J. (2016). The development of social cognition in adolescence: An integrated perspective. *Neuroscience and Biobehavioural Reviews*, *70*, 106–120.

Kwon, H., Reiss, A. L., & Menon, V. L. (2002). Neural basis of protracted developmental changes in visuo-spatial working memory. *Proceedings of the National Academy of Sciences of the United States of America*, *99*, 13336–13341.

Lee, N. C., de Groot, R. H. M., Boschloo, A., Dekker, S., Krabbendam, L., & Jolles, J. (2013). Age and educational track influence adolescent discounting of delayed rewards. *Frontiers in Psychology*, *4*, 993.

Lee, N. C., Krabbendam, L., Dekker, S. J., Boschloo, A., de Groot, R. H. M., & Jolles, J. (2012). Academic motivation mediates the influence of temporal discounting on academic achievement during adolescence. *Trends in Neuroscience and Education*, *1*, 43–48.

Lenroot, R. K., & Giedd, J. N. (2010). Sex differences in the adolescent brain. *Brain and Cognition*, *72*(1), 46–55.

Luna, B., Garver, K. E., Urban, T. A., Lazar, N. A., & Sweeney, J. A. (2004). Maturation of cognitive processes from late childhood to adulthood. *Child Development*, *75*, 1357–1372.

Luna, B., Padmanabhan, A., & O'Hearn, K. (2010). What has fMRI told us about the development of cognitive control through adolescence? *Brain and Cognition*, *72*, 101–113.

Luna, B., & Wright, C. (2016). Adolescent brain development: Implications to the juvenile criminal justice system. In K. Heilbrun, D. DeMatteo, & N. E. S. Goldstein (Eds.), *APA handbooks in psychology: APA handbook of psychology and juvenile justice* (pp. 91–116). Washington, DC: American Psychological Association.

Leung, R. K., Toumbourou, J. W., & Hemphill, S. A. (2011). The effect of peer influence and selection processes on adolescent alcohol use: a systematic review of longitudinal studies. *Health Psychology Review*, *8*(4), 426–457.

Miller, M., & Hinshaw, S. P. (2010). Does childhood executive function predict adolescent functional outcomes in girls with ADHD? *Journal of Abnormal Child Psychology*, *38*, 315–326.

Mills, K. L., Goddings, A.-L., Clasen, L. S., Giedd, J. N., & Blakemore, S.-J. (2014). The developmental mismatch in structural brain maturation during adolescence. *Developmental Neuroscience*, *36*, 147–160.

Mills, K. L., Goddings, A.-L., Herting, M. M., Meuwese, R., Blakemore, S.-J., Crone, E. A., . . . Tamnes, C. K. (2016). Structural brain development between childhood and adulthood: convergence across four longitudinal samples. *Neuroimage*, *141*, 273–281.

Miyake, A., & Friedman, N. P. (2012). The nature and organization of individual differences in executive functions: Four general conclusions. *Current Directions in Psychological Science*, *21*, 8–14.

O'Brien, L., Albert, D., Chein, J., & Steinberg, L. (2011). Adolescents prefer more immediate rewards when in the presence of their peers. *Journal of Research on Adolescence*, *21*, 747–753.

Paus, T., Keshavan, M., & Giedd, J. N. (2008). Why do many psychiatric disorders emerge during adolescence? *Nature Reviews Neuroscience*, *9*, 947–957.

Peters, S., Braams, B. R., Raijmakers, M. E., Koolschijn, P. C., & Crone, E. A. (2014). The neural coding of feedback learning across child and adolescent development. *Journal of Cognitive Neuroscience*, *26*, 1705–1720.

Peters, S., Koolschijn, P. C., Crone, E. A., van Duijvenvoorde, A. C., & Raijmakers, M. E. (2014). Strategies influence neural activity for feedback learning across child and adolescent development. *Neuropsychologia*, *62*, 365–374.

Pfeifer, J. H., & Allen, N. B. (2016). The audacity of specificity: Moving adolescent developmental neuroscience towards more powerful scientific paradigms and translatable models. *Developmental Cognitive Neuroscience*, *17*, 131–137.

Rubia, K., Smith, A. B., Woolley, J., Nosarti, C., Heyman, I., Taylor, E., & Brammer, M. (2006). Progressive increase of frontostriatal brain activation from childhood to adulthood during event-related tasks of cognitive control. *Human Brain Mapping*, *27*, 973–993.

Saxbe, D., Del Piero, L., Immordino-Yang, M. H., Kaplan, J., & Margolin, G. (2015). Neural correlates of adolescents' viewing of parents' and peers' emotions: Associations with risk-taking behavior and risky peer affiliations. *Social Neuroscience*, *10*, 592–604.

Schel, M. A., & Crone, E. A. (2013). Development of response inhibition in the context of relevant versus irrelevant emotions. *Frontiers in Psychology*, *4*, 383.

Sebastian, C., Viding, E., Williams, K. D., & Blakemore, S.-J. (2010). Social brain development and the affective consequences of ostracism in adolescence. *Brain and Cognition*, *72*, 134–135.

Shulman, E. P., Smith, A. R., Silva, K., Icenogle, G., Duell, N., Chein, J., & Steinberg, L. (2016). The dual systems model: review, reappraisal and reaffirmation. *Developmental Cognitive Neuroscience*, *17*, 103–117.

Silva, K., Shulman, E. P., Chein, J., & Steinberg, L. (2015). Peers increase late adolescents' exploratory behaviour and sensitivity to to positive and negative feedback. *Journal of Research in Adolescence*, *26*, 696–705.

Somerville, L. H., Hare, T., & Casey, B. J. (2011). Frontostriatal maturation predicts cognitive control failure to appetitive cues in adolescents. *Journal of Cognitive Neuroscience*, *23*, 2123–2134.

Somerville, L. H., Jones, R. M., Ruberry, E. J., Dyke, J. P., Glover, G., & Casey, B. J. (2013). Medial prefrontal cortex and the emergence of self-conscious emotion in adolescence. *Psychological Science*, *24*, 1554–1562.

Steinberg, L. (2008). A social neuroscience perspective on adolescent risk-taking. *Developmental Review*, *28*, 78–106.

Sturman, D. A., & Moghaddam, B. (2011). The neurobiology of adolescence: Changes in brain architecture, functional dynamics, and behavioral tendencies. *Neuroscience & Biobehavioral Reviews*, *35*, 1704–1712.

Tan, P. Z., Lee, K. H., Dahl, R. E., Nelson, E. E., Stroud, L. J., Siegle, G. J., . . . Silk, J. S. (2014). Associations between maternal negative affect and adolescents' neural response to peer evaluation. *Developmental Cognitive Neuroscience*, *8*, 28–39.

Telzer, E. H., Ichien, N. T., & Qu, Y. (2015). Mothers know best: Redirecting adolescent reward sensitivity toward safe behavior during risk taking. *Social Cognitive and Affective Neuroscience*, *10*, 1383–1391.

Telzer, E. H., Masten, C. L., Berkman, E. T., Lieberman, M. D., & Fuligni, A. J. (2010). Gaining while giving: An fMRI study of the rewards of family assistance among white and Latino youth. *Social Neuroscience*, *5*, 508–518.

Thomas, L. A., De Bellis, M. D., Graham, R., & LaBar, K. S. (2007). Development of emotional facial recognition in late childhood and adolescence. *Developmental Science*, *10*(5), 547–558.

Tremel, J. J., & Wheeler, M. E. (2015). Content-specific evidence accumulation in inferior temporal cortex during perceptual decision-making. *NeuroImage*, 109, 35–49.

Ursache, A., & Noble, K. G. (2016). Socioeconomic status, white matter, and executive function in children. *Brain and Behavior*, *6*, e00531.

Van den Bos, W., & Eppinger, B. (2016). Developing developmental cognitive neuroscience: From agenda setting to hypothesis testing. *Developmental Cognitive Neuroscience*, *17*, 138–144.

Van Hoorn, J., Fuligni, A. J., Crone, E. A., & Galván, A. (2016). Peer influence effects on risk-taking and prosocial decision-making in adolescence: insights from neuroimaging studies. *Current Opinion in Behavioural Sciences*, *10*, 59–64.

Whittle, S., Simmons, J. G., Dennison, M., Vijayakumar, N., Schwartz, O., Yap, M. B. H., . . . Allen, N. B. (2014). Positive parenting predicts the development of adolescent brain structure: A longitudinal study. *Developmental Cognitive Neuroscience*, *8*, 7–17.

Yakovlev, P. I., & Lecours, A. R. (1967). The myelogenic cycles of regional maturation of the brain. In A. Minkowski (Ed.), *Regional Development of the Brain in Early Life* (pp. 3–70). Oxford, England: Blackwell.

Zelazo, P. D., & Carlson, S. M. (2012). Hot and cold executive function in childhood and adolescence: Development and plasticity. *Child Development Perspectives*, 6, 354–360.

Zhu, Y., & Han, S. (2008). Cultural differences in the self: From philosophy to psychology and neuroscience. *Social and Personality Compass*, 2, 1799–1811.

Zimring, F. (1998). *American Youth Violence Studies in Crime and Public Policy*. Oxford, England: Oxford University Press.

{ 4 }

Studying Positive Youth Development in Different Nations

THEORETICAL AND METHODOLOGICAL ISSUES

Richard M. Lerner, Jacqueline V. Lerner, G. John Geldhof,
Steinunn Gestsdóttir, Pamela Ebstyne King, Alistair T. R. Sim,
Milena Batanova, Jonathan M. Tirrell, and Elizabeth Dowling

Parents, youth development practitioners, and policymakers in all nations have a vested interest in the positive and healthy development of their youth (e.g., Petersen et al., 2017; Schoon & Bynner, 2017; Smith et al., 2017; United States Agency for International Development [USAID], 2013). Similarly, all developmental scientists share the goal of promoting (optimizing the chances of) positive development. Developmental scientists are not in the business of finding ways to harm young people. For instance, since the time that the study of adolescence was launched as a scientific field (Hall, 1904), researchers have been interested in discovering the *processes* involved in adolescents' healthy, adaptive, or positive development. However, both across and within nations, there is variation in definitions of positive youth development (PYD) and in the ideas framing efforts to promote such development (Figure 4.1); these differences in perspectives exist as well among parents, practitioners, policymakers, and developmental scientists (e.g., Koller et al., 2017; Petersen et al., 2017; Smith et al., 2017).

For much of the twentieth century, the scientific study of adolescence was conducted in the context of a deficit-oriented perspective initiated by Hall's (1904) conception that storm and stress define the adolescent period; the deficit model, encapsulated by the belief that youth were problems to be managed (Roth & Brooks-Gunn, 2003), was often shared by the people raising youth, seeking to provide programs outside the family that might nurture them and formulating or enacting social policies that might support youth development (e.g., their health, education, moral or spiritual growth, or citizenship). As such, many developmental scientists and members of these other sectors viewed youth through a lens of their being at risk, beset by problems, and endangered by the inevitable, biologically based shortcomings that were alleged to cause their storm and stress (e.g.,
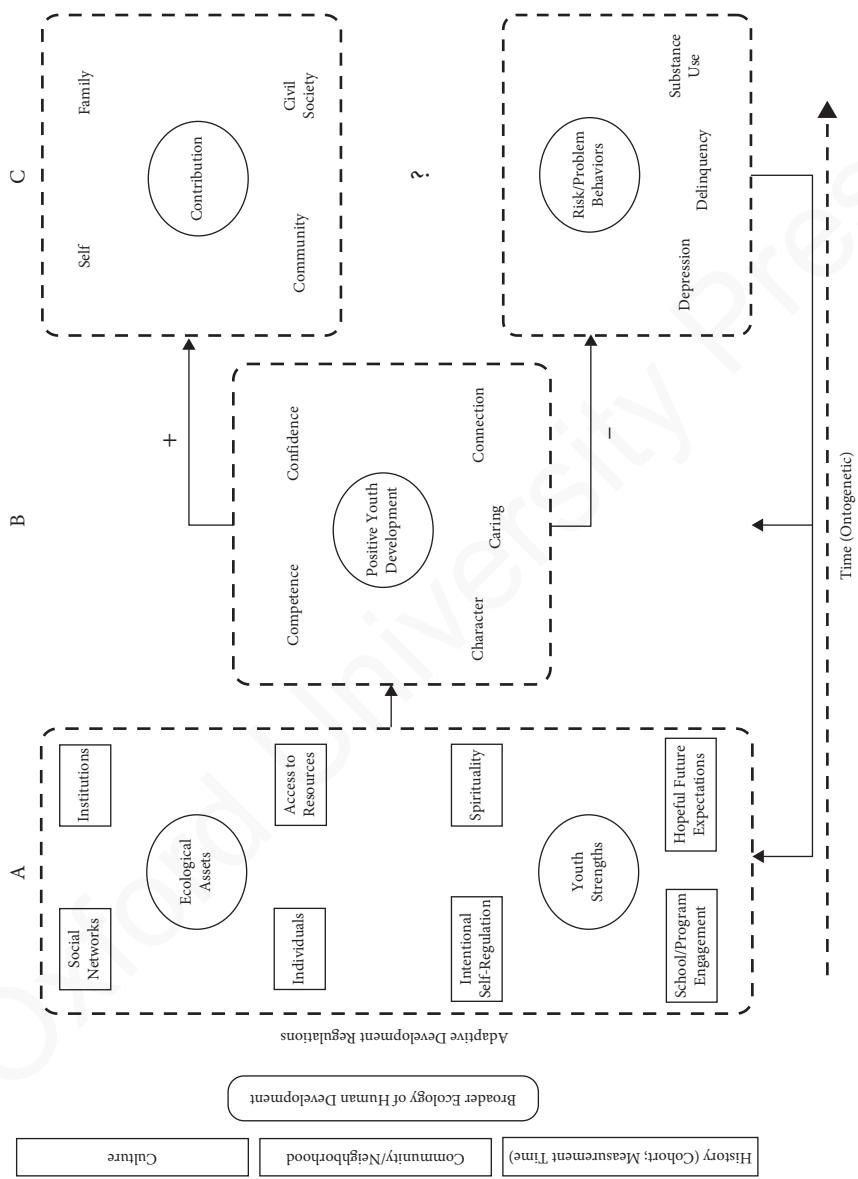
FIGURE 4.1 *The Lerner and Lerner model of PYD as instantiated within the 4-H Study of Positive Youth Development.*

Anthony, 1969; Freud, 1969). From this perspective, promoting positive develop-ment in youth was a matter of making them less problematic. Being a good ado-lescent, therefore, was in effect defined by what youth did not do (e.g., in regard to smoking, drinking, substance use, unsafe sex, or bullying). Into the 1990s, this deficit perspective was the predominant lens for the study of adolescents despite more than 30 years of countervailing research findings (e.g., Bandura, 1964; Block, 1971; Douvan & Adelson, 1966; Offer, 1969).

In the 1990s, a new lens for viewing adolescent behavior and development emerged, spurred by the convergence of the work of youth program professionals, such as Rick Little of the International Youth Foundation and Donald Floyd of the (US-based) National 4-H Council. Practitioner beliefs in the strengths of youth and their potential for positive development had a fortunate convergence with contemporaneous theory and research in developmental biology and develop-mental science regarding the relative *plasticity* of human development across the life span (Lerner, 1984; Lerner et al., 2015; Woese, 2004). Plasticity is the potential for systematic change in the features and trajectories of youth development.

Thus, a new vision of adolescent development emerged, one specifically directed to capitalizing on human plasticity and testing a strength-based model (in contrast to a deficit one) of adolescence. The essence of this conception was that the *funda-mental process* of human development involves mutually influential relations be-tween the individual and the other facets of the context within which he or she is embedded (Lerner et al., 2015); that is, individuals are part of an integrated devel-opmental system, and through the coactions within this system, all young people have strengths. Relative plasticity is an exemplar of such strengths. Relative plasticity in human development means that the attributes of behavior and development pre-sent at one point in life are malleable; as such, if young people could be placed into circumstances promoting positive development, then, through their coactions within the developmental system, would have the capacity to change these attributes.

Across the early years of the twenty-first century, and continuing through this writing, several different models of this *developmental process* believed to be in-volved in PYD were used to frame descriptive, explanatory, and intervention/optimization research across childhood and adolescence (e.g., Benson et al., 2011; Catalano et al., 2002, 2012; Damon, 2008; Eccles, 2004; Eccles & Gootman, 2002; Flay, 2002; Larson, 2000; Lerner et al., 2005, 2015; Masten, 2001, 2014; Spencer, 2006; Spencer et al., 2015). All of these models reflect ideas associated with what is termed relational developmental systems (RDS) metatheory (Overton, 2015).

A Brief Overview of RDS Metatheory

A metatheory is a theory of theories; it is a conception of how to write theories. A metatheory proscribes and prescribes the attributes one includes in theories of development (Overton, 2015). Models derived from RDS metatheory

depict universal functions of a living, open, self-constructing (autopoietic), self-organizing, and integrated/holistic system. RDS metatheory is derived from a process-relational paradigm wherein the organism is seen as inherently active, autopoietic, self-organizing, self-regulating (agentic), nonlinear/complex, and adaptive. RDS-based ideas were used to specify the process of PYD as involving mutually influential *and* mutually beneficial relations between individuals and their contexts, represented as individual ⇔ context relations. When individual ⇔ context relations are mutually beneficial, they are termed *adaptive developmental regulations* (Brandtstädter, 1998). These relations reflect the idiographic character of an individual's thriving trajectory.

As discussed by Bornstein (2017), this idiography means that we need a specificity principle to understand, identify, and use youth strengths to enhance the lives of diverse adolescents. Such a principle would ask a multilevel set of "what" questions, that is, What features of positive development emerge; that are linked to what trajectory of individual ⇔ context relations; for youth of what sets of individual psychological, behavioral, and demographic characteristics; living in what families, schools, faith communities, neighborhoods, nations, cultures, and physical ecologies; at what points in ontogenetic development; and at what historical periods?

The key asset of framing an interest in promoting PYD through approaches derived from the RDS metatheory is the optimism it entails because of being able to capitalize on the developmental plasticity of young people. Indeed, the key hypothesis of the PYD model is that if the specific strengths of youth and the resources in their context (assets for positive development found in their homes, schools, out-of-school activities, and faith communities, for instance) are systematically integrated across adolescence, the lives of all youth can be enhanced.

RDS-Based Models of PYD

At this writing, there is growing use of RDS-based models of PYD in nations around the globe (e.g., see Koller et al., 2017; Schoon, 2017; and other chapters in Petersen et al., 2017; also see USAID, 2013). Nevertheless, it is fair to say that most studies of PYD have been conducted on US samples, a situation still common in the developmental science literature (e.g., Bornstein, 2010; Lerner, 2015; Raeff, 2016). Moreover, although the Lerner and Lerner Five Cs model of PYD (e.g., Lerner et al., 2015, 2017), which is discussed in more detail further in this chapter, is the instance of RDS-based PYD models that has the most extensive empirical support (Heck & Subramaniam, 2009) and, as well, has received the most attention in globally diverse settings (Petersen et al., 2017), caution must be taken when using any US-based model in international settings.

Analogous to minority youth in the United States, youth from the majority world face structural challenges (e.g., gender prejudice, marginalization, or lack of access to institutions of power in their nation) and contextual problems (e.g.,

persistent and pervasive poverty, lack of adequate access to health care, deficiencies in educational opportunities) that must be considered when studying them empirically (Spencer & Spencer, 2014). In addition, by failing to consider the unique contextual challenges that global youth may face, especially those living in poverty, researchers may be defining PYD too narrowly for these youth.

For instance, if researchers approach positive development with an exclusive focus on any one Western-developed PYD model—for example, Damon's (2008) model of youth purpose, Benson's (2008) model of developmental assets, or the Lerner and Lerner (Lerner et al., 2015) model of the Five Cs of PYD—there may be an omission or an underestimation of the potentially unique and creative ways in which global youth may use contextual assets to cope with their settings and thrive, particularly when faced with exceptional circumstances (Spencer & Spencer, 2014; Spencer et al., 2015). In turn, it may be that a focus on purpose, developmental assets, the Five Cs, and so on is appropriate for many global youth, but the way in which these ideas are operationalized in non-US settings may need revision; the constructs pertinent to any PYD model may be manifested differently in different national or cultural contexts. Clearly, future research needs to address these possibilities.

Thus, although the US-based Lerner and Lerner model of PYD is the most studied conception of positive development in youth, it, and the data from the 4-H study of PYD (Lerner et al., 2015), must be used with caution in formulating ideas for the international study of PYD. Within the context of this caution, it is useful to discuss both US-based tests of the Lerner and Lerner model and, as well, the findings of research testing facets of this model in international settings.

TESTS OF THE LERNER AND LERNER PYD MODEL

As is the case with all RDS-based PYD models, the Lerner and Lerner conception is a strength-based model of development that seeks to understand and enhance the lives of diverse youth through engagement with key contexts in their ecology (e.g., families, schools, peer groups, and out-of-school programs) (Lerner et al., 2015).

The Lerner and Lerner model of the PYD process has drawn explicitly from the RDS individual ⇔ context conception as its foundation. This model has been tested in the main in the longitudinal 4-H study of PYD conducted by Lerner, Lerner, and colleagues (e.g., Bowers et al., 2014; Lerner et al., 2005, 2015). This research seeks to identify the individual and ecological relations that may promote thriving and, as well, that may have a preventive effect in regard to risk/problem behaviors. Within the 4-H study, thriving is understood as the growth of attributes that mark a flourishing, healthy young person. These characteristics are termed the *Five Cs* of PYD: *competence* (skills in areas such as academic, social, health, and vocational, including entrepreneurship); *confidence* (an internal sense of overall positive self-worth and self-efficacy); *character* (respect for societal and cultural norms, possession of standards for correct behaviors, a sense of right and wrong [a moral compass], and

integrity); *connection* (positive relationships with people such as parents and other family members, peers, teachers, coaches, mentors, faith leaders, and community members); and *caring* (a concern for others, a sense of social justice).

The 4-H study of PYD began assessing participants in Grade 5 and extending through Grade 12. Overall, across eight waves of the study, approximately 7,000 youth and 3,500 of their parents from 42 US states were surveyed. At all eight waves, the sample varied in race, ethnicity, socioeconomic status, family structure, rural–urban location, geographic region, and program participation experiences (Lerner et al., 2015). Families, schools, and out-of-school youth development programs were assessed in regard to whether they served as settings for, or sources of, the key *ecological assets* linked to positive developmental outcomes. These ecological assets were categorized into four categories: other individuals such as parents, peers, mentors, and teachers; community institutions, including youth development programs; collective activity between youth and adults, including program leaders; and access to the prior three types of assets.

The Lerner and Lerner model of PYD indicated that youth engagement within the specific contexts of their lives was linked to PYD, and that there were links among contexts involved in promoting PYD. For instance, using data from Grades 5, 6, and 7, Theokas and Lerner (2006) found that, in all settings—families, schools, and out-of-school programs—assets represented by other individuals were the most potent predictors of PYD. Family assets such as parental involvement, autonomy granting, communication, and problem-solving were most important in the lives of youth. Similarly, using data from Grades 5 through 8, Lewin-Bizan et al. (2010) found a developmental cascade through which positive parenting (indexed by warmth and monitoring) was a key contextual asset predicting subsequent youth intentional self-regulation; in turn, intentional self-regulation predicted subsequent scores for PYD, and in turn, this positively predicted later youth civic engagement.

Moreover, in a series of studies across Grades 5 through 8, Li and colleagues (e.g., Li & Lerner, 2011; Li et al., 2011) found positive links between cognitive, emotional, and behavioral school engagement, academic achievement, intentional self-regulation, and PYD and negative links between school engagement and problem/risk behaviors. In addition, this work found that peer support positively predicted school engagement, whereas associating with problem-behaving friends and bullying involvement were negatively associated with school engagement. Moreover, both "hanging out" with friends without set plans and excessive media use were associated with lower school engagement, lower academic achievement, and higher rates of risk behaviors. However, youth who ate dinner with their families reported higher levels of school engagement, lower depression and risk behaviors, and better grades.

In addition, several studies have also used the 4-H study data set to examine possible relations between youth development program participation and self-regulatory processes. Urban and colleagues (2010) found that both the strengths of youth, represented by a measure of their intentional self-regulation attributes,

and the resources of their contexts, represented by out-of-school programs, are involved in thriving. However, youth intentional self-regulation abilities moderated the effect of participation in youth development programs on PYD among adolescents living in neighborhoods with lower levels of ecological assets. Youth in these settings who had the greatest capacity to self-regulate benefitted the most from involvement in youth development programs, in terms of PYD, depressive symptoms, and risk behaviors. These relations were particularly strong for girls. Moreover, emotions, such as hope for one's future, along with cognitive and behavioral self-regulation skills, were also related to PYD and to contributions (e.g., positive civic engagement) made by adolescents in Grades 7, 8, and 9 (Schmid & Lopez, 2011). In addition, using data from Grades 8 through 11, Zaff et al. (2011) found that youth participation in out-of-school programs and in religious institutions predicted four aspects of civic engagement: civic participation, civic duty, civic self-efficacy, and neighborhood connection.

In sum, findings from the tests of the Lerner and Lerner model conducted with data from the 4-H study of PYD support the idea that links among the strengths of young people (e.g., intentional self-regulation, school engagement, hope for the future, or spirituality) and the ecological assets in their families, schools, out-of-school programs, peer groups, and neighborhoods predict their thriving and, in turn, active and engaged citizenship. However, there have also been tests of the model that have been inconsistent with expectations. For instance, the predicted inverse relation between indices of civic engagement and risk/problem behaviors was not present for all participants at all ages. Some trajectories of high, positive civic engagement were coupled with trajectories involving increasingly higher levels of risk/problem behaviors for different youth across different portions of adolescence (Lewin-Bizan et al., 2010; Phelps et al., 2007). Therefore, the overall strength and valence of the relation between civic engagement and risk/problem behaviors remain uncertain in any general sense. Additional theory development and research will be required to identify the individual and ecological conditions moderating the valence and strength of the civic engagement–risk/problem behavior relation for specific youth or groups of adolescents.

There are other issues that need to be addressed in order to advance knowledge beyond the understanding of PYD provided by the 4-H study. For instance, in the 4-H study there were limitations of design, measurement, and sampling (e.g., participants were part of a convenience sample, and the sample was mostly white, suburban or rural, and middle-to-above-middle socioeconomic status) (see Bowers et al., 2014; Lerner et al., 2015, 2017; Spencer & Spencer, 2014, for further critiques). However, the primary limitation of the 4-H study, at least in regard to understanding PYD among global youth, pertains to its exclusive focus on US youth. Nevertheless, despite this limitation, interest in PYD in general is burgeoning internationally, and there is growing interest in extending the assessment of the Lerner and Lerner model to global youth.

International Programs, Policies, and Research About PYD

The burgeoning international interest in research pertinent to the meaning and measurement of PYD (Petersen et al., 2017; Schoon & Bynner, 2017; Smith et al., 2017) has been increasingly coupled with efforts by youth-serving program leaders, governmental organizations, and international foundations to frame practice within a PYD perspective. Although these efforts are still in their infancy, there are several reasons to believe that this framing will continue.

For instance, in 2016, the Washington, DC, chapter of the Society for International Development held a meeting, Positive Youth Development in Action: Voice From Youth and Practitioners. Among the participants were representatives from the International Research and Exchanges Board, Creative Associates International, the Latin American Youth Center, and the International Youth Foundation. The contribution by the International Youth Foundation to this meeting reflected its interest in the link between PYD and youth workforce development.

The International Youth Foundation works in about 100 countries to promote PYD. Its work focuses on three areas of youth workforce development: education and employment, entrepreneurship, and social innovation. The work of USAID is, in many ways, congruent with the efforts of the International Youth Foundation. USAID collaborates with regional governments, the private sector, and intermediary organizations, such as Making Cents International and the International Youth Foundation, to enhance educational options, skill training, and apprenticeship opportunities that enhance PYD. Moreover, USAID works to enhance the measurement tools useful for research and evaluation pertinent to PYD. Although this measurement development work regarding PYD is still in its early stages, it reflects an interest in USAID to use the several models of PYD noted previously as frames for devising useful indices of PYD. We also noted that, at this writing, the Lerner and Lerner model is still the most used frame for international PYD research (Petersen et al., 2107). As such, we may use it as a sample case illustrating the issues to be addressed in future PYD research among youth from the majority world.

USING THE LERNER AND LERNER MODEL TO INDEX PYD AMONG GLOBAL YOUTH

The visibility of the 4-H study (Petersen et al., 2017) and the international interest in RDS-based models of human development more generally (e.g., Lerner, 2012, 2015) have been associated with several attempts to use the Lerner and Lerner model in nations other than the United States. Such work is consistent with ideas forward by USAID (2013) in regard to still-unmet research needs regarding PYD research involving youth from the majority world. The USAID report (2013) calls for rigorous, longitudinal studies of holistic programs aimed at promoting PYD; the report argues that such studies should be framed within a conceptual model

applicable to international settings and, as well, should be marked by the use of psychometrically strong measures. At this writing, a key focus of international work pertinent to the Lerner and Lerner model has been about the measurement of PYD itself. This work has focused on verifying whether the Five Cs measure of PYD developed for use in the 4-H study (e.g., Bowers et al., 2010; Geldhof, Bowers, Boyd, et al., 2014; Geldof, Bowers, Mueller, et al., 2014; Lerner et al., 2005) is applicable to youth from nations other than the United States.

Holsen et al. (2017) assessed whether the Five Cs measure can validly index positive development among 1,195 Norwegian upper secondary school students (ages 16 to 19). A sample of 839 participants who took part in the 4-H study was used in the study as well. In comparison to the US sample, findings from the Norwegian sample indicated that facets of the Five Cs did not covary together as strongly, implying that youth in Norway may distinguish between the individual scales that comprise each C more strongly than US youth. However, tests of weak and strong measurement invariance suggested an overarching PYD factor and that a majority of the Cs retained their qualitative interpretation between the two samples.

In turn, data testing the Five Cs model among Icelandic youth closely followed what has been reported in assessments of the US youth involved in the 4-H study. A study of over 2,000 US youth and over 500 Icelandic adolescents, approximately 14 years old, attained what is termed weak invariance. That is, the factor-loading pattern of the PYD model, or the strength of the relation between each item and its underlying construct, was invariant across cultures. Furthermore, results suggest minor differences on the intercepts between youth in the United States, suggesting that comparisons using the PYD measure across those two Western cultures are meaningful (Gestsdóttir et al., 2017).

Taken together, the studies by Holsen et al. (2017) and Gestsdóttir et al. (2017) suggest that the measurement and meaning of the Five Cs may not be very different between the US and Western European youth. Data from the assessment of youth in Lithuania with a measure of the Five Cs support this inference (Erentaite & Raiziene, 2015), with perhaps one exception. Caring as a stand-alone factor correlated positively with anxiety. Holsen et al. (2017) found a similar relation with the residual variance that was associated with the caring construct (controlling for overall PYD) among Norwegian youth.

At this point, however, even these preliminary findings suggest that a reasonable way to begin to assess if the Lerner and Lerner model of PYD extends usefully to global youth is to begin to ascertain if the measures used in the 4-H study possess invariance across national boundaries. However, at this writing, these assessments have focused only on the measure of the Five Cs used in the 4-H study and have not been longitudinal. Together, these limitations mean that the overall Lerner and Lerner PYD model (or any other PYD model for that matter) has not been thoroughly assessed among global youth, especially among samples of global youth who vary from the 4-H study participants and, in particular, youth of color living in diverse poverty contexts.

To address these possible constraints in assessments of the global generalizability of the Lerner and Lerner model of PYD, quantitative work (e.g., invariance testing) needs to be extended to the breadth of the constructs included in the model, and not only the Five Cs measure (or, perhaps, another measure of youth strengths not indexed by the Five Cs). In addition, the survey approach used in the 4-H study needs to be triangulated with qualitative methods in order to afford understanding of what may be the distinct meaning of PYD among youth from the majority world contexts. Such qualitative work would also be useful for describing what may be distinct assets for engaging in adaptive developmental regulations that may exist in their settings (Spencer & Spencer, 2014).

We believe that adaptive developmental regulations are a fundamental part of thriving for youth around the globe; that is, the importance of mutually beneficial individual ⇔ context relations involved in PYD exists for all youth, in that such relations constitute the fundamental feature of adaptive functioning (Brandtstädter, 1998). However, the *content* of these relations may vary. What global youth bring to these individual ⇔ context exchanges, what the context provides to them, and how thriving may be actualized in global youth from the majority world have not been as yet adequately elucidated.

We do not know, therefore, if or the extent to which the Lerner and Lerner model can be applied to global youth, at least in regard to the manifest variables involved in their thriving. This same limitation on generalizability exists to varying extents in regard to the other RDS-based models of PYD we have noted previously in this chapter (e.g., Benson, 2008; Damon, 2008; Spencer, 2006; Spencer et al., 2015). There are important methodological issues that must be considered to adequately address these issues of generalizability.

METHODOLOGICAL ISSUES IN FUTURE STUDIES OF PYD AMONG GLOBAL YOUTH

Conducting research derived from the RDS metatheory requires that theoretical ideas about development be actualized through methodological approaches involving change-sensitive research designs, measurements, and data analysis methods. This obligation is an essential feature of "good science—selecting features of one's methodology based on the nature of the (theoretically predicated) questions asked" (Lerner & Overton, 2008, p. 250).

Molenaar (2014) explained that the standard approach to statistical analysis in the social and behavioral sciences is not focused on change but is instead derived from mathematical assumptions regarding the constancy of phenomena across people and, critically, time. He noted that these assumptions are based on the ergodic theorems, which hold that (a) all individuals within a sample may be treated as the same (this is the assumption of homogeneity); and (b) all individuals remain the same across time, that is, all time points yield the same results (this is the assumption of stationarity). These ideas lead, then, to statistical

analyses placing prime interest on the population level. Interindividual variation, rather than intraindividual change, is the source of this population information (Molenaar, 2014).

If the concept of ergodicity is applied to the study of PYD among global youth, then within-person variation in PYD across time would either be ignored or be treated as error variance. In addition, any sample (group) differences in PYD would be held to be invariant across time and place. However, development varies across people and across contexts, and these facts violate the ideas of ergodicity. That is, developmental processes have time-varying means, variances, or sequential dependencies. The structure of interindividual variation at the population level is therefore not equivalent to the structure of intraindividual variation at the level of the individual (Molenaar, 2014). Developmental processes are nonergodic. As such, differences between young people in trajectories of PYD (i.e., in the course of within-person changes in thriving) are important foci for research and, as well, for program and policy applications aimed at enhancing PYD among global youth across time and place.

How, then, should research proceed to study PYD among majority world youth? One answer is to return to the "specificity principle" to frame research. Bornstein (2017) explained that this principle would lead researchers to ask multipart "what" questions when conducting programmatic research exploring the function, structure, and content of development across the life span. Accordingly, the task for developmental researchers is to undertake programs of research to gain insights into a multipart what question such as (a) What individual context relations in regard to PYD emerge; that are linked to (b) What antecedent and consequent adaptive developmental regulations (i.e., what trajectories of individual ⇔ context relations); at (c) What points in development; for (d) What global youth; living in (e) What national and community contexts; across (f) What historical periods; resulting in (g) What immediate and what longer-term developmental outcomes?

Answers to these questions, about any of the contemporary RDS-based PYD models noted previously in this chapter, may contribute importantly to the evidentiary base for applications of developmental science aimed at enhancing PYD among diverse individuals across diverse global contexts. Such evidence could also address the call by USAID (2013) for a comprehensive model of PYD. Thus, gaining greater understanding of this complex, multipart question will enable developmental scientists (using any instance of RDS-based models of PYD) to understand the content and course of adaptive developmental regulations linked to the development of PYD among and across different groups of global youth and within any member of a sample of global youth.

Yet, despite what we believe is the clear value in conducting such tests of RDS-based PYD models, we acknowledge that such research will be daunting to actually design, enormously complex to implement, and expensive to fund. Thus, we recognize that, whereas such theory-predicated research may seem ideal in the abstract, these formidable planning and implementation obstacles may make such research seem like a "pie-in-the-sky vision," one that could at best be approached asymptotically.

Therefore, we are excited by what is, at this writing, a newly launched, three-nation, comparative longitudinal study of the use of the Lerner and Lerner model in understanding the bases of PYD among some of the world's poorest youth. Supported by Compassion International (CI), this research involves a collaboration among CI, Tufts University, Boston College, and Fuller Theological Seminary. CI is a Christian child-sponsorship organization that partners with over 7,000 churches to support and promote thriving in over 1.8 million children living in poverty in 25 countries (Sim & Peters, 2014). Using a counterfactual causal modeling longitudinal design, the project will study the development of youth involved in CI's programs in a Central or South American country, an African country, and an Asian country. In each nation, the development of CI program participants will be compared to youth who are not participating in CI's programs to identify what works, with what children, in what context, over what time period. It is the hope of the collaborators in this research that the study will set an aspirational standard of rigor for such work, one that will move the field of PYD in international settings forward.

Conclusions

Developmental scientists have, in the repertoire of models and methods in their intellectual "toolbox," potential means to promote youth thriving as well as active and engaged citizenship among youth. Furthermore, through enhancement of the positive individual ⇔ context relations, developmental scientists may afford diverse individuals the opportunities needed to maximize their aspirations and actions by engaging with social institutions that support individual agency, promote freedom and liberty, and support civil society or, in other words, that contribute to social justice (Fisher et al., 2013; Lerner, 2004; Lerner & Overton, 2008). In order to contribute significantly to creating a developmental science aimed at promoting such social justice-oriented outcomes, scholars need to conduct more culturally relevant studies of PYD and contextually specific tests of PYD models, such as the Lerner and Lerner one, to fully understanding thriving in all youth. As well, scholars need to identify the means with which to work within the ecologically valid settings of global youth to alter individual ⇔ context relations in ways that enhance the probability that all individuals, no matter their individual characteristics or contextual circumstances, have greater opportunities for PYD (e.g., see Fisher et al., 2013).

Ecologically valid knowledge of the actual settings of youth is most likely to be found among the practitioners delivering programs to young people. Youth development practitioners have deep understanding of these contexts and are readily positioned to test and apply scientific learning to promote the most effective and scalable approaches to youth development. Perhaps not surprisingly, then, the concept of PYD arose from the insights of practitioners, in particular practitioners working internationally (i.e., Rick Little and the International Youth Foundation).

At this writing, many practitioners working with youth from the majority world may be using the concept of PYD and the associated RDS-based ideas of holism,

individual development, and individual ⇔ context relations without necessarily consulting the scientific literature pertinent to these ideas. We believe, however, that advances in knowledge about, and significant contributions to, global youth can best be made if there are strong and mutually beneficial collaborations between academia and practitioners, ones where the needs and interests of both parties are fully understood and integrated toward a common goal of improved youth thriving. To create such collaborations at this point in the history of applied developmental scholarship about PYD, the growing interest in studying and enhancing PYD among global youth (e.g., Petersen et al., 2017; Smith et al., 2017; USAID, 2013) could be best instantiated if researchers rely once again on the wisdom and knowledge of practitioners.

Acknowledgment

References

Anthony, E. J. (1969). The reactions of adults to adolescents and their behavior. In G. Caplan & S. Lebovici (Eds.), *Adolescence: Psychosocial perspectives* (p. 77). New York, NY: Basic Books.

Bandura, A. (1964). The stormy decade: Fact or fiction? *Psychology in the School*, *1*, 224–231.

Benson, P. L. (2008). *Sparks: How parents can help ignite the hidden strengths of teenagers.* San Francisco, CA: Jossey-Bass.

Benson, P. L., Scales, P. C., & Syvertsen, A. K. (2011). The contribution of the developmental assets framework to positive youth development theory and practice. In R. M. Lerner, J. V. Lerner, & J. B. Benson (Eds.), *Advances in child development and behavior: Positive youth development: Research and applications for promoting thriving in adolescence* (pp. 195–228). London, England: Elsevier.

Block, J. (1971). *Lives through time*. Berkeley, CA: Bancroft.

Bornstein, M. H. (Ed.). (2010). *Handbook of cultural developmental science*. New York, NY: Psychology Press.

Bornstein, M. H. (2017). The specificity principle in acculturation science. *Perspectives in Psychological Science*, *12*(1), 3–45.

Bowers, E. P., Geldhof, G. J., Johnson, S. K., Lerner, J. V., & Lerner, R. M. (Eds.). (2014). Elucidating the developmental science of adolescence: Lessons learned from the 4-H study of positive youth development. *Journal of Youth and Adolescence*, *43*(6) (Whole Issue).

Bowers, E. P., Li, Y., Kiely, M. K., Brittian, A., Lerner, J. V., & Lerner, R. M. (2010). The Five Cs model of positive youth development: A longitudinal analysis of confirmatory factor structure and measurement invariance. *Journal of Youth and Adolescence*, *39*(7), 720–735.

Brandtstädter, J. (1998). Action perspectives on human development. In W. Damon (Series Ed.) & R. M. Lerner (Vol. Ed.), *Handbook of child psychology*: Vol. 1. *Theoretical models of human development* (5th ed., pp. 807–863). New York, NY: Wiley.

Catalano, R. F., Fagan, A. A., Gavin, L. E., Greenberg, M. T., Irwin, C. E., Jr., Ross, D. A., & Shek, D. T. (2012). Worldwide application of prevention science in adolescent health. *Lancet*, *379*(9826), 1653–1664.

Catalano, R. P., Hawkins, J. D., Berglund, M. L., Pollard, J. A., & Arthur, M. W. (2002). Prevention science and positive youth development: Competitive or cooperative frameworks? *Journal of Adolescent Health*, *31*, 230–239.

Damon, W. (2008). *The path to purpose: Helping our children find their calling in life*. New York, NY: Simon and Schuster.

Douvan, J. D., & Adelson, J. (1966). *The adolescent experience*. New York, NY: Wiley.

Eccles, J. S. (2004). Schools, academic motivation, and stage-environment fit. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (Vol. 2, pp. 125–153). Hoboken, NJ: Wiley.

Eccles, J. S., & Gootman, J. A. (Eds.). (2002). *Community programs to promote youth development/committee on community-level programs for youth*. Washington, DC: National Academy Press.

Erentaite, R., & Raiziene, S. (2015). Lithuanian version of measure of positive youth development based on the Five Cs model. *European Journal of Developmental Psychology*, *12*(6), 701–717.

Fisher, C. B., Busch, N. A., Brown, J. L., & Jopp, D. S. (2013). Applied developmental science: Contributions and challenges for the 21st century. In R. M. Lerner, M. A. Easterbrooks, & J. Mistry (Eds.), I. B.Weiner (Ed.-in-chief), *Handbook of psychology*. Vol. 6: *Developmental psychology* (2nd ed., pp. 516–546). Hoboken, NJ: Wiley.

Flay, B. R. (2002). Positive youth development requires comprehensive health promotion programs. *American Journal of Health Behavior*, *26*(6), 407–424.

Freud, A. (1969). Adolescence as a developmental disturbance. In G. Caplan & S. Lebovici (Eds.), *Adolescence* (pp. 5–10). New York, NY: Basic Books.

Geldhof, G. J., Bowers, E. P., Boyd, M. J., Mueller, M. K., Napolitano, C. M., Schmid, K. L., . . . Lerner, R. M. (2014). Creation of short and very short measures of the Five Cs of positive youth development. *Journal of Research on Adolescence*, *24*(1), 163–176.

Geldhof, G. J., Bowers, E. P., Mueller, M. K., Napolitano, C. M., Schmid, K. L., & Lerner, R. M. (2014). Longitudinal analysis of a very short measure of positive youth development. *Journal of Youth and Adolescence*, *43*(6), 933–949.

Gestsdóttir, S., Geldhof, G. J., Lerner, R. M., & Lerner, J. V. (2017). What drives positive youth development? Assessing intentional self-regulation as a central adolescent asset. *International Journal of Developmental Science* Preprint, 1–11. doi: 10.3233/DEV-160207.

Hall, G. S. (1904). *Adolescence: Its psychology and its relations to psychology, anthropology, sociology, sex, crime, religion, and education*. New York, NY: Appleton.

Heck, K. E., & Subramaniam, A. (2009). Youth development frameworks. *Monograph*. Davis: 4-H Center for Youth Development, University of California.

Holsen, I., Geldhof, G. J., Larsen, T., & Aardal, E. (2017). The Five Cs of positive youth development in Norway: Assessment and associations with positive and negative outcomes. *International Journal of Behavioral Development*, *41*, 559–569.

Koller, S. H., Motti-Stefanidi, F., Petersen, A. C., & Verma, S. (2017). Achieving positive development for youth globally: How far have we come and what is yet needed? In A. C. Petersen, S. H. Koller, F. Motti-Stefanidi, & S. Verma (Eds.), *Positive youth development in global contexts of social and economic change* (Chapter 17). New York, NY: Taylor & Francis Group.

Larson, R. W. (2000). Toward a psychology of positive youth development. *American Psychologist*, *55*(1), 170–183.

Lerner, R. M. (1984). *On the nature of human plasticity*. New York, NY: Cambridge University Press.

Lerner, R. M. (2004). *Liberty: Thriving and civic engagement among America's youth*. Thousand Oaks, CA: Sage.

Lerner, R. M. (2012). Essay review: Developmental science: Past, present, and future. *International Journal of Developmental Science*, *6*, 29–36.

Lerner, R. M. (2015). Promoting positive human development and social justice: Integrating theory, research, and application in contemporary developmental science. *International Journal of Psychology*, *50*(3), 165–173.

Lerner, R. M., Lerner, J. V., Almerigi, J. B., Theokas, C., Phelps, E., Gestsdottir, S., . . . von Eye, A. (2005). Positive youth development, participation in community youth development programs, and community contributions of fifth-grade adolescents: Findings from the first wave of the 4-H study of Positive Youth Development. *Journal of Early Adolescence*, *25*(1), 17–71.

Lerner, R. M., Lerner, J. V., Bowers, E., & Geldhof, G. J. (2015). Positive youth development: A relational developmental systems model. In W. F. Overton & P. C. Molenaar (Eds.), R. M. Lerner (Ed.-in-chief), *Handbook of child psychology and developmental science*. Vol. 1: *Theory and method* (7th ed.). (pp. 607–651). Hoboken, NJ: Wiley.

Lerner, R. M., & Overton, W. F. (2008). Exemplifying the integrations of the relational developmental system: Synthesizing theory, research, and application to promote positive development and social justice. *Journal of Adolescent Research*, *23*, 245–255.

Lerner, R. M., Wang, J., Hershberg, R. M., Buckingham, M. H., Harris, E. M., Tirrell, J. M., & Bowers, E. P. (2017). Positive youth development among minority youth: A relational developmental systems model. In N. J. Cabrera & B. Leyendecker, *Positive development of minority children* (pp. 5–17). Dordrecht, the Netherlands: Springer.

Lewin-Bizan, S., Bowers, E. P., & Lerner, R. M. (2010). One good thing leads to another: Cascades of positive youth development among American adolescents. *Development and Psychopathology*, *22*, 759–770.

Li, Y., & Lerner, R. M. (2011). Developmental trajectories of school engagement across adolescence: Implications for academic achievement, substance use, depression, and delinquency. *Developmental Psychology*, *47*(1), 233–247.

Li, Y., Lynch, A. D., Kalvin, C., Liu, J., & Lerner, R. M. (2011). Peer relations as a context for the development of school engagement. *International Journal of Behavioral Development*, *35*(4), 329–342.

Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, *56*, 227–238.

Masten, A. S. (2014). *Ordinary magic: Resilience in development*. New York, NY: Guilford Press.

Molenaar, P. C. M. (2014). Dynamic models of biological pattern formation have surprising implications for understanding the epigenetics of development. *Research in Human Development*, *11*, 50–62.

Offer, D. (1969). *The psychological world of the teenager*. New York, NY: Basic Books.

Overton, W. F. (2015). Process and relational developmental systems. In W. F. Overton & P. C. M. Molenaar (Eds.), R. M. Lerner (Ed.-in-chief), *Handbook of child psychology and developmental science,* Volume 1: *Theory and method* (7th ed., pp. 9–62). Hoboken, NJ: Wiley.

Petersen, A. C., Koller, S. H., Motti-Stefanidi, F., & Verman, S. (2017). *Positive youth development in global contexts of social and economic change*. New York, NY: Taylor & Francis Group.

Phelps, E., Balsano, A., Fay, K., Peltz, J., Zimmerman, S., & Lerner, R. M. (2007). Nuances in early adolescent development trajectories of positive and problematic/risk behaviors: Findings from the 4-H study of positive youth development. *Child and Adolescent Psychiatric Clinics of North America*, *16*(2), 473–496.

Raeff, C. (2016). *Exploring the dynamics of human development: An integrative approach*. New York, NY: Oxford University Press.

Roth, J. L., & Brooks-Gunn, J. (2003). What exactly is a youth development program? Answers from research and practice. *Applied Developmental Science*, *7*, 94–111.

Schmid, K. L., & Lopez, S. (2011). Positive pathways to adulthood: The role of hope in adolescents' constructions of their futures. In R. M. Lerner, J. V. Lerner, & J. B. Benson (Eds.), *Advances in child development and behavior: Positive youth development* (Vol. 41, pp. 72–89). London, England: Academic Press.

Schoon, I. (2017). Making it against the odds: A developmental-contextual approach to the study of resilience. In A. C. Petersen, S. H. Koller, F. Motti-Stefanidi, & S. Verma (Eds.), *Positive youth development in global contexts of social and economic change* (Chapter 5). New York, NY: Taylor & Francis Group.

Schoon, I., & Bynner, J. (Eds.). (2017). *Young people's development and the Great Recession: Uncertain transitions and precarious futures*. New York, NY: Cambridge University Press.

Sim, A. T. R., & Peters, M. (2014). Compassion International: Holistic child development through sponsorship and church partnership. In B. Watson & M. Clarke (Eds.). *Child sponsorship: Exploring pathways to a brighter future* (pp. 163–190). New York, NY: Palgrave McMillian.

Smith, E., Petersen, A. C., & Leman, P. (Eds.). (2017). Positive youth development in diverse and global contexts. *Child Development*, *88*(4), 1035–1397.

Spencer, M. B. (2006). Phenomenology and ecological systems theory: Development of diverse groups. In W. Damon & R. M. Lerner (Eds.), *Handbook of child psychology*, Vol. 1: *Theoretical models of human development* (6th ed., pp. 829–893). Hoboken, NJ: Wiley.

Spencer, M. B., & Spencer, T. R. (2014). Exploring the promises, intricacies, and challenges to positive youth development. *Journal of Youth and Adolescence*, *43*, 1027–1035.

Spencer, M. B., Swanson, D. P., & Harpalani, V. (2015). Development of the self. In M. E. Lamb (Vol. Ed.), R. M. Lerner (Ed.-in-chief), *Handbook of child psychology and developmental science*, Volume 3: *Socioemotional processes* (7th ed., pp. 750–793). Hoboken, NJ: Wiley.

Theokas, C., & Lerner, R. M. (2006). Observed ecological assets in families, schools, and neighborhoods: Conceptualization, measurement, and relations with positive and negative developmental outcomes. *Applied Developmental Science*, *10*(2), 61–74.

Urban, J. B., Lewin-Bizan, S., & Lerner, R. M. (2010). The role of intentional self regulation, lower neighborhood ecological assets, and activity involvement in youth developmental outcomes. *Journal of Youth and Adolescence*, *39*(7), 783–800.

United States Agency for International Development (USAID). (2013). *State of the field report: Holistic, cross-sectoral youth development: USAID youth research, evaluation and learning project*. Washington, DC: Author.

Woese, C. R. (2004). A new biology for a new century. *Microbiology and Molecular Biology Reviews*, *68*(2), 173–186.

Zaff, J. F., Kawashima-Ginsberg, K., Lin, E. S., Lamb, M., Balsano, A., & Lerner, R. M. (2011). Developmental trajectories of civic engagement across adolescence: Disaggregation of an integrated construct. *Journal of Adolescence*, *34*(6), 1207–1220.

Adolescent Civic Engagement in Contemporary Political and Technological Realities

Colette Daiute

Introduction

Civic engagement interacts with social structures and communication media, so adolescent civic engagement research must interact with political and technological realities. Since the turn of the twenty-first century, civic spaces have been changing rapidly, sometimes violently, and digital media have rendered human lives globally visible and interactive. In the twentieth century, when civic engagement became a focus of adolescent research, nation states, municipalities, and civil society organizations changed, albeit more slowly than such civic entities are changing today. In addition, because communication technologies are also increasingly powerful and prevalent, adolescents can see one another and can interact, compounding the nature of civic engagement in these troubled times. Researchers focusing on civic engagement should thus usefully ask, How have the concept of civic engagement and related research with adolescents been sensitive to rapidly changing civic spaces and public media? Toward that end, this chapter reviews adolescent civic engagement research in the past 10 years when the concept has slowly begun to transform.

The chapter summarizes definitions, contexts, methods, and findings of adolescent civic engagement research, highlighting shifts toward context-sensitive inquiries. This review considers how the scale-based survey methods characterizing much civic engagement research and thereby assuming stable, primarily Western civic contexts and categories have loosened to consider diverse contexts and peoples across the globe. The final section of the chapter proposes extensions of civic engagement research to interact with the changing nature of global political, economic, and social circumstances where children are growing up.

Given contemporary realities of geopolitical conflict and migration, many millions of adolescents are living in circumstances that are not confined to stable

nation states. Instead, increasing numbers of young people are growing up in the midst of wars that shatter nation states, within displacement flows across nation states, in the legal limbos of refugee camps, or on the margins of societies. Away from political entities providing formal citizenship rights, awaiting asylum or other appeals to official refuge, residents of temporary settlements and refugee camps live in civically in-between spaces. Scholars, humanitarian aid workers, and others supporting and studying adolescent development during and after major disruptions like wars, displacements, and social exclusions have become open to innovative manifestations of civic engagement. When considering young people's activities for survival, normalcy, or aspiration, scholars working with them in daily life learn about adverse or uncivil situations, as well as activities characteristic of more stable settings. Increased availability of digital communication media, including smartphones, which are ubiquitous even during migration, provides alternative civic spaces. As this review of research will, however, show, the field of adolescent civic engagement research continues, for the most part, to assume relatively stable public locations and institutions.

Drawing on research with youth growing up in politically and economically disrupted and unstable circumstances, the final section of the chapter urges expanding civic engagement research in terms of such realities. Based on this recent review, the argument will be that civic engagement research can usefully open to contexts where voting, volunteering, and formal education are not the norms. The conclusion considers how research with adolescents might usefully expand to studying civic engagement in transforming and even uncivil contexts. Toward that end, research methods are also increasingly embedding inquiry in practices that support civic engagement as it makes sense in the local circumstances.

What Is Civic Engagement During Adolescence?

A definition emerging consistently across research on adolescence is that civic engagement involves young people's participation in activities for the greater good. Scholarly authors emphasize that civically engaged adolescents contribute their political opinions and leadership to issues that matter to them and have impacts beyond their personal interests (Flanagan & Levine, 2010; Simmons & Lilly, 2010). Such broad collective goals include improving health, participation in democracy (Flanagan & Levine, 2010); critical analysis of and political action in society (Watts et al., 2011); and improving intergroup relations (Bowman et al., 2016). Some scholars also note that civic relationships between individuals and communities must be reciprocal, thereby allowing youth transformations of society and not only social reproduction of society (Lenzi et al., 2014).

Civic engagement for collective good is, moreover, a process, sometimes leading to individual *and* collective developments. Two research teams emphasized the importance of participation from within communities, not only for those in *other*

communities, especially by youth who are underrepresented in research. Because reasons abound why youth across social classes, races, and ethnicities are not equally active in civic engagement, some young people must work for the benefit of their own communities and not only to benefit others (Flanagan & Levine, 2010; Levinson, 2010). While self-empowering methods to face social injustices must be addressed by youth in communities subjected to those injustices (Watts et al., 2011), young people in privileged communities are increasingly recognized as needing critical self-analysis toward eventual engagement beyond privilege (Levinson, 2010).

Scholars have sometimes explained that specific activities, such as playing leadership roles in one's community, volunteering, donating money to nonprofit organizations and political causes, or even simply keeping up to date on political issues, are outcomes of the goal to do good for others and for the community (Bowman et al., 2016). Another literature review has argued that civic engagement is a stage-like process, progressing from thinking to talking to acting—a sequence the researchers explain as ranging from low impact (short-term effects typical of personal individual action) to high impact (changing social structures of injustice more possible through collective action) (Watts & Hipolito-Delgado, 2015).

Research also increasingly points to the importance of discourse as a civic engagement process in itself. In one study, for example, adolescents who spent their young lives during and after a decade of wars across socialist ex-Yugoslavia used various forms of interaction to create community organization newsletters—a process whereby a civic discourse process produced civic results. This link emerged, for example, in relationships between the young participants' sociopolitical analyses of contemporary life and their advice to public officials about how to support young people in the aftermath of war (Daiute, 2010). Illustrative of the power of participating in community organizations during national upheaval was that adolescents who were involved in local organizations wrote letters that not only analyzed problems but also proposed collaborative solutions to problems more than adolescents who were not involved in such organizations (Daiute, 2013, 2016).

A 4-year case study across high schools in South Africa, Northern Ireland, and the United States highlighted the importance of teacher–student, teacher–parent, peer–peer, and participant–researcher relationships, with a focus on transformations of individual adolescents. Analyzing these varied interactions that occurred within and around a civic engagement curriculum, the authors defined *ethical civic actors* as competent and responsible citizens who recognize the need to participate in creating and upholding a just and democratic society and who are capable of taking prosocial action that helps to fend off threats to democracy (Freedman et al., 2016).

The role of civic discussions also emerged in studies with specific focus on adolescents' engagement with news of local and global current events (Lenzi et al., 2015). Adolescents' discussions of civic topics with family and peers involved

exposure to other people's perspectives promoting civic engagement outcomes via skills the researchers report are required for being an active citizen—conflict resolution skills, negotiating abilities, listening skills, and comprehension skills (Lenzi et al., 2015).

Civic Engagement Qualities and Activities

Additional detail about adolescent civic engagement emerges from a focus on the measures used to identify young people's activities and social orientations. Civic engagement activities and orientations are typically measured with scale-based surveys on which adolescents indicate whether and how much they participate in certain activities and endorse certain beliefs. Emphasis in the research is on individuals' self-reported behaviors and beliefs. Individual activities reported in adolescent civic engagement research include voting, volunteering, donating to nonprofit organizations or political causes, leadership in community organizations, expressing values to promote racial understanding, participating in an act for change, participating in digital information gathering, doing extracurricular activities, taking courses on civic engagement, and reflecting on social issues. Activities emerging from research also include sharing/listening to experiences of injustice/discrimination, discussing politics or social problems, discussing social issues and politics with family, engaging in civic discussions, participating in group acts for change, debating, participating in digital social activities (e.g., on Facebook), and participating in legal and illegal protests.

Also notable in recent research on youth civic engagement is the expansion beyond specific activities, such as voting and volunteering, to a focus on skills, such as reasoning skills, conflict negotiation skills, critical thinking, and perspective-taking skills. Focus on orientations such as fair society beliefs, social networks, social norms, and values has also increased, often relating to civic outcomes (Van Camp & Baugh, 2016; Wray-Lake et al., 2015).

Individual activities and orientations associated with affecting social change have been described as reflection on public performance. Relatively reflective activities cited in research include following news of politics; indicating knowledge/belief of structural problems, and expressing awareness of discrimination toward others and to one's self. Those activities presumably indicate pluralistic understandings, values for cooperativeness, racial and ethnic awareness, hope for better outcomes for self and others, trust in institutions and people, perceptions of fairness, empathy for known and unknown others, and civic duty (Bowman et al., 2016; Callina et al., 2014). More openly activist orientations include participant reports of using civic skills, connecting with others and issues in local neighborhoods, enacting social bonds and networks to build norms of reciprocity and solidarity, and possessing executive function capacities (Watts et al., 2016). Outcomes may be measured as changes in beliefs, values, or activities.

Diversities in Adolescent Civic Engagement

As the adolescent civic engagement field has matured in recent years, many authors have begun exploring diversity, as a factor beyond individuals' activities, skills, and beliefs. Diversities that scholars have identified in research include distinctions across generations, genders, socioeconomic circumstances, and birth origins (immigrant vs. native born).

Studies of differences across generations bring an aspect of history into the study of civic engagement. Researchers report a steady decline of older adolescents and young adults voting in US elections in the period, from 45% to 21% in the years from 1974 to 2012, respectively (van Camp & Baugh, 2016). Citizenship activities in which the contemporary generation participated less than 1970s young adults included belonging to at least one group, attending religious services at least monthly, belonging to a union, reading newspapers at least once a week, voting, being contacted by a political party, working on a community project, attending club meetings, and believing that people are trustworthy (van Camp & Baugh, 2016).

Youth today are, however, more likely to volunteer than were 1974 youth, perhaps because of the major efforts by schools, colleges, and community groups to encourage volunteering. Declines in youth participation in voting could have to do with increasing differences in the circumstances, resources, and opportunities of young people, as the middle class in the US and other Western capitalist societies has shrunk during the twenty-first century. In other words, society has changed over generations, yet civic engagement measures focus on individuals. Such broacher social change could usefully become an increasing focus of youth civic engagement worldwide.

One study within a generation examined developmental origins of civic engagement in a sample of US children growing up in poverty. This study tested a conceptual model employing the Early Childhood Longitudinal Study-Kindergarten Class (ECLS-K) national data set (Astuto & Ruck, 2017). The researchers examined the contributions of kindergarten children's cognitive executive function and exposure to classroom-based play to participation in different extracurricular activities when they were in eighth grade. The researchers found that executive function was a significant predictor of participation in drama and music clubs, sports, and number of hours spent in extracurricular activities. Play was also a significant predictor of participation in school clubs. These findings provide initial evidence of a developmental trajectory toward civic engagement beginning in early childhood and extending into preadolescence (Astuto & Ruck, 2017).

Researchers have identified a "civic engagement gap" based on findings that young people growing up in situations of poverty participate less in traditional civic engagement activities like voting and volunteering than their middle- and upper-class peers (Astuto & Ruck, 2017; Flanagan & Levine, 2010; Levinson, 2010). One

explanation is that young people of lower income and minority backgrounds do not have opportunities for civic engagement activities typically supported in colleges where attendance by low-income groups is relatively low (Flanagan & Levine, 2010). This explanation about lack of opportunity for traditional forms of civic engagement usefully shifts attention to the context, which researchers could explore in greater depth. For example, young people in countries with majority populations living in poverty are caring for younger siblings, holding jobs, playing sports, or creating new social and cultural forms, outside the influence and scrutiny of parents, teachers, and community leaders who script youth civic engagement in thriving capitalist democracies (Galazyn, 2016).

Gender differences also emerge in adolescent civic engagement research. One study with a sample of 1,578 high school seniors used a mixed-methods analysis of survey and interview data. Statistical analyses confirmed that girls were more civically involved and expressed greater future civic intention. Analysis of motivations by gender suggested, furthermore, that differences in moral motivations might affect ongoing political development, as girls were more likely to take political action out of desire to help, while boys were more often motivated to act on values (Malin et al., 2015).

Civic engagement among immigrant youth has become another increasing focus of research. Several studies have found that community-oriented forms of civic engagement are especially important for immigrant youth, who may be socially or legally excluded from organized activities and formal political participation (Roffman et al., 2003; Sirin & Katsiaficas, 2011; Stepick et al., 2008; Wray-Lake et al., 2015). Another consensus is that although research on immigrant youth is rapidly accumulating, most studies still focus on cultural assimilation, academic achievement, psychosocial adjustment, or family relationships (e.g., Sirin et al., 2013; Suárez-Orozco & Suárez-Orozco, 2009; Yoshikawa, 2011). Emphasizing such traditional measures of host countries is likely to leave the unique kinds of civic participation by immigrant youth under-studied (Wray-Lake et al., 2015).

Contexts of Engagement

Researchers have surveyed a range of settings where young people spend time—formal education, community organizations, neighborhoods, social media, faith-based institutions, public protests, projects, military, and other voluntary service programs (Flanagan & Levine, 2010). Those contexts include education and social media. A few studies not specifically focused on civic engagement in non-Western contexts suggest opening the concept of civic engagement to some of the activities among youth growing up in uncivil settings where war, displacement, and marginalization engage positive participation for greater good (Daiute, 2010).

EDUCATION AND CIVIC ENGAGEMENT

Education is a major context for adolescent civic engagement and a foundation for ongoing participation. Beginning in early childhood and middle school, civic education can provide a foundation for civic engagement activities up through adolescence and beyond (Astuto & Ruck, 2017; Voight & Torney-Purta, 2013). Secondary and higher education are standard contexts for examining adolescents' civic engagement. Curricular as well as co-curricular programs have increased with recognition that civic engagement in youth provides a foundation for participation in democratic institutions.

A study in a "psychology of current events" course provided minority students with a context for their expression on social issues (van Camp & Baugh, 2016). The researchers examined the relative influence of neighborhood characteristics (neighborhood opportunities and intergenerational relationships), civic education at school, friends' civic engagement, and parents' civic engagement on the civic attitudes and civic behaviors of some 400 children 11 to 15 years old in Italy. Intergenerational closeness, friends' civic engagement, and parents' civic engagement are variables associated with participants' civic attitudes and civic behaviors. Other studies highlight the importance of maintaining research focus on a wide range of potential contexts for youth civic engagement, thereby identifying key factors motivating participation (Rossi et al., 2016).

Another study focusing on the role of education in civic engagement examined adults' civic behaviors 6 years after attending racial awareness workshops in high school (Bowman et al., 2016). With survey data collected over a relatively long period from adolescence to young adulthood, the researchers report significant associations between numerous civic outcomes, such as civic behaviors, attitudes/beliefs, and skills by young adults who had attended the racial awareness workshops when in high school (Bowman et al., 2016, p. 1576). The authors argue, moreover, that their results suggest that participation in the workshops fostered attitudes and activities, including volunteer work, donating money, community leadership, cross-racial interaction, and discussion of racial issues, that are characteristic of a well-functioning workforce and democracy (Bowman et al., 2016).

A media-focused research project administered a variety of media literacy assessments and skills tasks along with several civic engagement measures to 400 American high school students in a selective media literacy program to explore the relationship between measures of participation in a media literacy program, academic ability, frequency of Internet use, information-gathering motives, media analysis skills, and intention toward civic engagement. The researchers report that findings show that participation in a media literacy program is positively associated with information-seeking motives, media knowledge, and news analysis skills, which also contribute to civic engagement (Martens & Hobbs, 2015).

SOCIAL MEDIA ENVIRONMENTS

In addition to interactions in formal educational settings, researchers have begun to study adolescents' spontaneous interactions in social media for traditional and new forms of civic engagement. According to the Civic Health Index, noncollege youth who used various types of digital media (such as e-mail, Facebook or MySpace, posting videos online, text messaging, or watching a video of a presidential candidate) were between 10% and 40% more likely to volunteer than noncollege youth who did not use these media (Flanagan & Levine, 2010). The research team explained that a value of social media interactions is to explore complex issues with others whose opinions about those issues differ—discussions that can lead to crystalizing or transforming relatively unexamined positions on the issues (Flanagan & Levine, 2010, p. 161). Others have explained that it is not Internet use per se but the specific affordances, such as the qualities of online and offline practices (Salvatore, 2013). For example, youth civic engagement since the mid-2000s appears to involve a mutual synergy of virtual and public spaces where a broad range of public actors become involved (Salvatore, 2013, p. 226).

Further exploring the affordances of digital media in relation to civic engagement, a survey study with 10th graders in Korea analyzed the effects of digital media use and Internet literacy on adolescents' interests and participation in politics and social issues (Kim & Yang, 2016). The authors distinguish between Internet information literacy and Internet skill literacy related to measures of civic engagement. Results point to the importance of accessing information online rather than of procedural skills related to using the Internet (Kim & Yang, 2016).

Research with high school students in Italy showed that Facebook informational use was associated with higher levels of adolescent perceived competence for civic action, both directly and through civic discussion with parents and friends offline (Lenzi et al., 2015). The authors report strong positive statistical relationships between using Facebook for reading news, civic discussions with family and friends, competence for civic actions, and intentions to participate in the future.

Young people's use of social media has also been lauded as contributing to major political change in several Arab countries, a movement called the "Arab spring" (Barber, 2012). By numerous reports, this movement was galvanized via social media; nevertheless, the movement subsequently dissipated in the face of local political crackdowns, disillusionment, and replacement of other more popular topics on this largely populist medium (Salvatore, 2013). Long-term ethnographic and archival research on the role of social media compared to a new language of public discourse and rights involved in public squares of Tunisia, Egypt, and beyond found that Internet bloggers fueled revolution with their descriptions of the dire sociopolitical predicament of their countries oppressed by authoritarian regimes, thereby creating new awareness, especially among masses of youth (Salvatore, 2013). The study also offers evidence that the Internet activists had, however, already been involved in regional collective initiatives like those advocating free and

open software (such as "copyleft" or "net neutrality"), and that much youth mo-
bilization occurred in universities, mosques, trade unions, and sports, indicating
foundations deeper than social media use (Salvatore, 2013). The conclusion was
that revolutionary awareness, language, and face-to-face networks mattered most.
While social media interaction can be a catalyst, social media interaction does
not transform apathy into collective action (Salvatore, 2013). Loosely consistent
with this finding that social media contexts rely on other kinds of social rela-
tions is research indicating the need for education *about* civic engagement in this
Internet age.

Based on large-scale surveys of youth from 2008 to 2015, researchers report
that 50% of youth access news via digital sources and that this increase over time
challenges civic engagement educators to adapt their practices to problems as
well as opportunities in digital platforms (Kahne et al., 2016). According to the
research team, digital communication affords "participatory politics"—youth peer
activities expressing and influencing issues of public concern (Kahne et al., 2016).
Without guidance, however, social media users are likely to retreat to networks
echoing their own beliefs and to conform to simplistic rather than elaborated rea-
soning and dialogue. To foster participatory politics, civic education must thus ex-
pand beyond promoting traditional activities, like those mentioned previously, to
methods of critical online investigation, dialogue, circulation beyond one's friends,
production of persuasive civic expressions, and mobilization in support of well-
reasoned civic goals (Kahne et al., 2016). While pointing out that digital spaces
involve different manifestations of civic engagement than face-to-face processes,
this recent research returns to the importance of education not only to motivate
youth civic engagement but also to guide it.

NONGOVERNMENTAL ORGANIZATIONS

Nongovernmental organizations often involve community service, social change,
or social justice goals. Such organizations are thus contexts where young people
participate for the benefit of others, as well as learn new skills and act in areas of
personal interest. Civic engagement research has identified US-based organiza-
tions like 4-H clubs, City Year, and AmeriCorps as contexts of civic engagement,
for the most part, as sites for contributions of relatively privileged youth to work
for the benefit of the less privileged (Zaff et al., 2010). Somewhat different in or-
igin are current movements such as "Black Lives Matter" and "Dreamers" where
youth activism emerges from within communities seeking to decry injustices and
to change policies. The vast majority of nongovernmental organizations and so-
cial movements act or develop in non-Western contexts. It is, in part, due to the
missions of international organizations, like Save the Children and United Nations
organizations (United Nations High Commissioner for Refugees [UNHCR] and
United Nations Children's Fund [UNICEF]), that they seek to work in devel-
oping countries, situations in crisis, and sites where social change seems possible.

Because they often work across national borders, such nongovernmental organizations are also often sites of civic engagement in the midst of disrupted and uncivil spaces.

Civic Engagement in Civically Disrupted and Uncivil Spaces

Millions of young people are growing up in-between and on the margins of legal civic spaces. Some unpredicted manifestations and meanings of civic engagement emerge in those spaces. Globalization has changed the geopolitical organization of societies, and digital technologies have changed the nature of communication networks. Furthermore, while *civic* has traditionally referred to national and community locations, and *engagement* has been, for the most part, defined within those contexts, recent research in dramatically changing spaces has begun to transform the concept of civic engagement. Increasing political conflicts, geopolitical processes (imperial takeovers and revolutions), related displacements, economic inequality, and myriad kinds of social injustices have changed the referential categories of civic engagement.

With violently and rapidly shifting geopolitical borders especially post-1989, the context that researchers, practitioners, and young people themselves define as their civic realm has shifted. An analysis of increasing conflicts and migrations has described the global processes of mass migrations resulting in long periods of adolescents' journeys, informal living in squats, months in migrant processing and detention centers, migration–deportation–return cycles, and unexpected settling in refugee camps, where average stays are estimated to be from 12 to 26 years (Daiute, 2017). Fortunate youth find relatively stable nurturance with extended family or foster homes. Even then, life is not easy when asylum and citizenship in new home countries can take many years and increasingly does not happen at all. Digital communication technologies enable spontaneous youth networking within and across traditional geopolitical borders, and this sometimes aids in self-determination of their journeys and connection with relatives. Such exposure via smartphone images extends adolescent dreams for a future in places that might provide education, employment, health care, and a good life. Nevertheless, digital communications also extend responsibilities with family and friends back home and do not provide all the necessary resources or understandings for connecting to the new home country. Although outside traditional civic spaces and many of the activities already defined, such adolescent lives in migration require rethinking civic engagement in a way that is consistent with what one scholarly group has called "a cultural revolution" in civic engagement (https://www.ameconference2016.org).

Situations imposing possible trauma, extreme scarcity of resources, or constant risk of violence expose young people to a range of negative life events and characters. Yet, it seems that even minimal support of humanitarian aid workers,

nongovernmental organizations, community centers, peers, and other collectives invites youth participation in activities not only to benefit their own personal or family circumstances but also to be concerned with and to work for societal improvement (Daiute, 2010; Lucic, 2016; Turniski, 2012).

Although organizations in war-affected areas are sometimes criticized for promoting their own agendas and sometimes perhaps do (Hoare, 2016), such organizations provide supports for the development of civic values, sometimes with an openness that invites alternatives to those of the ongoing or failed nation state. While imperfect, nongovernmental organizations become spaces for exploring and developing civic orientations and activities. Nongovernmental organizations have been central to youth civic engagement, especially in situations of adversity.

Until recently, scholars have assumed that civic engagement is positive engagement. Excepting youth participation in terrorism and other forms of violence, research open to a broader perspective on civic engagement in unstable situations has identified shifts from negative civic roles to positive ones. Participation as a child or youth soldier does not bode well for adolescent or societal trajectories, but some research has found that young people in certain roles and with certain supports shift to prosocial ways (Bullock & Nesbitt-Larking, 2013). Ethnographic studies focusing on meaning-making processes have, for example, contributed insights about how young people acquire skills and goals for their future development from participation in combat and noncombat roles in the field, as revealed in a study citing a teenage girl who expressed interest in pursuing formal medical training after having served as a medic for an armed guerilla group in the Philippines (Sta. Maria, 2006).

Another study that interviewed ex–child soldiers in adulthood reported that participants who exerted conscious efforts to employ cognitive coping strategies, such as connecting with others and engaging in routines of daily life, experienced greater well-being than those dwelling on troubling thoughts and feelings about their previous combat roles (Boothby & Thompson, 2013). Overall, the study found that most of the former child soldiers became trusted and productive adult members of society in spite of their histories of violence. The researchers explain that engaging with some stable norms, practices, and people mitigated at least some of the effects of violence. While not civically engaged in the traditional sense, such former combatants had valuable cautions and strategies to share for the benefit of others.

Research and practice with forced and voluntary youth participation in armed conflicts must allow for open-ended interaction and reflection. Toward that end, researchers have shifted frames of reference. For example, one study with Muslim youth began with generic prompts about daily life rather than with questions about how their religious experiences might have led to radicalization (Bullock & Nesbitt-Larking, 2013). Results of that interview study revealed that even though they acknowledged personal impacts of negative public discourse about Muslims and instances of racism, participants expressed a high level of civic engagement

in Canadian public life as well as in their religious communities (Bullock & Nesbitt-Larking, 2013).

Another set of studies shifted from assuming that young people growing up during and after wars had, by default, traumatic responses to their circumstances or that they were prone to repeat ethnic hatreds of their parents (Daiute, 2010, 2016). With research methods that asked about daily life from a range of youth perspectives as participants in youth culture, observers of local adults, and evaluators of public institutions, research in Colombia, Bosnia, Serbia, Croatia, and refugee communities in the United States revealed that many adolescents and young adults oriented toward their environments critically and creatively with any positive effects they could make (Daiute, 2010; Daiute & Botero, 2014). When responses consistent with trauma emerged, those tended to be in the narratives most like the prevailing national story. Bosnian youth, for example, tended to express distress in autobiographical narratives but not in fictional stories, thereby using fiction as a reprieve, while Serbian youth, in contrast, tended to express distress in fictional stories but not in autobiographical stories (Daiute, 2010).

What these studies show is that with a shift in perspective, researchers should consider civic engagement in the practice of living in and coping with adverse circumstances. Without overextending civic engagement to every act of life, such an approach could advance from using the somewhat deficit term of *civic engagement gap* to exploring the contributions of young people innovating in the development of communities and families. Although some young people might have had intentions to become civically engaged for "a greater good," as much contemporary research suggests, such forethought might not be paramount on the minds of those living in the midst of violence and lacking basic resources. The increasingly common situations of conflict and displacement might enlist youth to act for the benefit of others, actions that only later young people and those around them recognize as civic engagement.

Challenges and Future Directions: Changing Politics and Technologies, Changing Meanings of Civic Engagement

To continue advancing, civic engagement research can extend further into nontraditional, transforming, disrupted, and even uncivil geopolitical contexts. Being receptive to diverse circumstances and meanings of adolescent civic engagement in those dramatically changing spaces, the effective set of scale-based surveys can be complemented by qualitative studies, employing a range of cultural techniques (such as creating new organizations, new media outlets, and protests) with new technologies as well as face-to-face engagements. The review in this chapter also indicates the importance of knowledge seeking and deliberative discourse with multiple meanings across diverse relationships. Developing a full research agenda is beyond the scope of this chapter, but

several key suggestions are to increase practice-based collaborative research in nonnormative as well as normative geopolitical contexts, to consider the participation strategies of adolescents in unstable and uncivil spaces for how they add new meaning to civic engagement, and to honor theoretical foundations for examining civic engagement of adolescents and societies with innovative methods of inquiry. Theory and method are crucial as they define the terms and possible findings of the research.

<div align="center">PRACTICE-BASED METHODS</div>

Research on civic engagement has been, for the most part, driven by survey items and data. This plethora of data is important, not only as a resource for ongoing research but also for its inextricable interaction with the findings. The relative dearth of practice-based research and, in particular, research that goes beyond supporting scale-based studies with illustrative quotes or single-case studies is more than a question of method. To address contemporary challenges and opportunities, practice-based and critical qualitative studies are required. *Practice based* refers to research in organizations where young people and adults supporting them are engaged in activities with civic goals and processes, not only as demonstrations but also as systematic applications of theoretical knowledge about how youth can use language and other symbolic media to make sense of their environments, how they fit, and what they would like to change (Daiute, 2016). The example of youth growing up during and after the Yugoslav wars and the long-term Colombian conflict include such activities as youth engagement in writing policy suggestions and collective storytelling rather than only personal storytelling (Daiute, 2010; Daiute & Botero, 2014). Practice-based research creates its designs and analyses within activities that are meaningful to the participants. *Critical* refers to those studies from underrepresented populations of adolescents who speak for themselves for a variety of civic purposes in relation to a variety of audiences. For example, another study involved focus group methods allowing young participants to reveal that they felt abandoned by adults during the wars, which then energized the youth to consider their own civic solutions (Freedman & Abazovic, 2006).

   This shift is not only from quantitative to qualitative methods. Not all qualitative methods are empowering, in part because the common method of interviewing often asks participants growing up in challenging circumstances to focus on the past, the plights they have suffered. In contrast, research in practice encourages young people to participate in creating projects they deem useful, like newsletters, blogs, or plays, and to assume different perspectives in such individual and collaborative expressive, activities. In such practice-based studies, young people might also be able, along with researchers, to identify civic engagements that differ from those on predetermined surveys. Such activities must focus on future and hypothetical possibilities rather than only on the past.

EXPANDING CIVIC ENGAGEMENT RESEARCH IN CIVICALLY DISRUPTED AND UNCIVIL SPACES

Given contemporary realities, the meaning of *civic* requires elaboration and critique in uncivil places. Recent research has acknowledged participation in illegal as well as legal protests as contexts of civic engagement. Young people have participated in protests against injustices across the globe. Temporary and longer term youth social movements have been acknowledged in some civic engagement research. Nevertheless, a frontier in civic engagement research is to consider the nature of adolescents' participation in situations of war, displacement, and extreme inequality. It is worth noting and examining the history of civic engagement among individual and groups because, for example, protests like the Black Lives Matter and Dreamer movements do not begin abstractly among youth who have high engagement beliefs or who have been highly engaged. Historical circumstances seem to engage young people rather than the young people engaging the movement. Circumstances of the creation of the Black Lives Matter movement have been the visibility of a fast succession of police killings of unarmed black men and boys and solidarity nurtured not only from the Internet but also from the history of social and economic injustices to black, Latino, and other communities. The Dreamer movements have galvanized against the backdrop of visibility of the 2012 Deferred Action Executive Order providing some rights to undocumented peoples living and contributing to the United States and increased deportations. Resources for youth mobilization over these past 5 years when both civic movements have occurred include digital media exposure to news and youth expression, collective outrage shared therein, and increasing savvy about how to develop movements, such as with community organizing. Those factors more than or at least as much as individual orientations and beliefs should be explored. Expanding to this temporal and situated nature of civic engagement requires new methods as well as openness to the concept within contemporary circumstances. While qualitative methods can offer nuances, these must be used within research designs that sample beyond the individual interview or case study to considerations of time, situation, and resources.

Another kind of uncivil space for researchers to understand in terms of civic engagement—not only how it occurs, might occur, and might not occur—is in the massive contemporary migration situation. During migration, in temporary settlements, detention centers, and refugee camps, young people are often engaging on behalf of others and their communities. While not naming what they are doing as civic action, young people living in such challenging circumstances perform activities like fetching water, translating, and helping figure out new technologies. They act in these ways as needed, where needed, and not only for family in the course of daily life. It is also important to recognize spontaneous civic engagement from planned civic engagement. Both are important, yet notably missing from the research literature are the spontaneous civic engagements of young people in

emergency settings. Journalistic reporting has explained, for example, that because adults are not permitted to work in areas outside of refugee camps like Dadaab and other long-established camps, children and youth are encouraged to venture beyond camp confines for paid employment (Rawlence, 2016).

Refugee centers, for example, provide an important perspective on civic engagement for several reasons. Young people growing up in the midst of armed conflict, during displacement, and in refugee camps miss years of education. Humanitarian aid and international education organizations have offered options. As some adolescent civic engagement research reviewed previously found, continuing education through adolescence is a foundation for civic engagement. Initiatives like School-in-a-Box (https://www.unicef.org/supply/index_40377.html) and the Inter-Agency Network for Education in Emergencies (INEE) Minimum Standards (http://toolkit.ineesite.org/; http://www.ineesite.org/en/) provide resources and strategies for basic skills instruction during short-term and long-term displacements. Beyond literacy and numeracy instruction, INEE has a peace-building curriculum that is in line with traditional definitions of civic engagement as interest in something for a greater good. The INEE peace-building curriculum, for example, includes activities by a broad range of community stakeholders, including young people to promote peaceful relations by strengthening viable institutions capable of creating conditions for sustained peace or capable of handling conflict.

In terms of spontaneous involvement in civic causes, research with adolescents who have been involved in peaceful assistance during wartime includes a study with the boys of Sarajevo's war tunnel; in part because of their physical size, these boys helped out by walking through a small flooded tunnel linking a city under siege with the airport for life-sustaining food and other supplies (Lucic, 2016). When interviewed about those times, the now-adults 20 years later unheroically narrated their participation transporting goods for city survival as well as for their own economic gains, which speaks to the need for civic engagement research addressing political realities and opportunities nonjudgmentally. Also evident in this study was how the former boys who assisted in the tunnel remained in their war-torn city and currently were engaged in its rebuilding against great long-term odds of political instability, such as a government rotating by ethnicity and the city's 40% unemployment.

Although the circumstances during displacement are not stable enough to account for norms of civic engagement as currently defined in most of the literature, broadening the concept to consider how responding to less-than-ideal life circumstances might lead to unintended civic engagement or realization of civic engagement rather than an intention to be civically engaged. If adults are not available or able to play leadership roles, adolescents step in, care for younger siblings and elders, and sometimes make important decisions. For example, young people serve functions like getting water from a source at the far end of a refugee camp, helping maintain their family dwellings, and translating for monolingual elders and aid workers (Rachele, 2016). In such roles, young people are serving social functions that benefit their communities, even if not embarked on

with the intention of civic engagement as currently defined. In addition to the range of community functions young people serve in refugee camps or during displacements, participating in civic engagement research, beyond being asked to tell their personal stories, could reveal how they think about, critique, and envision improvements in those situations and the situations causing their plights.

A finding from recent studies of young refugees unaccompanied by adults and moving with their families is youth desire for a future as part of public spaces that are stable enough to provide education, employment, and other participations (Campesi, 2015; Daiute, 2010; Vigh, 2009). When research and practice in those situations engage young people in hypothetical thinking about what could be in fictional stories and policy suggestions, rather than only in stories about the past, they express collective actions for improving situations, often in quite possible ways (Daiute, 2010, 2016). This goal for civic participation leads adolescents to take risks to migrate often alone on unknown paths into unknown territories. We must ask whether and how such civic desires could usefully expand civic engagement research to address contemporary political realities.

If, however, civic engagement is confined to stable situations where traditional forms of public engagement such as voting, volunteering, or even the more recently-acknowledged activities like protesting and hashtag movements, then the field is ignoring what are unfortunately increasing life spaces defined by adversity, where civic engagement may be developing in unexpected ways. Broadening to those circumstances and considering what civic engagement in adversity might mean, why it is important to acknowledge it, and how to nurture it can add to our field.

Conclusion

This review built toward the argument that twenty-first-century global processes require that researchers, practitioners, and policymakers broaden definitions and studies of adolescent civic engagement in relation to the rapidly and violently changing nature of civic entities. Because such civic entities, including nation states, citizenship policies, and educational institutions, are changing rapidly in the twenty-first century, civic engagement must also be defined in relation to political and economic circumstances. Voting, citizenship, and mainstream institutions are not always the most appropriate bases for adolescents' civic engagement in the dynamic and often violent environments where they live. While research points to adolescent civic engagement gaps, youth participation in social media suggests otherwise, urging, as some studies have begun to do, examining the nature of youth digital communication as public and political. Equally important is that, as inequalities between those for whom official public life created or supported by government and institutions is engaging and those for whom official public life is not, adults' concerns about youth civic engagement must plumb novel meanings of *civic* and *engagement* where young people find themselves. It is

also important not to forget that adolescence is an active liminal phase of developing and integrating social, cognitive, and emotional abilities through diverse phases of rumination and action (Erikson, 1994; Piaget, 1968), so research that considers imagining somewhere in the process toward becoming a civic actor is well worth our attention. Theoretical approaches that take such intrapersonal diversity seriously acknowledge interactions as adolescents make sense, with the verbal and nonverbal media available to them, of what is going on in their environments, how they fit, and what they would like to change can be a basis for exploring civic engagement as entwined with political and technological realities. Moreover, because policy, research, and practice increasingly occur in tandem, researchers can consider basic questions, such as how adolescents develop motivation, resources, and strategies not only to participate in traditional civic engagement activities defined in terms of stable nation states (like voting and volunteering) but also how they make sense of and intervene in extremely challenging circumstances, where there are no prior experts, such as in recent mass displacements or life in refugee camps.

Researchers and practitioners must thus employ theories and methods that are open to meanings by adolescents as they interact with and interpret (such as via the Internet) extant circumstances with others who are present and distant. Attendant innovations may not, however, be captured on surveys and other measures developed in stable nation states. Adolescent participatory research and qualitative methods could provide some surprising information to complement the survey-dominated methods in the field.

References

Astuto, J., & Ruck, M. (2017). Growing up in poverty and civic engagement: The role of kindergarten executive function and play predicting participation in 8th grade extracurricular activities. *Applied Developmental Science*. doi.org/10.1080/10888691.2016.1257943

Barber, B. (2012). *How the hell did they do it? Case studies of youth activists in the Arab Spring*. http://www.conflictyouth.blogspot.com

Boothby, N. & Thompson, B. (2013). Child soldiers as adults: The Mozambique case study. *Journal of Aggression, Maltreatment & Trauma*, 22,735–756. doi:10.1080/10926771.2013.814742

Bowman, N. A., Denson, N., & Park, J. J. (2016). Racial/cultural awareness workshops and post-college civic engagement: A propensity score matching approach. *American Educational Research Journal*, 53(6), 1556–1587. doi:10.3102/0002831216670510

Bullock, H., & Nesbitt-Larking, P. (2013). Becoming "holistically indigenous": Young Muslims and political participation in Canada. *Journal of Muslim Minority Affairs*, 33(2), 185–207. http://dx.doi.org/10.1080/13602004.2013.810116

Callina, K. S., Johnson, S. K., Buckingham, M. H., & Lerner, R. M. (2014). Hope in context: Developmental profiles of trust, hopeful future expectations, and civic engagement across adolescence. *Journal of Youth and Adolescence*, 43, 869–883. doi:10.1007/s10964-014-0096-9

Campesi, G. (2015). Hindering the deportation machine: An ethnography of power and resistance in immigration detention. *Punishment & Society*, *17*(4), 427–453.

Daiute, C. (2010). *Human development and political violence.* New York, NY: Cambridge University Press.

Daiute, C. (2013). Living history by youth in post-war situations. In K. Hanson & O. Nieuwenhuys (Eds.), *Living rights: Theorizing children's rights in international development* (pp. 175–198). Cambridge, England: Cambridge University Press.

Daiute, C. (2016). A relational theory of human development in the 21st century crisis of violence and displacement. *Human Development*, *59*(2–3), 128–151. doi:10.1159/000448230

Daiute, C. (2017). Developing with diversity into the third decade of life and beyond. In N. Budwig, E. Turiel, & P. Zelazo (Eds.). *New perspectives on human development* (pp. 447–468). Cambridge, England: Cambridge University Press.

Daiute, C., & Botero Gomez, P. (2014). Narrating change in and against time in Colombia. In D. Rellstab & C. Schlote (Eds.), *Representations of war, migration and refugeehood: Interdisciplinary perspectives* (pp. 140–160). New York, NY: Routlege.

Erikson, E. (1994). *Youth in society.* New York, NY: Norton.

Flanagan, C., & Levine, P. (2010). Civic engagement and the transition to adulthood. *The Future of Children*, *20*(1), 159–179.

Freedman, S. W., & Abazovic, D. (2006). Growing up during the Balkan wars of the 1990s. In C. Daiute, Z. Beykont, C. Higson-Smith, & L. Nucci (Eds.), *International perspectives on youth conflict and development* (pp. 57–72). New York, NY: Oxford University Press.

Freedman, S. W., Barr, D., Murphy, K., & Beširević, Z. (2016). The development of ethical civic actors in divided societies: A longitudinal case. *Human Development*, *59*, 107–127. doi:10.1159/000448229

Galazyn, M. (2016). Participation strategies in low-resource settings and their impact on cognitive and non-cognitive skills: A study in four different geographical regions (dissertation). Graduate Center, City University of New York, NY.

Hoare, J. P. (2016). Doing gender activism in a donor-organized framework: Constraints and opportunities in Kyrgyzstan. *Nationalities Papers*, *44*(2), 281–298. http://dx.doi.org/10.1080/00905992.2015.1007344

Kahne, J., Hodgin, E., & Eidman-Aadahl, E. (2016). Redesigning civic education for the digital age: Participatory politics and the pursuit of democratic engagement. *Theory and Research in Social Education*, *44*(1), 1–35.

Kim, E., & Yang, S. (2016). Internet literacy and digital natives' civic engagement: Internent skill literacy or Internet information literacy? *Journal of Youth Studies*, *19*(4), 438–456.

Lenzi, M., Vieno, A., Altoe, G., Scacchi, L., Perkins, D. D., Zukauskiene, R., & Santinello, M. (2015). Can Facebook informational use foster adolescent civic engagement? *American Journal of Community Psychology*, *55*, 444–454. doi:10.1007/s10464-015-9723-1

Lenzi, M., Vieno, A., Sharkey, J., Mayworm, A., Scacchi, L., Pastore, M., & Santinello, M (2014). How school can teach civic engagement besides civic education: The role of democratic school climate. *American Journal of Community Psychology*, *54*, 251–261. doi:10.1007/s10464-014-9669-8

Levinson, M. (2010). The civic empowerment gap: Defining the problem and locating solutions. *Handbook of Research on Civic Engagement in Youth*, *1*, 331–361. doi:10.1002/9780470767603.ch13

Lucic, L. (2016). Developmental affordances of war-torn landscapes: Growing up in Sarajevo under siege. *Human Development*, *59*, 81–106. doi:10.1159/000448228

Malin, H., Tirrib, K., & Liauwa, I. (2015). Adolescent moral motivations for civic engage-
ment: Clues to the political gender gap? *Journal of Moral Education*, *44*(1), 34–50. http://
dx.doi.org/10.1080/03057240.2015.1014324

Martens, H., & Hobbs, R. (2015). How media literacy supports civic engagement in a digital
age. *Atlantic Journal of Communication*, *23*, 120–137. doi:10.1080/15456870.2014.961636

Piaget, J. (1968). *Six psychological studies*. New York, NY: Random House.

Rachele, A. (2016). Caught in the middle: Child language brokering as a form of unrecog-
nized language service. *Journal of Multilingual and Multicultural Development*, *37*(7),
710–725.

Rawlence, B. (2016). *City of thorns: Nine lives in the world's largest refugee camp*. New York,
NY: Picador.

Roffman, J. G., Suárez-Orozco, C., & Rhodes, J. E. (2003). Facilitating positive develop-
ment in immigrant youth: The role of mentors and community organizers. In F. A.
Villarruel, D. F. Perkins, L. M. Borden, & J. G. Keith (Eds.), *Community youth develop-
ment: Programs, policies, and practices* (pp. 90–117). Thousand Oaks, CA: Sage.

Rossi, G., Lenzi, M., Sharkey, J. D., Vieno, A., & Santinello, M. (2016). Factors associated
with civic engagement in adolescence: The effects of neighborhood, school, family,
and peer contexts. *Journal of Community Psychology*, *44*(8), 1040–1058. doi:10.1002/
jcop.21826

Salvatore, A. (2013). New media, the "Arab Spring," and the metamorphosis of the public
sphere: Beyond Western assumptions on collective agency and democratic politics."
Constellations, *20*(2), 217–228.

Simmons, J. R., & Lilly, B. (2010). The university and student political engagement.
PS: Political Science and Politics, *43*(2), 347–349.

Sirin, S. R., & Katsiaficas, D. (2011). Religiosity, discrimination, and community engage-
ment gendered pathways of Muslim American emerging adults. *Youth & Society*, *43*(4),
1528–1546. doi:10.1177/0044118X10388218

Sirin, S. R., Ryce, P., Gupta, T., & Rogers-Sirin, L. (2013). The role of acculturative stress
on mental health symptoms for immigrant adolescents: A longitudinal investigation.
Developmental Psychology, *49*(4), 736–748. doi:10.1037/a0028398

Sta. Maria, M. A. (2006). Paths to Filipino youth involvement in violent conflict. In C.
Daiute, Z. Beykont, C. Higson-Smith, & L. Nucci (Eds.), *International perspectives on
youth conflict and development* (pp. 29–42). New York, NY: Oxford University Press.

Stepick, A., Stepick, C. D., & Labissiere, Y. (2008). South Florida's immigrant youth and
civic engagement: Major engagement: Minor differences. *Applied Development Science*,
12(2), 57–65. doi:10.1080/10888690801997036

Suárez-Orozco, C., & Suárez-Orozco, M. M. (2009). *Children of immigration*. Cambridge,
MA: Harvard University Press.

Turniski, M. (2012). *The place of participation in the recovery of identity in adolescents and
young adults affected by war and displacement in Croatia* (Unpublished dissertation).
Graduate Center, City University of New York, New York, NY.

Van Camp, D., & Baugh, S.-A. (2016). Encouraging civic knowledge and engage-
ment: Exploring current events through a psychological lens. *Journal of the Scholarship
of Teaching and Learning*, *16*(2), 14–28. doi:10.14434/josotl.v16i2.19199

Vigh, H. (2009). Wayward migration: On imagined futures and technological voids. *Ethnos*,
74(1), 91–109.

Voight, A., & Torney-Purta, J. (2013). A typology of youth civic engagement in urban middle schools. *Applied Developmental Science*, *17*(4), 198–212. doi:10.1080/10888691.2013.836041

Watts, R. J., Diemer, M. A., & Voight, A. M. (2011). Critical consciousness: Current status and future directions. *New Directions for Child and Adolescent Development*, *134*(2011), 43–57.

Watts, R. J., & Hipolito-Delgado, C. P. (2015). Thinking ourselves to liberation?: Advancing sociopolitical action in critical consciousness. *Urban Review*, *47*, 847–867. doi:10.1007/s11256-015-0341-x

Wray-Lake, L., Rote, W. M., Gupta, T., Godfrey, E., & Sirin, S. (2015). Examining correlates of civic engagement among immigrant adolescents in the United States. *Research in Human Development*, *12*, 10–27. doi:10.1080/15427609.2015.1010343

Yoshikawa, H. (2011). *Immigrants raising citizens*: *Undocumented parents and their children*. New York, NY: Russell Sage Foundation.

Zaff, J., Boyd, M., Li, Y., Lerner, J. V., & Lerner, R. M. (2010). Active and engaged citizenship: Multi-group and longitudinal factorial analysis of an integrated construct of civic engagement. *Journal of Youth and Adolescence*, *39*, 736–750. doi:10.1007/s10964-010-9541-6. https://www.unicef.org/emailarticle/supply/index_40377.rhtml

{ SECTION 2 }

Social Relationships

Parent–Adolescent Relationships in Global Perspective

Marc H. Bornstein and Diane L. Putnick

This chapter addresses parent–adolescent relationships in global perspective. It begins with brief characterizations of adolescence and its particular developmental tasks and of parenting adolescents with its special developmental concerns. Individual difference characteristics of adolescents and parents covered here (gender, age, and the like) are features of each that have a bearing on their relationships with one another. The chapter then discusses parent–adolescent relationships, first identifying parent-to-adolescent effects, then adolescent-to-parent effects, and finally dyadic parent–adolescent relationships proper. The parent–adolescent relationship is dynamic, and their bidirectional, transactional relationship includes the multiplicity of ways individuals continually and mutually influence one another through time. The chapter indicates similarities and differences in parent–adolescent relationships across contexts of development, focusing specifically on ethnic and cultural moderation. Of course, adolescents develop in multiple other physical (school, work, media) as well as social (friends, peers, teams) contexts that fall outside the scope of this chapter. The chapter concludes with a brief discussion of parent–adolescent relationships and interventions.

Parents and Their Adolescents

Adolescence represents a significant period of psychosocial development because of thoroughgoing biological, cognitive, and social developments. Gender and age as well as changes in brain and maturation, thought and emotions, and self and sociability define the child's arrival at adolescence, and they, along with ethnicity and culture, shape adolescents' relationships with their parents. Most adolescents

transit this period successfully, but problem behaviors are generally much more common during adolescence than earlier in childhood (Gullotta & Adams, 2005).

According to major theories of human development, two principal goals of adolescence are to form a personal identity and to separate ("individuate") from parents (Koepke & Denissen, 2012). Many developmental challenges initiated during childhood, such as becoming autonomous, establishing an identity, and forming and maintaining relationships with others, continue into adolescence but are transformed by multiple changes in adolescence. Adolescents tend to spend more time in direct interaction with their mothers than with their fathers. Unsurprisingly, adolescents report closer relationships with their mothers than with their fathers and are more likely to disclose sensitive information to their mothers than to their fathers. Reciprocally, mothers are more likely to be an information source and to influence adolescent risk behaviors than fathers. The importance of the adolescent–parent relationship does not diminish over time. Variation in adolescent–parent relationships is associated with adolescent problems, such as anxiety, depression, substance use, aggressive behavior, and low self-esteem. Over time, however, discrepancies in adolescent–parent perceptions, and moderate levels of adolescent–parent conflict, may be fundamental to normal processes of adolescent individuation from the family and the realignment of family relationships.

Major theories of adolescent development originated almost exclusively in Western traditions. In Western societies, people tend to hold more individualist views (e.g., placing a strong value on self-reliance and individual achievement). Here, developing a personal identity and separation–individuation from the family are desired goals. In more collectivist cultures, where the family's or community's well-being tends to be valued more than individualism, these goals may not be culturally appropriate. Instead, learning interdependence, forging strong emotional bonds with others, and reducing separation from the family may take precedence for adolescents. Scharf and Mayseless (2010) suggested that a culturally universal adolescent goal may be to discover an authentic self or recognize one's true qualities rather than those imposed by others. Discovering one's authentic self requires psychological separation from parents in terms of recognizing how one is similar and different from parents, but not necessarily physical and emotional separation, which may be more common in Western cultures. In turn, differing developmental goals likely produce differing parent–adolescent relationships, but little is known about the normative developmental course of parent–adolescent relationships in non-Western cultures. As Larson et al. (2009) aptly observed, "There are currently over one billion youth in the second decade of life . . . and we know very little about the great majority of them" (p. 591).

The parent's role is to educate adolescents in beliefs and behaviors that are acceptable for the stage of life they occupy as well as prepare adolescents for adaptation to a wider range of life roles and contexts they will encounter as they continue to grow (Bornstein et al., 2011). In achieving life goals, parents have the

moment-to-moment job of disambiguating novel, complex, and rapidly changing, uncertain information vis-à-vis their adolescents. Despite this flux, parents are consensually expected to parent their adolescents consistently, appropriately, and effectively. What about parents affects their parenting of their adolescents? Several salient individual difference characteristics likely moderate parents' relationships with their adolescent children. Specifically, gender and age as well as cognitive and socioemotional skills define parenting, and they along with social status in terms of ethnicity and culture shape parent–adolescent relationships. Across adolescence, mothers and fathers serve as key sources of instrumental aid (i.e., providing tangible resources and services), advice, support, and affection, and they continue to serve as primary socialization agents of values, reasoning, and morals (Parke & Buriel, 2006).

Here, we profile the nature of parent–adolescent relationships. The following account admittedly draws mostly from the Western literature, although we present variation across cultures further in the discussion. We also present static snapshots of adolescent or parent actors when our ultimate goal is to convey a relational and dynamic perspective on parent–adolescent relationships. To fully appreciate their bidirectional, transactional relationships, however, readers need to hold individual difference characteristics of the adolescent and parent as well as some direction of effects in mind.

Parent–Adolescent Relationships

Parents and their adolescents interact with one another over time to co-construct adolescenthood as well as parenthood (Crosnoe & Cavanagh, 2010). In such dyadic dynamics, the individual difference characteristics of adolescent and parent are actualized in parent-to-adolescent, adolescent-to-parent, and reciprocal adolescent–parent relationships.

PARENT-TO-ADOLESCENT RELATIONSHIPS

Parents actively participate in adolescent individuation, and they facilitate healthy emotional development in adolescents by granting age-appropriate autonomy while maintaining a warm and involved relationship. Although parents must adjust to their evolving roles as continuingly important but diminishingly salient figures in their teen's life, parents influence their adolescents' beliefs and behaviors in important ways (Collins et al., 2000). In parenting adolescents, socialization and genetic endowment are inextricably intertwined, even if much more is presently known about the former than the latter.

A direct channel by which parents influence adolescents in themselves and in their relationships is via socialization (Bornstein et al., 2011). In most theoretical accounts, the adult culture is transmitted to each new generation of adolescents

primarily through parental control and teaching. Parents are the primary agents who set the agenda for what adolescents learn and who administer the rewards and punishments that strengthen desired characteristics and weaken undesired ones in adolescents. Parenting adolescents is instantiated in parents' cognitions and parents' styles and practices (Bornstein, 2015). That is, parents (and other significant adults) directly influence adolescent adjustment and development by the socialization (and related) cognitions they hold and by the socialization (and related) practices they exhibit.

Socialization cognitions generate and shape parent practices and form a framework out of which parents perceive and interpret their adolescents, in turn affecting adolescent adjustment and development. Parents' cognitions, broadly construed, include values, goals, perceptions, attitudes, beliefs, and the like. For example, parents' goals might include their adolescents having positive friend and peer relationships (such as having friendships with other adolescents who do well in school) or avoiding contact with friends or peers whom parents believe to be negative influences (such as those who are involved in delinquency or drugs). Parents' cognitions about their own adolescent (whether their adolescent's development is delayed, on time, or advanced), their cognitions about adolescence (the importance of peer relationships to adolescent social adjustment), and their cognitions about parenting (attributions about the heritability of social behavior) all likely affect parents' parenting of their adolescents. For example, parents who see their adolescent as delayed in developing interpersonal skills might express higher levels of concern than those who judge their adolescent's progress as normative (Profilet & Ladd, 1994). Moreover, parents who estimate their adolescent's progress as appropriate and express low levels of concern are more likely to encourage their adolescent to participate in contacts with friends or peers. Mothers who see their adolescent as interpersonally skillful are less likely to supervise adolescent peer play (Mize et al., 1995). In essence, parents' thinking about parenting, adolescence, and adolescent development plays a role in parent–adolescent relationships.

Socialization styles and practices constitute a second domain of influence. Parenting style is composed of general attitudes toward the adolescent and the emotional climate of the parent–adolescent relationship in contrast to parenting practices that have specific goals and specific content. Parenting style therefore refers to the emotional climate of the parent–adolescent relationship, the affective context of their interactions. Baumrind (1967) grouped European American children according to their social adjustment and then determined how the parents of her groups differed. "Children who were most self-reliant, self-controlled, explorative, and content" had parents who were "controlling and demanding; but they were also warm, rational, and receptive to the children's communication," whereas "children who . . . were discontent, withdrawn, and distrustful" had parents who were "detached and controlling, and somewhat less warm than other parents," and "the least self-reliant, explorative, and self-controlled children" had parents

who were "noncontrolling, nondemanding, and relatively warm" (Baumrind, 1971, pp. 1–2). Baumrind termed the three groups of parents authoritative, authoritarian, and permissive, respectively. She hypothesized that parenting style fosters one or another type of social competence. The major conceptual difference between authoritative and authoritarian parents is the presence or absence of warmth (responsiveness) along with the high levels of control (demandingness) that both types of parents are thought to exert with respect to childrearing.

Together, warmth and control establish a circumplex model (Maccoby & Martin, 1983) that delimits four parenting styles vis-à-vis adolescents: authoritative (high warmth, high control); authoritarian (low warmth, high control); indulgent (i.e., high warmth, low control); and indifferent (i.e., low warmth, low control). In European American families, authoritative parenting is believed to promote the development of adolescents' competence and enhance their ability to withstand potentially negative influences, such as life stress and exposure to antisocial friends/peers (Mounts & Steinberg, 1995). Adolescents from authoritative homes are more responsible, self-assured, adaptive, creative, curious, socially skilled, and successful in school (Reitz, Dekovic, Meijer, & Engels, 2006; Vazsonyi & Belliston, 2006). They report less depression and anxiety, score higher on measures of self-reliance and esteem, and are less likely to engage in antisocial behavior, including delinquency. The verbal give-and-take of parent–adolescent exchanges in authoritative families fosters cognitive and social competencies, thereby enhancing adolescents' functioning outside the family. Furthermore, the advantages of authoritative parenting appear to accumulate over time.

In authoritarian households, by contrast, where rules are rigidly enforced and seldom explained, parenting appears to lead to adolescent depression and behavior adjustment problems. Adolescents reared in authoritarian homes are more dependent and passive and less socially adept, self-assured, and intellectually curious (Sheeber et al., 1997).

Adolescents from indulgent homes appear less mature and less able to assume positions of leadership and are irresponsible and more conforming with their friends and peers. Although autonomy-granting behaviors are important, parents still need to balance them with a measure of control. Adolescents who are granted too much autonomy too early by their parents are more likely to engage in problem behaviors and to become involved with deviant peers (Dishion, 2004).

Finally, adolescents reared in indifferent homes are likely to be impulsive and delinquent and experiment precociously with sex, drugs, and alcohol. In both indulgent and indifferent families, parents fail to provide sufficient guidance for their adolescents, and, as a result, their youth fail to acquire adequate standards for behavior (Kurdek & Fine, 1994).

Parents adopt multiple roles in socializing their adolescents, including those of direct instructors and relational partners (Viner et al., 2012). For example, the way parents approach dilemmas with their adolescents directly affects adolescents' thinking: Parents who encourage and support, and who reason at a level slightly

higher than do their adolescents, successfully optimize adolescents' moral development, whereas parents who make conflictual remarks or lecture without warmth do not (Walker & Henig, 1999). Parents' use of reasoning, and especially other-oriented induction (i.e., reasoning that draws adolescents' attention to the effects of their actions on others), extends adolescents' thinking beyond personal consequences and fosters adolescents' prosocial behavior and concern for others (Hoffman, 1977).

Parental socialization accounts for significant portions of the variance in many adolescent outcomes (Neiderhiser et al., 1999). Both longitudinal study (which assesses parenting at one point in time and adolescence at some later point) and experimental research (in which parenting practices are altered through intervention and adolescents assessed later) provide evidence that parenting affects, and does not simply reflect, adolescent adjustment and development (Collins et al., 2000). Parental influences on adolescent functioning are evident even when controlling for adolescents' impact on their parents (Williams & Steinberg, 2011).

Style, then, is the general emotional climate that parents create, and practices constitute goal-directed behaviors that parents engage in to socialize adolescents in a particular fashion. Of course, practices may be more or less effective depending on the style that parents establish because the family emotional climate conditions whether adolescents are more or less receptive to parent practices.

One domain of practice that has implications for adolescents' relationships with parents is discipline. Inductive parental disciplinary strategies emphasize reasoning and are associated with prosocial adolescent behavior (Zahn-Waxler et al., 1979). Parents who employ inductive discipline presumably teach their adolescents about interpersonal outcomes. By contrast, power assertive disciplinary styles, in which parents rely on verbal commands and physical power, are associated with adolescents' use of aggression and hostility with friends and peers, and these associations between harsh discipline and antisocial behavior obtain independent of confounds, such as adolescent temperament, family, and SES (Weiss et al., 1992).

Two other noteworthy specific types of parental behavior related to adolescent autonomy are enabling and constraining (Allen & McElhaney, 2000). Parents who enable accept their adolescents but at the same time help them to develop and state their own ideas through questions, explanations, and tolerating differences of opinion. In contrast, parents who constrain their adolescents have difficulty accepting their adolescents' individuality and react to expressions of independent thinking with responses that are distracting, judgmental, or devaluing. Adolescents whose parents enable rather than constrain are more individuated and score higher on measures of ego development and psychosocial competence. Adolescents who are permitted to assert their own opinions within a family context that is secure and loving develop higher self-esteem and more mature coping abilities. In contrast, adolescents whose autonomy is suppressed are at risk for

developing feelings of depression, and those who do not feel connected are likely to develop adjustment problems.

The foregoing perspective on socialization assumes that parents exert an influence on their adolescents through direct supervision and control of adolescents' activities and associations, even if not physically present, as when their adolescents are outside their purview and direct control of their behavior is not possible. Parental monitoring is linked to less delinquency, reduced association with deviant friends or peers, and diminished drug and alcohol use, cigarette smoking, and risky sexual activity (Chilcoat & Anthony, 1996).

ADOLESCENT-TO-PARENT RELATIONSHIPS

The relative strengths of parent-versus-offspring effects shift over the course of child development. Parental influences are likely stronger early in development, when parents exert relatively direct control over many aspects of their young children's physical and social environments. As children grow older and gain autonomy, however, children exert increasing control over their experiences. Adolescents more actively choose situations and circumstances associated with their own parent socialization (Kerr et al., 2003). By "niche picking," adolescents increasingly seek experiences and environments that match their dispositions and interests. In addition, adolescents alter their environments as they interact with them, and they interpret their experiences and environments in idiosyncratic ways. The messages parents send their adolescents may be illuminating, but in the end the adolescent must actually process and act on those messages. Based on adolescents' developmental level, perceptions of the domain appropriateness of certain messages, and so forth, adolescents decide to accept or reject parental messages (Grusec & Goodnow, 1994). Thus, the impact of parenting on adolescent adjustment is likely to be mediated by how adolescents perceive their parents. Overall, adolescents are active agents in their own development and so also influence their parents.

The adolescent's makeup, expressed in individual difference characteristics, not only affects the adolescent's adjustment and development directly but also evokes certain parenting cognitions and practices, which then influence the adolescent's future adjustment and development. Goldberg (1977) usefully taxonomized three salient child characteristics that affect parents: responsiveness, readability, and predictability. Responsiveness refers to the extent and quality of child reactivity to stimulation; readability refers to the definitiveness of child behavioral signals; and predictability refers to the degree to which child behaviors can be anticipated reliably. Each adolescent brings a unique social style and an idiosyncratic physical, social, and mental life to interactions with parents that then shape his or her parenting experiences. For example, an "easily read" adolescent produces unambiguous cues that allow parents to recognize the adolescent's state quickly, interpret signals promptly, and thus respond appropriately.

From the perspective of so-called evocative interactions (Scarr & McCartney, 1983), consistent versus changing characteristics in adolescent groups or individuals at one time can be expected to differentially shape responses from the social and physical environments that contribute to later outcomes in those adolescents. Twin, adoption, and sibling studies indicate that parents react to their children's unique makeup, and in turn children's unique experiences are predictive of their adjustment and development (Plomin et al., 1994). For example, positive parent behaviors decline, and negative ones increase, in response to offspring antisocial behavior (Albrecht et al., 2007; Reitz, Dekovic, & Meijer, 2006). Adolescents' antisocial behavior disrupts effective parenting, and parents become hostile and rejecting in the face of adolescent delinquency (Conger & Ge, 1999). The impact of adolescent deviance on parenting can be stronger than that of parenting on adolescent deviance (Albrecht et al., 2007). In making attributions about their behavior and in creating opportunities and environments (or in failing to do so), parents can be influenced by and respond to their adolescents' characteristics, including gender, age, personality, and interests, as much or more than parental characteristics (De Los Reyes & Kazdin, 2005).

The developmental literature is replete with longitudinal and experimental studies—from which causality can be inferred—that show that parents and other adults sometimes react to child and adolescent characteristics and adjust their behavior accordingly. For example, parents' active efforts to extract information from their adolescents are only weakly related to their knowledge about their adolescents; rather, adolescents must disclose. Stattin and Kerr (2000), Kerr and Stattin (2000), and others (e.g., Marshall et al., 2005) learned that much of the knowledge parents have about their adolescents comes from adolescents' open disclosure of information to parents. Thus, in addition to the claim that relations between parents or parenting and adolescent adjustment and development are ascribable to parent efforts, parent–adolescent associations sometimes run in the reverse direction (Kerr & Stattin, 2003).

A second way parents and adolescents mutually influence one another in their relationships is via their shared genetics. That is, some connections between parent and adolescent characteristics may be attributable to parents' and adolescents' common genetic makeup (Reiss et al., 2000), and reciprocal behaviors between adolescents and their parents may be influenced by inherited factors (van de Oord & Rowe, 1997). Because genes and environments are correlated, genetic endowment plus gene–environment correlations contribute to linking parents and adolescents. Parents may create opportunities and environments relevant for adolescents' relationships that are consistent with their own and their adolescents' genetic dispositions. Behavioral geneticists claim that many (if not most) associations observed between parenting and adolescent outcomes are ascribable to genetic transmission rather than socialization. However, gene-related effects do not rule out parent-to-adolescent socialization (Bornstein, 2015).

PARENT–ADOLESCENT RELATIONSHIPS

Parents likely adjust to adolescent behavior as much as they likely produce it. The reverse is also true with adolescents' behavior influencing parents and adolescents adjusting their behavior based on the behavior of their parents. For example, relative to other adolescents, adolescents who disclose to their parents about their lives are more likely to have parents who do not react negatively (with sarcasm, judgment, or ridicule) to adolescents' spontaneous disclosures; knowledgeable parents tend to be trusting, and their adolescents in turn do not feel overly controlled (Kerr & Stattin, 2000). Therefore, parents' trust (or mistrust) affects the way they relate to and communicate with their adolescent, which in turn affects their adolescents' willingness to disclose about their feelings and life experiences to their parents.

Some family conflict is normative during adolescence. In studies of daily family life, adolescents report family conflict. Disagreements between adolescents and their parents typically relate to minor issues and everyday matters (such as chores and style of dress) rather than larger substantive issues (such as sex and drugs). In adolescence, conflicts may occur as parents and children renegotiate their roles, especially as they relate to authority. Extreme levels of conflict are not normal and perhaps only about 5%–15% of families with adolescents experience serious family conflict. De Goede et al. (2009) suggested that the increases in conflict reflect shifts toward more egalitarian relationships, and Lam et al. (2012) placed changes in the affective quality of the parent–adolescent relationship within the context of developmental changes in the amount of time parents and adolescents spend together.

Attachment theory looks at life-span relationships faithful to this kind of bidirectional, transactional perspective (Posada & Lu, 2011). Attachment views the emotional bond between parents and adolescents as a feedback system, maintaining a balance between adolescents' desires for closeness with parents and for exploring the world beyond the family (Güngör & Bornstein, 2010). As the balance between independence and closeness with parents is a central feature of attachment theory, it is particularly relevant to adolescence. In the context of attachment theory, the construct of the "internal working model" has been construed as an unconscious representation of early intimate parent–adolescent ties that, once formed, remain relatively invariant (Fraley, 2002). These cognitive models are thought to guide feelings, behaviors, and how information about the world is processed. They structure parents' and adolescents' approach to and expectations about each other. Adolescents and parents differ in their emotional security and the types of internal working models they have developed from their attachment relationships (Cummings & Cummings, 2002). The security of attachment relationships is shaped by the ways that members of the dyad—parent and adolescent alike—respond to each other. Secure attachments are characterized by open and flexible communication, whereas insecure attachments reveal problematic ways of communicating

emotions, where partners exhibit a restricted range of emotions or intensify their displays of emotion.

Attachment experiences provide a secure or insecure base for adolescents to explore their talents and abilities in a variety of contexts and prepare adolescents to become socially connected with others. Individuals learn both sides of the attachment relationship and are believed to reenact both sides of their attachment relationship in their associations with others. Adolescents using in-secure attachment strategies may experience difficulties understanding their own and others' emotions, leaving them more vulnerable to misinterpreting am-biguous situations as hostile and less able to repair disruptions in relationships (Kobak & Cole, 1994). These misinterpretations may lead to hostile or aggressive actions, withdrawal from friends and peers, or other behaviors that foster nega-tive feelings about the self and undermine the formation of healthy relationships. Conversely, adolescents with secure attachments to their mothers tend to have secure attachments with their peers (Laible, 2007).

The parent–adolescent relationship also has implications for each of its respec-tive actors—parent and adolescent. That is, actors in a relationship are altered by their relationship experiences. For example, parent–adolescent relationships that are characterized by mutually secure attachments are theorized to lead to better adolescent social skills development (Allen et al., 2002). Adolescents in close, positive relationships with their parents enjoy lower levels of anxiety, de-pression, and delinquent behavior than adolescents who are detached from their parents; adolescents who feel secure in their attachments to their parents are relatively more competent with peers, have higher self-esteem, and do better at school.

Furthermore, alterations to each actor impact other relationships (i.e., effects on parent or adolescent derived from their relationship can influence other relationships). For example, parents can affect the types of friends that adolescents associate with (Mounts, 2002), and they might influence those adolescent–friend relationships indirectly or directly (Parke & Bhavnagri, 1989). Parents indirectly affect their adolescents' friend relationships even when they engage in parenting that does not directly focus on affecting those relationships. An authoritative par-enting style (high warmth and control) is not focused specifically on external relationships, yet it relates to them (Putallaz & Heflin, 1990). Adolescents who report that their parents use a nonauthoritative style are more likely to award their friends undue influence (Mounts & Steinberg, 1995). When adolescents report that their parents are restrictive and try to maintain power over them, they orient more to friends (Fuligni & Eccles, 1993). Some parents might encourage their adolescent to enroll in many activities with friends that they find desirable and away from the undesirable contacts. Other parents might engage in high levels of prohibiting in an effort to shape friend selection.

Direct parental influences on adolescent–friend and –peer relationships have been organized traditionally around four key parental roles: designer, mediator,

supervisor, and advisor/consultant (Ladd & Pettit, 2002). These direct modes of influence encompass parents' efforts to socialize or manage adolescents' relationships with friends or peers. Designer parents seek to structure, control, or influence the physical surroundings and social settings in which adolescents meet and interact with their friends and peers. These parents influence their adolescents' access to friends/peers through their choice of neighborhoods, schools, afterschool arrangements, extracurricular activities, and community resources. For example, parents involve their adolescents in religious organizations as a means to provide them with peer groups that purportedly influence adolescent development positively (Furstenberg et al., 1999). Mediator parents bridge between the family and the worlds of friends and peers by helping adolescents meet friends or peers and construct social networks, form and maintain relationships with specific friends or peers, and manage interactions in different contexts (Bhavnagri & Parke, 1991). Parents report that they meet with other parents, facilitate proximity between peers, talk with their adolescents about peer relationships, and encourage interactions with other adolescents as strategies for helping them make new friends (Vernberg et al., 1993). Supervisory parents oversee and regulate adolescents' ongoing interactions, activities, and relationships with friends and peers. Parents in impoverished neighborhoods enforce rules regarding peer relationships as a strategy to prevent their adolescents from being adversely affected by peers. Finally, parents advise adolescents about friends and peers when their friends and peers are not present. Parents talk with adolescents about how to initiate friendships, manage conflicts, maintain relationships, deflect teasing, buffer bullying, and so forth (Laird et al., 1994). Such consulting is more likely to occur as parents become distant from direct involvement in their adolescent's friend and peer relationships (Parke et al., 2003).

Contexts of Parent–Adolescent Relationships

In the view of family systems theory, what transpires between a parent and an adolescent is governed not only by the characteristics of each individual and by patterns of transaction between them, as we have seen, but also by transactions between them and others (Bornstein & Sawyer, 2005). In the family systems view, emphases fall on relationships as well as contexts of relationships that reach beyond the parent and adolescent to encompass the full diversity of the dyad's social embeddedness (Bronfenbrenner & Morris, 2006).

Regarding the parent–adolescent dyad, a prime example of the role of context includes the ethnicity and culture in which parent–adolescent relationships emerge, develop, and function; each conditions meaning for partners in the relationship and for consequences of the relationship (Bornstein, 1995). Influences within the family system, and between the family and other social systems in the ethnic group and culture, are bidirectional and transactional as well.

Some characteristics of the parent–adolescent relationship appear to be common across such ethnic and cultural contexts. For example, age-related increases in adolescent–parent disagreements have been observed in various ethnic and cultural groups. Adolescents generally tend to view the family more negatively than do their parents. In comparison to their parents, adolescents also report lower levels of family closeness, cohesion, satisfaction, and communication and higher levels of family conflict. These discrepant views are reported across vastly different cultures worldwide. Chao and Otsuki-Clutter (2011) reviewed research on ethnic differences among adolescents, and Perry and Pauletti (2011) reviewed research on gender differences.

One aspect of the parent–adolescent relationship that appears to be universal is the need for children and adolescents to feel accepted and loved by their parents (Rohner, 2004). In a study of adolescent development in 12 nations, McNeely and Barber (2010) asked 14- to 17-year-old adolescents to list four specific things that parents do that make them feel loved. Responses were classified into the following four themes: emotional and companionate support, instrumental support, moral guidance/advice and showing respect or trust, and allowing freedoms. Emotional and companionate support was the most commonly mentioned theme across nations. In fact, affection and encouragement (a topic in the emotional and companionate support theme) was the most commonly given response by adolescents in 11 of 12 nations. However, cross-national comparisons indicated that adolescents from sites with primarily Western orientations were more likely to mention topics related to emotional and companionate support and less likely to mention topics related to moral guidance/advice and showing respect or trust. Being the recipient of positive affect and encouragement is a common need for adolescents of many cultures (but there are likely cultural variations in how emotional support is displayed), and there are other culturally specific ways that parents make adolescents feel loved (Bornstein, 1995).

Most world societies recognize a period of adolescence as distinct from childhood and adulthood, but the length, significance, and expectations of adolescence vary widely (Schlegel, 2009). Although all parents must negotiate the period of adolescence, and adolescents negotiate physical, cognitive, and socioemotional changes that accompany the transition from childhood to young adulthood, parents and adolescents also vary in positive versus negative relationships and developmental outcomes commonly associated with these changes depending on a variety of contexts. J. T. Y. Leung and Shek (2011) considered poverty as a developmental context, whereas Luthar and Barkin (2012) focused on affluence, with both reporting evidence of context-linked maladjustments.

The contextual variation in the definition, initiation, length, and goals of adolescence challenges our describing general trends in parent–adolescent relationships worldwide, but some specific cultural contrasts can illustrate the issues at play. For example, a primary difference between Asian Indian and European American cultural belief systems lies in the concept of the self (Mascolo et al., 2004). Asian

Indians tend to be allocentric, where the self and the family are integral, rather than have separate concepts for each, as is characteristic of Western belief systems. Asian Indian parental rearing practices emphasize close family bonds, with parents highly involved in their adolescents' lives. Individuals of all ages are expected to sacrifice and contribute to the honor and welfare of the family (Jambunathan & Counselman, 2002). By contrast, European American families tend to be nuclear, and children are generally viewed as transitional members who by adolescence are expected to individuate and pursue their own interests (Triandis et al., 1988). Indeed, adolescence, as it is broadly conceptualized in Western society, is a somewhat foreign concept in traditional Asian Indian families. Although rites of passage are associated with the onset of biological puberty, there is no corresponding change in adolescents' status, responsibilities, or autonomy in decision-making. Even adult children are expected to remain at home until marriage and follow parental advice when dating or making career choices (Jambunathan & Counselman, 2002). Thus, Asian Indian parents do not regularly recognize their adolescents' ability to make sound decisions, and they hold negative views of independent and autonomous behavior (Segal, 1991).

Some cross-cultural studies have emerged that question generalizations made about parent–adolescent relationships based on Western samples. For example, comparing first-generation Chinese versus second-generation Chinese versus European Americans, Chao (2001) identified cultural differences in relations between authoritative parenting and school achievement depending on the length of time in the United States. K. Leung et al. (1998) found parallel differences in relations between parenting style and academic achievement for adolescents from Australia, China, and the United States. Similarly, the use of parental control varies across ethnic groups and cultures (Greenfield et al., 2003). In another study of adolescents from Australia, China, and the United States, Feldman and Rosenthal (1991) noted that adolescents from different cultures have different expectations for when they may engage in adult-like behaviors, such as dating, controlling their own schedule, and making decisions about money and friendships. The expected timing of these behaviors was similarly related to parental monitoring and demandingness, but unrelated to adolescents' feelings of parental acceptance and engagement in different cultures. Hence, the timing of autonomous behaviors varies across cultures, but later timing was universally associated with parental behavioral control (not affect) across cultures.

In brief, the vast majority of the published literature on parent–adolescent relationships derives from studies conducted in North America and Western Europe. Simply put, we know less than is desirable about the nature and development of parent–adolescent relationships in non-Western settings (Brown et al., 2002). However, adolescent behaviors in family contexts are likely moderated by culture because they are often directed by cultural conventions, norms, and values (Chen & French, 2008). Relationships between adolescents and parents vary with ethnic and cultural identification, even if some topics of agreement and disagreement are similar across ethnic groups.

Parents from different ethnic and cultural groups possess different goals or beliefs in regard to adolescents, their adjustment, and development, and they manage relationships with their adolescents in different ways. Parent–adolescent relationships can have different effects as well (Way & Greene, 2005). Ethnicity plays a role in parental supervision. European American, Latin American, and African American parents all actively encourage their adolescents to establish same-ethnicity friendships and caution their adolescents about the challenges of cross-ethnic romantic relationships (Hamm, 2001). Mean level differences in relationship management as well as differences in correlations between management and outcomes are common across European American, Latin American, and African American parent–adolescent relationships (Mounts, 2004). However, Latin American and African American adolescents report lower levels of consulting with parents than do European American adolescents. In turn, higher levels of consulting are related to lower levels of delinquency among European American adolescents but not Latin American or African American adolescents. Parents' childrearing beliefs vary with ethnicity and culture and are associated with the psychological well-being of their adolescents. For example, Asian Indian parents endorse training and shaming childrearing beliefs more than European Americans, and their adolescents report higher family conflict, ethnic identity achievement, and anxiety (Farver et al., 2007).

It is noteworthy that even authoritative and authoritarian parenting may be more or less appropriate in different cultural settings. For children in the European American middle class, the authoritative parenting style is associated with achievement of social competence and overall adaptation when compared to other parenting styles, such as authoritarian parenting, which has generally been associated with poor developmental outcomes in children. In non-European American ethnic groups, other patterns may obtain. For example, adolescents from European American and Hispanic American homes who report having experienced authoritative parenting in growing up perform well academically and better than those coming from nonauthoritative households. However, school performance is similar for authoritatively and for nonauthoritatively reared Asian Americans and African Americans (Bornstein, 1995).

Furthermore, ethnographic observations suggest that authoritarian parenting may be adaptive in some situations. European American parents who engage in intrusive and controlling behaviors typically score high on scales of authoritarian parenting. However, that style of interaction in low-income African American families is directive, is adaptive, and is not harsh control. That is, an authoritarian style constitutes an appropriate adjustment in some circumstances (e.g., certain inner-city neighborhoods) where it is a parent's job to impress on the child the necessity of following rules. Indeed, authoritarian parenting in some contexts may achieve the same ultimate function—successful social adaptation—that authoritative parenting achieves in other contexts (Bornstein, 1995). Parental control is equated with loving concern and associated with perceptions of warmth in Asian

and Latin, but not European, American families (Chao & Tseng, 2002; Harwood et al., 2002). In European American families, parental warmth protects against children developing externalizing problems, but in African American families, it is a risk factor (Lorber et al., 2011). Rudy and Grusec (2001, 2006) documented that authoritarian parenting is associated with lack of warmth, feelings of inefficacy, negative cognitions about the child, and anger in Anglo-Canadian parents, but not in Middle Eastern Canadian parents. In brief, different outcome patterns appear to obtain for different ethnic, sociodemographic, and cultural contexts.

Globalization and Interventions for Parent–Adolescent Relationships

Beyond the dyad and the culture, societal and global factors influence parent–adolescent relationships at the community level. First, globalization, or the increased interconnectedness of different nations, is a driving force in contemporary parent–adolescent relationships. One example of globalization is the coordination of global development ideals. For decades, the United Nations has spurred global change by partnering with local governments to promote human development targets like the Millennium Development Goals (MDGs; United Nations General Assembly, 2000) and the Sustainable Development Goals (SDGs; United Nations General Assembly, 2015). In addition to infrastructure, these development goals generally focus on early childhood survival and health (e.g., infant mortality rates and child undernutrition). Notably, no MDGs or SDGs address adolescent issues directly, with the exception of reducing the adolescent birth rate in MDGs (Vogel et al., 2015) and addressing the nutritional needs of adolescent girls in SDGs. Still, these infrastructure and global health goals advance indirect changes in areas that affect adolescent development and parent–adolescent relationships. SDGs such as ensuring healthy lives and promoting well-being, increasing access to education, achieving gender equality, promoting sustainable jobs, and improving infrastructure can have wide-ranging impacts on adolescents. For example, the health focus on early childhood will soon be reaped by the emerging adolescent. Furthermore, improvements to a country's education, economy, and infrastructure (e.g., communication, transportation) tend to lead to more jobs. Adolescents who once lived and worked on the family's farm may stay in school longer or choose to leave the home for employment, which alters the pattern of parent–adolescent relationships. More schooling often leads to delayed childbearing and more peer interaction, which shifts the adolescent's focus from the family of origin to the peer group. Leaving the home means that parents have less control over, and interaction with, their adolescents.

Another global change that is altering the course of adolescent development is increased global communication. Adolescents across the world have more and more access to cable or satellite television and the Internet (Gigli, 2004).

For example, the World Bank (2016) estimated that 45% of the world population uses the Internet, but the percentage varies greatly from country to country (from a low of 1.2% in Eritrea to a high of 98.2% in Iceland). This percentage has increased exponentially since the advent of the Internet, and even in low- and middle-income countries (LMICs) the percentage of users averages 37%. Younger adults (age 18–35) in LMICs are more likely to use the Internet than older adults (36+; Pew Research Center, 2015). In a survey of attitudes about the Internet in LMICs, the Pew Research Center (2015) reported that adults generally believed that the Internet was a good influence on education, personal relationships, and the economy, but a bad influence on morality. As global communication (inevitably) becomes more prevalent, parents and adolescents will have to contend with the plethora of information and the variation in attitudes, values, and messages that adolescents have at their fingertips.

Parent–adolescent relationships are a critical target of intervention for achieving SDG 3, "to ensure healthy lives and promote well-being for all at all ages" (United Nations General Assembly, 2015, p. 14). Adolescence is a time of increased risk for substance use, sexual behavior, and mental illness. One estimate suggests that 70% of preventable adult deaths have their behavioral origins in adolescence (Resnick et al., 2012). For example, adolescent (ages 15–19) pregnancies make up 11% of worldwide births, and most are in LMICs (Ganchimeg et al., 2014). Adolescent pregnancy puts the mother and infant at increased risk for morbidity and mortality. Adolescents also have a high incidence of HIV infection, and HIV is a leading cause of death in adolescence. Finally, mental illness is an adolescent issue because half of all mental illnesses begin by age 14, and suicide is the second leading cause of death in 15- to 29-year-olds (World Health Organization, 2014b).

In its statement on health for the world's adolescents, the World Health Organization (2014a) acknowledged the impact that parents can have on positive outcomes for adolescents, suggesting that "parents and schools can play particularly important roles in protecting adolescents from a range of health-compromising behaviours and conditions, including unsafe sex, substance use, violence and mental health problems" (p. 8). Patel et al. (2007) earlier acknowledged that parenting interventions should begin before adolescence to have the strongest impact: "Perhaps the single most important factor for building resilience in youth is to enable parents to provide adequate psychosocial stimulation during early childhood" (pp. 1305–1306). Still, few interventions focused on the health and well-being of adolescents include parents, especially in LMICs. Evidence from the United States suggests that family-focused adolescent interventions can have robust effects on reducing adolescent substance use and mental health problems (Schwinn & Schinke, 2010). These effects could prove even stronger in countries where parents and adolescents maintain close, interdependent relationships throughout adolescence.

To improve the lives of parents and adolescents, parent–adolescent relationships need to be studied more closely across cultures. We simply do not know enough about the normative developmental course of parent–adolescent relationships in many parts of the world. Identifying culturally universal adolescent needs (e.g., love and acceptance) and parenting practices (e.g., warmth and control) as well as culturally specific ways that parents and adolescents navigate the transition from childhood to adulthood will help families, researchers, and policymakers identify intervention targets that will lead to better health and well-being across the life span.

Author Note

References

Albrecht, A. K., Galambos, N. L., & Jansson, S. M. (2007). Adolescents' internalizing and aggressive behaviors and perceptions of parents' psychological control: A panel study examining direction of effects. *Journal of Youth and Adolescence*, 36, 673–684.

Allen, J., & McElhaney, K. (2000, March). *Autonomy in discussions vs. autonomy in decision-making as predictors of developing close friendship competence.* Paper presented at the meeting of the Society for Research on Adolescence, Chicago, IL.

Allen, J. P., Marsh, P., McFarland, C., McElhaney, K. B., Land, D. J., Jodl, K. M., & Peck, S. (2002). Attachment and autonomy as predictors of the development of social skills and delinquency during midadolescence. *Journal of Consulting and Clinical Psychology*, *70*(1), 56–66.

Baumrind, D. (1967). Child care practices anteceding three patterns of preschool behavior. *Genetic Psychology Monographs*, *75*(1), 43–88.

Baumrind, D. (1971). Types of adolescent life-styles. *Developmental Psychology Monographs*, *4*, Pt. 2.

Bhavnagri, N., & Parke, R. D. (1991). Parents as direct facilitators of children's peer relationships: Effects of age of child and sex of parent. *Journal of Social and Personal Relationships*, *8*(3), 423–440.

Bornstein, M. H. (1995). Parenting infants. In M. H. Bornstein (Ed.), *Handbook of parenting, Vol. 1. Children and parenting* (pp. 3–43). Mahwah, NJ: Erlbaum.

Bornstein, M. H. (2015). Children's parents. In M. H. Bornstein & T. Leventhal (Eds.), *Handbook of child psychology and developmental science, Vol. 4. Ecological Settings and processes* (pp. 1–78). Hoboken, NJ: Wiley.

Bornstein, M. H., Mortimer, J. T., Lutfey, K., & Bradley, R. (2011). Theories and processes of lifespan socialization. In K. Fingerman, C. Berg, T. Antonucci, & J. Smith (Eds.), *Handbook of lifespan development* (pp. 27–55). New York, NY: Springer.

Bornstein, M. H., & Sawyer, J. (2005). Family systems. In K. McCartney & D. Phillips (Eds.), *Blackwell handbook on early childhood development* (pp. 381–398). Malden, MA: Blackwell.

Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. In R. M. Lerner (Ed.), W. Damon & R. M. Lerner (Eds.-in-chief), *Handbook of child psychology, volume 1. Theoretical models of human development* (6th ed., pp. 793–828). Hoboken, NJ: Wiley.

Brown, B. B., Larson, R. W., & Saraswathi, T. S. (2002). *The world's youth: Adolescence in eight regions of the globe.* New York, NY: Cambridge University Press.

Chao, R. K. (2001). Extending research on the consequences of parenting style for Chinese Americans and European Americans. *Child Development*, *72*(6), 1832–1843.

Chao, R. K., & Otsuki-Clutter, M. (2011). Racial and ethnic differences: Sociocultural and contextual explanations. *Journal of Research on Adolescence*, *21*(1), 47–60.

Chao, R., & Tseng, V. (2002). Parenting of Asians. In M. H. Bornstein (Ed.), *Handbook of parenting, Vol. 4. Social conditions and applied parenting* (pp. 59–93). Mahwah, NJ: Erlbaum.

Chen, X., & French, D. (2008). Children's social competence in cultural context. *Annual Review of Psychology*, *59*, 591–616.

Chilcoat, H. D., & Anthony, J. C. (1996). Impact of parent monitoring on initiation of drug use through late childhood. *Journal of the American Academy of Child and Adolescent Psychiatry*, *35*(1), 91–100.

Collins, W. A., Maccoby, E. E., Steinberg, L., Hetherington, E. M., & Bornstein, M. H. (2000). Contemporary research on parenting: The case for nature and nurture. *American Psychologist*, *55*(2), 218–232.

Conger, R. D., & Ge, X. (1999). Conflict and cohesion in parent-adolescent relations: Changes in emotional expression from early to midadolescence. In M. J. Cox (Ed.), *Conflict and cohesion in families: Causes and consequences* (pp. 185–206). Mahwah, NJ: Erlbaum.

Crosnoe, R., & Cavanagh, S. E. (2010). Families with children and adolescents: A review, critique, and future agenda. *Journal of Marriage and Family*, *72*, 594–611. doi:10.1111/j.1741-3737.2010.00720.x

Cummings, E. M., & Cummings, J. S. (2002). Parenting and attachment. In M. H. Bornstein (Ed.), *Handbook of parenting, Vol. 5. Practical parenting* (2nd ed., pp. 35–58). Mahwah, NJ: Erlbaum.

De Goede, I. H. A., Branje, S. J. T., & Meeus, W. H. J. (2009). Developmental changes in adolescents' perceptions of relationships with their parents. *Journal of Youth and Adolescence*, *38*, 75–88. doi:10.1007/s10964-008-9286-7

De Los Reyes, A., & Kazdin, A. E. (2005). Informant discrepancies in the assessment of childhood psychopathology: A critical review, theoretical framework, and recommendations for further study. *Psychological Bulletin*, *131*, 483–509.

Dishion, T. J., Nelson, S. E., & Bullock, B. M. (2004). Premature adolescent autonomy: Parent disengagement and deviant peer process in the amplification of problem behavior. *Journal of Adolescence*, *27*(5), 515–530.

Farver, J. M., Xu, Y., Bhadha, B. R., Narang, S., & Lieber, E. (2007). Ethnic identity, acculturation, parenting beliefs, and adolescent adjustment. *Merrill-Palmer Quarterly*, *53*, 184–215.

Feldman, S. S., & Rosenthal, D. A. (1991). Age expectations of behavioural autonomy in Hong Kong, Australian and American youth: The influence of family variables and adolescents' values. *International Journal of Psychology*, *26*(1), 1–23.

Fraley, C. R. (2002). Attachment stability from infancy to adulthood: Meta-analysis and dynamic modeling of developmental mechanisms. *Personality and Social Psychology Review*, *6*(2), 123–151.

Fuligni, A. J., & Eccles, J. S. (1993). Perceived parent-child relationships and early adolescents' orientation toward peers. *Developmental Psychology*, *29*(4), 622–632.

Furstenberg, F., Cook, T., Eccles, J., Elder, G., & Sameroff, A. (1999). *Managing to make it: Urban families and adolescent success.* Chicago, IL: University of Chicago Press.

Ganchimeg, T., Ota, E., Morisaki, N., Laopaiboon, M., Lumbiganon, P., Zhang, J., & Vogel, J. P. (2014). Pregnancy and childbirth outcomes among adolescent mothers: A World Health Organization multicountry study. *BJOG*, *121*, 40–48.

Gigli, S. (2004). *Children, youth and media around the world: An overview of trends and issues (report for UNICEF).* Rio de Janeiro, Brazil: InterMedia Survey Institute.

Goldberg, S. (1977). Infant development and mother-infant interaction in urban Zambia. In P. H. Leiderman, S. R. Tulkin, & A. Rosenfeld (Eds.), *Culture and infancy: Variations in the human experience* (pp. 211–243). New York, NY: Academic Press.

Greenfield, P. M., Keller, H., Fuligni, A., & Maynard, A. (2003). Cultural pathways through universal development. *Annual Review of Psychology*, *54*(1), 461–490.

Grusec, J. E., & Goodnow, J. J. (1994). Impact of parental discipline methods on the child's internalization of values: A reconceptualization of current points of view. *Developmental Psychology*, *30*(1), 4–19.

Gullotta, T. P., & Adams, G. R. (2005). *Handbook of adolescent behavioral problems: Evidence-based approaches to prevention and treatment.* New York, NY: Springer.

Güngör, D., & Bornstein, M. H. (2010). Culture-general and -specific associations of attachment avoidance and anxiety with perceived parental warmth and control among Turk and Belgian adolescents. *Journal of Adolescence*, *33*, 593–602.

Hamm, J. V. (2001). Barriers and bridges to positive cross-ethnic relations: African-American and white parent socialization beliefs. *Youth & Society*, *33*(1), 62–98.

Harwood, R., Leyendecker, B., Carlson, V., Asencio, M., & Miller, A. (2002). Parenting among Latino families in the US. In M. H. Bornstein (Ed.), *Handbook of parenting, Vol. 4. Social conditions and applied parenting* (pp. 21–46). Mahwah, NJ: Erlbaum.

Hoffman, M. L. (1977). Moral internalization: Current theory and research. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 10, pp. 86–135). New York, NY: Academic Press.

Jambunathan, S., & Counselman, K. P. (2002). Parenting attitudes of Asian Indian mothers living in the United States and India. *Early Child Development and Care*, *172*, 657–662.

Kerr, M., & Stattin, H. (2000). What parents know, how they know it, and several forms of adolescent adjustment: Further evidence for a reinterpretation of monitoring. *Developmental Psychology*, *36*(3), 366–380.

Kerr, M., & Stattin, H. (2003). Parenting adolescents: Action or reaction? In A. C. Crouter & A. Booth (Eds.), *Children's influence on family dynamics* (pp. 121–151). Mahwah, NJ: Erlbaum.

Kerr, M., Stattin, H., Biesecker, G., & Ferrer-Wreder, L. (2003). Relationships with parents and peers in adolescence. In R. M. Lerner, M. A. Easterbrooks, & J. Mistry (Eds.), *Handbook of psychology: Developmental psychology* (Vol. 6, pp. 395–419). Hoboken, NJ: Wiley.

Kobak, R., & H. Cole (1994). Attachment and meta-monitoring: Implications for adolescent autonomy and psychopathology. In D. Cicchetti & S. L. Toth (Eds.), *Disorders and dysfunctions of the self* (pp. 267–297). Rochester, NY: University of Rochester Press.

Koepke, S., & Denissen, J. J. A. (2012). Dynamics of identity development and separation-individuation in parent-child relationships during adolescence and emerging adulthood: A conceptual integration. *Developmental Review*, *32*, 67–88. doi:10.1016/j.dr.2012.01.001

Kurdek, L., & Fine, M. (1994). Family acceptance and family control as predictors of adjustment in young adolescents: Linear, curvilinear, or interactive effects. *Child Development*, *65*(4), 1137–1146.

Ladd, G. W., & Pettit, G. S. (2002). Parenting and the development of children's peer relationships. In M. Bornstein (Ed.), *Handbook of parenting, Volume 5. Practical issues in parenting* (pp. 269–309). Mahwah, NJ: Erlbaum.

Laible, D. (2007). Attachment with parents and peers in late adolescence: Links with emotional competence and social behavior. *Personality and Individual Differences*, *43*(5), 1185–1197.

Laird, R. D., Pettit, G. S., Mize, J., Brown, E. G., & Lindsey, E. (1994). Parent-child conversations about peer relationships: Contributions to competence. *Family Relations*, *43*(4), 425–432.

Lam, C. B., McHale, S. M., & Crouter, A. C. (2012). Parent-child shared time from middle childhood to late adolescence: Developmental course and adjustment correlates. *Child Development*, *83*, 2089–2103. doi:10.1111/j.1467-8624.2012.01826.x

Larson, R. W., Wilson, S., & Rickman, A. (2009). Globalization, societal change, and adolescence across the world. In R. M. Lerner & L. Steinberg, *Handbook of adolescent psychology, Volume 2. Contextual influences on adolescent development* (3rd ed., pp. 590–622). Hoboken, NJ: Wiley.

Leung, J. T. Y., & Shek, D. T. L. (2011). Poverty and adolescenceal outcomes: A critical review. *International Journal of Adolescent Medicine and Health*, *23*, 109–114. doi:10.1515/ijamh.2011.019

Leung, K., Lau, S., & Lam, W. L. (1998). Parenting styles and academic achievement: A cross-cultural study. *Merrill-Palmer Quarterly*, *44*, 157–172.

Lorber, M. F., O'Leary, S. G., & Smith Slep, A. M. (2011). An initial evaluation of the role of emotion and impulsivity in explaining racial/ethnic differences in the use of corporal punishment. *Developmental Psychology*, *47*(6), 1744–1749.

Luthar, S. S., & Barkin, S. H. (2012). Are affluent youth truly "at risk"? Vulnerability and resilience across three diverse samples. *Development and Psychopathology*, *24*, 429–449. doi:10.1017/S0954579412000089

Maccoby, E. E., & Martin, J. A. (1983). Socialization in the context of the family: Parent-child interaction. In P. Mussen & E. M. Hetherington (Eds.), *Handbook of child psychology* (Vol. 4, pp. 1–101). New York, NY: Wiley & Sons.

Marshall, S. K., Tilton-Weaver, L. C., & Bosdet, L. (2005). Information management: Considering adolescents' regulation of parental knowledge. *Journal of Adolescence*, *28*, 633–647.

Mascolo, M. F., Misra, G., & Rapisardi, C. (2004). Individual and relational conceptions of self in India and the United States. *New Directions for Child and Adolescent Development*, *2004*, 9–26.

McNeely, C. A., & Barber, B. K. (2010). How do parents make adolescents feel loved? Perspectives on supportive parenting from adolescents in 12 cultures. *Journal of Adolescent Research*, *25*(4), 601–631.

Mize, J., Pettit, G. S., & Brown, E. G. (1995). Mothers' supervision of their children's peer play: Relations with beliefs, perceptions, and knowledge. *Developmental Psychology*, *31*(2), 311–321.

Mounts, N. S. (2002). Parental management of adolescent peer relationships in context: The role of parenting style. *Journal of Family Psychology*, *16*, 58–69.

Mounts, N. S. (2004). Contributions of parenting and campus climate to freshmen adjustment in a multiethnic sample. *Journal of Adolescent Research*, *19*(4), 468–491.

Mounts, N. S., & Steinberg, L. (1995). An ecological analysis of peer influence on adolescent grade point average and drug use. *Developmental Psychology*, *31*(6), 915–922.

Neiderhiser, J. M., Reiss, D., Hetherington, E. M., & Plomin, R. (1999). Relationships between parenting and adolescent adjustment over time: Genetic and environmental contributions. *Developmental Psychology*, *35*(3), 680–692.

Parke, R. D., & Bhavnagri, N. (1989). Parents as managers of children's peer relationships. In D. Belle (Ed.), *Children's social networks and social supports* (pp. 241–259). New York, NY: Wiley.

Parke, R. D., & Buriel, R. (2006). Socialization in the family: Ethnic and ecological perspectives. In N. Eisenberg, W. Damon, & R. Lerner (Eds.), *Handbook of child psychology, Vol. 3. Social, emotional, and personality development* (6th ed., pp. 429–504). New York, NY: Wiley.

Parke, R. D., Killian, C. M., Dennis, J., Flyr, M. L., McDowell, D. J., Simpkins, S., . . . Wild, M. (2003). Managing the external environment: The parent and child as active agents in the system. In L. Kuczynski (Ed.), *Handbooks of dynamics in parent-child relations* (pp. 247–270). Thousand Oaks, CA: Sage.

Patel, V., Flisher, A. J., Hetrick, S., & McGorry, P. (2007). Mental health of young people: A global public-health challenge. *The Lancet*, *369*, 1302–1313.

Perry, D. G., & Pauletti, R. E. (2011). Gender and adolescence. *Journal of Research on Adolescence*, *21*, 61–74. doi:10.1111/j.1532-7795.2010.00715.x

Pew Research Center. (2015). Internet seen as positive influence on education but negative influence on morality in emerging and developing nations. Available from http://www.pewglobal.org/files/2015/03/Pew-Research-Center-Technology-Report-FINAL-March-19-20151.pdf

Plomin, R., Reiss, D., Hetherington, E. M., & Howe, G. (1994). Nature and nurture: Genetic influences on measures of family environment. *Developmental Psychology*, *30*(1), 32–43.

Posada, G., & Lu, T. (2011). Child-parent attachment relationships: A life-span phenomenon. In K. L. Fingerman, C. A. Berg, J. Smith, & T. C. Antonucci (Eds.), *Handbook of life-span development* (pp. 87–116). New York, NY: Springer.

Profilet, S. M., & Ladd, G. W. (1994). Do mothers' perceptions and concerns about preschoolers' peer competence predict their peer management practices? *Social Development*, *3*(3), 205–221.

Putallaz, M., & Heflin, A. H. (1990). Parent child interaction. In S. R. Asher & J. D. Coie (Eds.), *Peer rejection in childhood* (pp. 189–216). New York, NY: Cambridge University Press.

Reiss, D., Neiderhiser, J. M., Hetherington, E. M., & Plomin, R. (2000). *The relationship code: Deciphering genetic and social influences on adolescent development.* Cambridge, MA: Harvard University Press.

Reitz, E., Dekovic, M., & Meijer, A. M. (2006). Relations between parenting and externalizing and internalizing problem behaviour in early adolescence: Child behavior as moderator and predictor. *Journal of Adolescence*, *29*, 419–436.

Reitz, E., Dekovic, M., Meijer, A. M., & Engels, R. C. M. E. (2006). Longitudinal relations among parenting, best friends, and early adolescent problem behavior: Testing bidirectional effects. *Journal of Early Adolescence*, *26*, 272–295.

Resnick, M. D., Catalano, R. F., Sawyer, S. M., Viner, R., & Patton, G. C. (2012). Seizing the opportunities of adolescent health. *The Lancet*, *379*, 1564–1567.

Rohner, R. P. (2004). The parental "acceptance-rejection syndrome": universal correlates of perceived rejection. *American Psychologist*, *59*(8), 830–840.

Rudy, D., & Grusec, J. E. (2001). Correlates of authoritarian parenting in individualist and collectivist cultures and implications for understanding the transmission of values. *Journal of Cross-Cultural Psychology*, *32*(2), 202–212.

Rudy, D., & Grusec, J. E. (2006). Authoritarian parenting in individualist and collectivist groups: Associations with maternal emotion and cognition and children's self-esteem. *Journal of Family Psychology*, *20*(1), 68–78.

Scarr, S., & McCartney, K. (1983). How people make their own environments: A theory of genotype → environment effects. *Child Development*, *54*(2), 424–435.

Scharf, M., & Mayseless, O. (2010). Finding the authentic self in a communal culture: Developmental goals in emerging adulthood. *New Directions for Child and Adolescent Development*, *2010*, 83–95.

Schlegel, A. (2009). Cross-cultural issues in the study of adolescent development. In R. M. Lerner & L. Steinberg, *Handbook of adolescent psychology, Volume 2. Contextual influences on adolescent development* (3rd ed., pp. 570–589). Hoboken, NJ: Wiley.

Schwinn, T. M., & Schinke, S. P. (2010). Preventing alcohol use among late adolescent urban youth: 6-year results from a computer-based intervention. *Journal of Studies on Alcohol and Drugs*, *71*(4), 535–538.

Segal, U. (1991). Cultural variables in Asian Indian families. *Families in Society*, *72*, 233–241.

Sheeber, L., Hops, H., Alpert, A., Davis, B., & Andrews, J. (1997). Family support and conflict: Prospective relations to adolescent depression. *Journal of Abnormal Child Psychology*, *25*(4), 333–344.

Stattin, H., & Kerr, M. (2000). Parental monitoring: A reinterpretation. *Child Development*, *71*(4), 1070–1083.

Triandis, H. C., Bontempo, R., Villareal, M. J., Asai, M., & Lucca, N. (1988). Individualism and collectivism: Cross cultural perspectives on self-group relationships. *Journal of Personality and Social Psychology*, *54*, 323–338.

United Nations General Assembly. (2000). *United Nations millennium declaration: Resolution adopted by the General Assembly*. Available from: http://www.un.org/millennium/declaration/ares552e.pdf

United Nations General Assembly. (2015). *Transforming our world: The 2030 Agenda for Sustainable Development.* New York, NY: United Nations.

van den Oord, E. J. C. G., & Rowe, D. C. (1997). Continuity and change in children's social maladjustment: A developmental behavior genetic study. *Developmental Psychology*, *33*(2), 319–332.

Vazsonyi, A. T., & Belliston, L. M. (2006). The cultural and developmental significance of parenting processes in adolescent anxiety and depression symptoms. *Journal of Youth and Adolescence*, *35*, 491–505.

Vernberg, E. M., Beery, S. H., Ewell, K. K., & Abwender, D. A. (1993). Parents' use of friendship facilitation strategies and the formation of friendships in early adolescence: A prospective study. *Journal of Family Psychology*, *7*(3), 356–369.

Viner, R. M., Ozer, E. M., Denny, S., Marmot, M., Resnick, M., Fatusi, A., & Currie, C. (2012). Adolescence and the social determinants of health. *The Lancet*, *379*, 1641–1652.

Vogel, J. P., Pileggi-Castro, C., Chandra-Mouli, V., Pileggi, V. N., Souza, J. P., Chou, D., & Say, L. (2015). Millennium Development Goal 5 and adolescents: Looking back, moving forward. *Archives of Disease in Childhood*, *100*, S43–S47.

Walker, L. J., & Henig, K. H. (1999). Parenting style and the development of moral reasoning. *Journal of Moral Education*, *28*(3), 359–374.

Way, N., & Greene, M. (2005, April). *Exploring adolescents' perceptions of parental attitudes and rules about friendships*. Paper presented at the meeting of the Society for Research on Child Development, Atlanta, GA.

Weiss, B., Dodge, K. A., Bates, J. E., & Pettit, G. S. (1992). Some consequences of early harsh discipline: Child aggression and a maladaptive social information processing style. *Child Development*, *63*(6), 1321–1335.

Williams, L. R., & Steinberg, L. (2011). Reciprocal relations between parenting and adjustment in a sample of juvenile offenders. *Child Development*, *82*, 633–645.

World Bank (2016). Individuals using the Internet (% of population). Available from: https://data.worldbank.org/indicator/IT.NET.USER.ZS?name_desc=true

World Health Organization (2014a). Health for the world's adolescents: A second chance in the second decade. Geneva, Switzerland: World Health Organization. Available from: http://apps.who.int/adolescent/second-decade/files/1612_MNCAH_HWA_Executive_Summary.pdf

World Health Organization (2014b). *Preventing suicide: A global imperative*. Geneva, Switzerland: World Health Organization. Available from: http://apps.who.int/iris/bitstream/10665/131056/1/9789241564779_eng.pdf?ua=1&ua=1

Zahn-Waxler, C., Radke-Yarrow, M., & King, R. (1979). Childrearing and children's prosocial initiations toward victims of distress. *Child Development*, *50*(2), 319–330.

{ 7 }

Peer Relationships
Doran C. French and Hoi Shan Cheung

Sociocultural theory emphasizes that interpersonal relationships, including those between peers, are critical for the transmission of culture (Vygotsky, 1978). Peer relationships are particularly important during adolescence. In this chapter we explore multiple features of these interactions and how these are similar and different across cultures.

Through interaction with their peers and others, youth serve as agents of transition and transformation of culture (X. Chen et al., 2006). A major focus within cultural psychology has been to understand the transmission of cultural practices through participating in activities facilitated by skilled adults (Rogoff, 2003). But, peers also engage in culturally consistent behavior and through their interactions internalize cultural norms, transmit culture from one generation to the next, and regulate behavior (X. Chen et al., 2006).

Erikson (1968) highlighted the central developmental task of adolescence as achieving a sense of identity, which often involves individuating from parents and attaining autonomy. There are large cultural differences in the extent to which adolescents seek and achieve such autonomy, the age at which they are allowed to make independent decisions, and the specific areas over which they assume control (Greenfield et al., 2003). For example, adolescents in different parts of the world vary in the extent to which they are allowed to make independent decisions about peers (e.g., "choosing own friends even if parents disagreed") and romantic associates ("dating" and "attending boy–girl parties") (Feldman & Rosenthal, 1991). Autonomy is interconnected with relatedness (Keller & Otto, 2011), and in some cultures, maturity is viewed in terms of attaining interdependence with their parents and successfully fulfilling filial obligations (Yu, 1996).

Biological Changes During Adolescence and Implications
for Peer Relationships

Adolescent peer relationships are affected by the profound biological changes (e.g., puberty, cognitive development, brain maturation) that define the adolescent period. These changes, however, occur within a cultural context within which these changes are framed (Greenfield et al., 2003). The beginning of adolescence is roughly associated with the onset of puberty, but this is often defined by societal markers such as the transition from elementary to junior high school (Schelgel & Barry, 2015).

Cognitive development. The cognitive changes that occur during adolescence afford youth the ability to think abstractly, understand the perspectives of others, evaluate the consequences of actions, and focus on the hypothetical. These enable adolescents to develop increasingly intimate and complex relationships with peers. Conversely, difficulty understanding the perspectives of others and anticipating the consequences of actions is associated with interpersonal difficulties with peers and psychopathology (Dodge & Crick, 1990).

Self-control and risk-taking. Self-regulatory abilities increase from childhood to adulthood but do not attain maturity until adulthood (Steinberg et al., 2009). It has been theorized that the imbalance between motivational impulses coupled with the immaturity of adolescent control systems is associated with the risky behavior and the heightened antisocial behavior that is typical of adolescents across cultures (Steinberg, 2010). There is considerable plasticity in brain development during adolescence, however, and these processes can be moderated by experience (Steinberg et al., 2009). We nevertheless expect that youth across the world are particularly likely to engage in risk-taking behavior, although the form that this takes is likely highly malleable, and most risk-taking occurs within culturally established frameworks regarding acceptable behavior and prohibited but nevertheless tolerated misbehavior. Much of this risk-taking occurs in the company of others, and adolescents are particularly likely to engage in deviant behavior with the encouragement or facilitation of others.

Timing of puberty. The timing of puberty is associated with peer relationships and adjustment, although these effects appear to be strongly dependent on the social context that varies within and across countries (Susman & Rogel, 2004). Early puberty appears to be associated with popularity, involvement with deviant peers, and engagement in problem behavior. US and Chinese early maturing girls exhibit greater deviancy than those who mature later (Caspi et al., 1993; J. Chen et al., 2015), an effect that may be partly attributable to the tendency for them to associate with older deviant boys.

Contexts of Adolescent Peer Relationships: Demography, Time Use, and Settings

Economic and subsistence patterns affect the density of potential peer associates and possibilities that youth have to interact with peers. The density of adolescents within the population affects the economic life course of adolescents and access to education (Fussell & Greene, 2002); although large numbers of youth can be a potential economic advantage to countries, this can be a strain if there are insufficient jobs or educational opportunities. Disproportionate numbers of unemployed and out-of-school boys are associated with increased crime and delinquency (Hirschi & Gottfredson, 1983).

The large variability in the time available to adolescents to engage in unstructured activities with peers may underlie cultural differences in peer relationships. Larson and Verma's (1999) aggregated findings from multiple studies revealed that US adolescents had 6.5 to 8.0 hours of discretionary daily time, with more recent estimates of 8 hours per day (Wight et al., 2009). This can be compared to the 5.5 to 7.5 hours for European youth and 4.0 and 5.5 hours for East Asian youth. These variations are partially a function of academic commitments, engagement in paid and unpaid work, and norms pertaining to activities with peers. In nonindustrial countries, boys typically have more free time than do girls, whereas in industrial societies, these gender differences are diminished or nonexistent (Larson & Verma, 1999). There are few current studies of adolescent time use. In particular, there is little information about the amount of time that youth spend on the Internet. One estimate is that US youth between ages 12 and 19 spend 8.9 hours online per week (Jordan et al., 2007).

What adolescents do with their discretionary time is partly determined by cultural scripts defining the settings, activities, companions, as well as the meanings and emotional experiences associated with these action settings (Lam & McHale, 2015). Engagement in unstructured activity with peers is associated with increased delinquency and substance use in US adolescents, increased aggression in Korean youth (M. Lee, 2003), and tobacco, alcohol, and drug use of adolescents from eight African countries (Peltzer, 2010). These associations, however, may be mediated by parental monitoring and prior antisocial behavior (Pettit et al., 1999) and explained by other variables, such as academic success. There is only beginning information regarding the associations between adolescent online activity and behavior. Online socializing of 15- to 16-year-old Chinese adolescents was associated with tobacco use, whereas Internet use to seek information was a protective factor (Huang et al., 2012). Engagement in nonacademic organized adult supervised activities (e.g., athletics, clubs, youth groups) is often positively associated with academic and psychological adjustment in US adolescents (Larson & Seepersad, 2003); this issue needs to be examined in other countries.

Taxonomy of Peer Relationships

Adolescents interact with peers in a variety of relationship contexts. These include crowds, networks, friendships, and romantic relationships.

CROWDS

Crowds are groups of adolescents who may or may not actually interact but share reputational characteristics (Brown et al., 1986). In a study of US middle and high schools, major crowds included *brains* (academically superior students), *jocks* (athletes), *populars, troublemakers,* and *normals* (Stone & Brown, 1999). The characteristics and status of these groups likely reflect the structure and values of the culture as evidenced by Sim and Yeo's (2012) findings that within the academically focused culture of Singapore, *nerd* group membership was not associated with the negative stereotypes that this carries in the United States.

Crowd membership may facilitate adolescents' identity formation and influence the attitudes, values, and behavior of adolescents (Brown et al., 1986). Membership in a low-status crowd may be associated with low self-esteem and problem behavior (Stone & Brown, 1999). Delsing et al. (2007), for example, found that Dutch adolescents identified as punks, metal heads, or gothics tended to report higher levels of depression and delinquency, which is consistent with findings reported in the United States (La Greca et al., 2001). Membership in a deviant crowd has been associated with increased delinquency, drug use, and poor academic success (Doornwaard et al., 2012).

SOCIAL NETWORKS

In contrast to crowds, networks are comprised of peers who regularly interact and provide a context within which multiple activities, including companionship, academic activities, delinquency, and sexual behavior, occur. These typically include, friends but networks may also consist of friends of friends, acquaintances, and even enemies. More recently, adolescents may develop online social networks with whom they may or may not associate with offline.

Networks likely vary across cultures with respect to such parameters as size, gender composition, age homogeneity, and similarity of members with respect to attributes such as academic success, popularity, and aggression, but there is little research on this topic. One of the few comparisons of networks across cultures was conducted by French et al. (2006) in a study of US, Indonesian, and South Korean college students' social interactions. The networks of Korean students were smaller than those of Indonesian students and more often consisted of close friends, findings consistent with other evidence of the importance and intimacy of dyadic friendships of South Koreans

(Choi et al., 1993) and observations that Indonesian adolescents tend to interact in large cliques.

Social network membership can have a major influence on the adjustment of adolescents. Participation in high academically achieving networks may lead to enhanced motivation and academic success. In contrast, membership in networks of substance-using peers is associated with increased substance use, findings that have emerged in Indonesia (French et al., 2014) as well as the United States (e.g., Roberts et al., 2015).

FRIENDSHIPS

Friendships are dyadic relationships between individuals that differ considerably in their characteristics across cultures (French, 2015). Although these are commonly construed as voluntary, they exist within cultural systems of practices and shared understandings (Suttles, 1970) and are defined by cultural blueprints that define who can and cannot be friends, the interactions that are expected to occur, and the provisions associated with these relationships (e.g., intimacy, instrumental assistance, affection, companionship). Friendships, as well as other relationships with peers, occur within activity settings, and the parameters of these have an important impact on friendships (Farver, 1999).

With whom can children become friends?

Friendships are typically constrained by factors such as social class, propinquity, gender, and parental and social restrictions (French, 2015). Gender segregation in friendships often exists and may result from differences in the preferences and play styles of boys and girls (Edwards, 1992; Maccoby, 1998), the existence of formal rules about cross-sex friendships, and differences in the activity settings occupied by boys and girls.

Parents exert control over children's friendships in ways that are influenced by cultural scripts regarding these relationships. For example, Korean parents encouraged their preschool children to develop a strong relationship with a single best friend (Aukrust et al., 2003), thus emphasizing at an early age the cultural norm of establishing intimate dyadic relationships (French et al., 2006). Parental control over friendship extends into adolescence, as reflected in Chinese parents' efforts to promote their children's friendship with academically achieving peers (J. Li, 2012).

Friendship qualities. Much of the research on culture and friendship has focused on differences in the qualities associated with friendship, with most research focused on intimacy, instrumental aid, and conflict. There are substantial methodological challenges that arise when comparing levels of friendship qualities across cultures. Much of this research has relied on ratings, and it is important to supplement this approach using multiple methods, such as observations, daily diaries, and ethnographic interviews (Way & Silverman, 2012).

Intimacy. The considerable variation in friendship intimacy across cultures is illustrated by comparing youths' friendships in Korea and Indonesia, two cultures that, although considered collectivist, differ considerably in their emphasis on intimacy in friendships. Korean friendships are expected to be long lasting and very intimate, incorporating elements of unconditional acceptance, trust, and intimacy (S. Lee, 1994). In contrast, Indonesians tend to be focused more on integration into large social networks (French et al., 2005). Variations in intimacy between friends across cultures might also emerge in the specific ways that this is expressed. For example, Gummerum and Keller (2008) suggested that friendship intimacy among Chinese youth incorporates self-disclosure and sharing of secrets to a lesser extent that it does in other countries.

Instrumental aid. Providing some form of assistance, whether it be material goods, helping with tasks, or facilitating access to resources, is likely an important aspect of friendships in most cultures (Hartup, 1992). Way (2006) found that sharing of money and protecting friends from harm were particularly salient aspects of the friendships of US low-income black and Hispanic adolescents. The importance of mutual assistance in schoolwork is a theme that prominently emerged in interviews with Chinese adolescents (X. Chen et al., 2004), and the importance of helping others is reflected in the norms of mutual aid that are fundamental to traditional Indonesian social structures (Magus-Suseno, 1997). This aspect of friendships tends to be deemphasized in US youth, perhaps partly a function of Aristotelian views that friendships are ideally based on affection and virtue rather than utility. Tietjen (1989) suggested that instrumental aid is particularly salient in the friendships of children in collectivist cultures, with evidence consistent with the view coming from comparisons of the United States with a number of other counties (see French, 2015).

Conflict. The management of conflict is central to the formation and maintenance of friendships throughout the life span (Gottman & Parker, 1986). Management of conflict can be understood in reference to socially shared scripts that specify events that precipitate conflict, the reactions to provocation, resolution strategies, and postconflict remediation (French, 2011). These scripts vary widely across cultures in their characteristics, the conditions under which they are employed, and the probability that they will be exhibited (Kitayama & Markus, 1994).

The constructs of individualism and collectivism may be useful for conceptualizing cultural differences in conflict, particularly when comparing countries such as the United States and China, which are positioned at the extremes of these dimensions (Markus & Lin, 1999). Models of conflict resolution typically endorsed by European Americans tend to focus on individual rights and the view that successful conflict management involves self-assertion, compromise, and negotiation. In contrast, Javanese and other ethnic groups in Indonesia tend to avoid overt expressions of conflict by avoiding provocation, refraining from interacting

with others with whom one has conflicts, relying on polite and ritualized forms of interaction, minimizing external displays of strong emotions, and avoiding the expression of strong opinions (Magus-Suseno, 1997). Consistent with the ideas of Confucius, Chinese view it as important to maintain interpersonal harmony and to attain this by being tolerant, forgiving, and compromising; withdrawing from conflict; and relying on authorities to maintain harmony (Bond, 1991; Wall & Blum, 1991).

ROMANTIC RELATIONSHIPS

In many cultures, adolescents make the transition from childhood to adulthood and marriage by increasingly interacting with opposite sex peers. These activities, however, are highly variable across cultures. Within some cultures, there are prohibitions that severely limit overt affection and private interactions between unmarried couples (Davis & Davis, 2012). In societies such as those of China and Japan, there is considerable interaction between boys and girls, but romantic involvement is strongly discouraged. In contrast, in the United States and many European cultures, romantic involvement between adolescents is encouraged and supported through such events as school dances.

Rates of romantic associations and the timing of this activity vary widely across cultures. Miller et al. (2009) found that 91% of seventh-grade US adolescents reported involvement in a current or past romantic relationship. In contrast, Z. H. Li et al. (2010) reported that 40% of Chinese boys and 20% of Chinese girls aged 16 to 17 reported having been involved in any romantic relationships.

In countries such as the United States, in which adolescent romantic involvement is encouraged, there are individual differences among youth in their engagement in these activities, with a small percentage of youth accounting for most of this (Larson & Verma, 1999). Sullivan (1953) theorized that successful adaptation with the same-sex peer group is a precursor of successful romantic relationships, and there is evidence consistent with this. French Canadian adolescents who were most liked at age 12 had a moderate-to-high number of romantic partners from ages 16 to 24 and spent more years in romantic relationships than youth who were less socially accepted (Boisvert & Poulin, 2016). Connolly et al. (2000) reported that the size of other-sex networks at 10th grade predicted the emergence of romantic relationships at 11th grade.

There are substantial cultural differences in the tolerance of adolescent premarital sexual activity. About 46% of US boys and girls between the ages of 15 and 19 reported having had a sexual experience; similar rates were reported in Canada (55% boys and 47% girls) (Bearinger et al., 2007). Much lower rates have been reported in some other countries; for example, 15- to 24-year-old Philippine youth report rates of premarital sexual intercourse of 16% and 31% for female and male respondents, respectively.

Status Hierarchies

ACCEPTANCE AND REJECTION

A major focus of peer relationship researchers over the past decades has been to understand individual differences in social acceptance and their associations with social competence (Asher & Coie, 1990). This interest was stimulated by results from longitudinal studies revealing that poor peer relationships during childhood predicted poor adult military adjustment, adult mental health problems, and adolescent delinquency (Asher & Coie, 1990).

Peer rejection has consistently been associated with aggression (Newcomb et al., 1993), a finding that has been widely replicated in countries such as China (X. Chen et al., 1995) and Finland (Salmivalli et al., 2000). Although it is reasonable to expect that the associations between aggression and rejection are particularly strong in countries such as Indonesia and China, in which there are strong norms of interpersonal harmony (X. Chen, 2011), this question is difficult to explore because measures of sociometric status and aggression are typically derived from peer and teacher ratings that are standardized within countries and are completed with reference to local norms of appropriate behavior (Weisz et al., 1995). Further complicating this question is the possibility of sex differences. In some studies, overt aggression is more typical of rejected boys than rejected girls (Cheng, 2010), and there are mixed findings regarding whether girls are more likely than boys to exhibit relational aggression (Card et al., 2008).

Cultural differences in the extent to which shyness is associated with peer rejection have also been found. Shyness has typically been associated with social incompetence in countries in which assertiveness is highly valued (i.e., North America and some European countries), whereas this is less so in some Asian countries (i.e., China), where socially reticent behavior is more accepted (X. Chen, 2011). This may, however, be changing in China. Whereas early studies of Chinese youth showed that shyness was associated with social acceptance (X. Chen et al., 1995), more recent studies revealed that shyness is associated with social rejection, likely reflecting the increased individualistic values of Chinese youth (X. Chen et al., 2005; Liu et al., 2012).

DOMINANCE AND BULLYING

There has been considerable research in the last several decades focused on understanding bullying in different cultures, efforts stimulated by Olweus (1978) in Norway and the use of the *Olweus Bullying Questionnaire* in cross-cultural studies (Olweus, 2007). One focus of international research has been on defining bullying, with a consensus that this entails repeated aggression coupled with a power differential between the perpetrator and the victim (Jimerson & Huai, 2010). Pellegrini et al. (2010) suggested that bullying in the form of physical or relational aggression

is often used by children and adolescents as a tactic to establish social dominance within the peer group, with the goal of acquiring resources (e.g., access to toys or the attention of members of the opposite gender).

It is difficult to assess the incidence of bullying in different countries because of methodological variation (e.g., time frame under consideration, definitions of bullying, age of youths) across studies. Richardson and Hiu (2016) addressed this by aggregating data from six international surveys assessing bullying children between ages 11 and 15 from over 150 countries and grouping countries into those exhibiting low, medium, and high rates of bullying. High-risk countries include Canada and some countries in South America and Africa. Low-risk countries include Russia and China. Boys were more often bullies than were girls in 75% of the countries, and adolescents who did not fit group norms, such as those with academic difficulties or those who did not conform to cultural gender patterns, were particularly likely to be bullied. Little information pertaining to the relative prevalence of different forms of bullying (i.e., physical, verbal, relational) across countries is available, although it is likely that differences exist. Kanetsuna and Smith (2002), for example, found that the most common form of bullying in Japan was name-calling or teasing, whereas hitting was more common in England.

Cyberbullying overlaps with other form of bullying in its effects on victims and that those who bully online typically bully offline (Khong et al., 2016). Although researchers have begun to examine cyberbullying in different cultures, it remains difficult to distinguish this from other forms of aggression (Livingstone et al., 2016).

POPULARITY

A salient index of status in most adolescent groups is popularity, which reflects visibility and social power (Cillessen et al., 2011). Although overlapping with social acceptance, there is evidence from studies of US, European, and Asian adolescents of its distinctive features. Whereas socially accepted youth typically exhibit low levels of both overt and relational aggression, popular US adolescents tend to exhibit higher levels of both types of aggression. Popular youth, similar to socially accepted youth, exhibit high levels of prosocial behavior, leading to suggestions that they are bistrategic in their selective and strategic use of a combination of coercion and prosocial behavior to obtain status and resources (Hawley, 2003).

Questions remain about whether the characteristics associated with popularity in the United States and Europe are similar in other areas of the world. Bellmore et al. (2011) speculated that the correlates of popularity might reflect the norms and values of the culture, such that the association between popularity and aggression might be lower in cultures that emphasize social harmony and avoid conflict. In addition, the characteristics associated with popularity in the United States and Europe may be a function of norms that emphasize autonomy and provide youth with opportunities to freely interact with peers away from the scrutiny of adults,

engage in deviant behavior, and develop romantic relationships. The most extensive efforts to explore popularity outside of Europe and North America have occurred in China, where mixed findings have emerged regarding the extent to which popular adolescents are aggressive (Lu et al., 2016). More research in diverse regions is needed to determine the extent to which models of popularity apply generally or are instead specific to some populations.

Prosocial behavior appears to be strongly associated with popularity in China, perhaps more so than in the United States (Zhang et al., 2016). In a longitudinal study of Chinese adolescents from 7th to 12th grade, Lu et al. (in press) found that popularity was associated with prosocial behavior at all ages, and that there were bidirectional longitudinal relations between acceptance and popularity. This finding is particularly interesting given Confucian ideas regarding the responsibility of high-status individuals to help others, suggesting that popularity norms reflect cultural values.

Peer Influence

As previously discussed, individual differences in peer status are positively associated with positive attributes (e.g., academic success) and negatively associated with a variety of adjustment problems (i.e., substance use, delinquency, and psychopathology). More recently, researchers have sought to unravel the causal relations between peer relationships and competence. Susceptibility to peer influence increases during childhood and peaks during adolescence (Steinberg & Monahan, 2007). Although most of the attention has focused on problem behavior, peers can be equally important in socializing positive behavior such as academic engagement, prosocial behavior, leadership skills, values, and civic responsibility (Allen & Antonishakm, 2008; Larson et al., 2012).

Fundamental to models of peer influence is the well-documented observation that youth tend to resemble those with whom they associate with respect to behavior, personality, and aptitudes. Kandel (1978) has documented this similarity, labeled *homophily*, with respect to the use of alcohol, tobacco, and other drugs. Homophily arises from two synergistic processes. *Selection* describes the process by which adolescents seek out others who are similar to themselves, whereas *influence* or *socialization* describes processes whereby adolescents become similar to those with whom they interact. This latter process is complex, with modeling, reinforcement, facilitation through shared activity, and the development of shared values being important (Allen & Antonishakm, 2008).

Processes of peer influence are likely affected by both planned and unplanned factors that aggregate youth into homogeneous groups. Neighborhoods, schools, and action settings tend to be homogeneous with respect to social class, ethnicity, and other characteristics, and this can have both positive and negative effects.

Creating groups of highly achieving adolescents can enhance academic success, creativity, and achievement motivation (Abadzi, 1984). Conversely, homogeneous grouping of deviant youth can accentuate pathways toward delinquency and substance use (Dishion et al., 2006). Next, we focus on peer influence on academic success and delinquency and substance use.

PEER INFLUENCE AND ACADEMIC SUCCESS

There is consistent evidence that peers have a salient impact on academic adjustment, and that both selection and influence attempts are important (Shin & Ryan, 2014). The relative impact of selection may vary across countries as evidenced by Fortuin et al.'s (2016) findings that that eighth-grade Dutch students did not select friends based on academic achievement, but adolescents' grades became similar to those of their friends over time.

Peers also appear to affect behaviors that either facilitate or are detrimental to academic success. J. J. L. Chen (2005) found that peer support positively predicted adolescents' academic engagement (e.g., classroom conduct and attitude toward school) among 7th- to 11th-grade Hong Kong students, which in turn contributed to better grades. Chang and Le (2005) found that that the interactions of US 10- to 19-year-old Chinese, Cambodian, Laotian, and Vietnamese immigrants with delinquent peers tended to have more negative attitudes toward school, which in turn contributed to their poorer academic achievement.

There appears to be differences across countries in the extent to which peers and parents influence adolescents' academic motivation and achievement. In a comparison of Canadian, Cuban, and Spanish 12-year-old adolescents' intrinsic academic motivation for school, Vitoroulis et al. (2012) found that Cuban parents' views of the importance of academic success were the strongest predictor of adolescents' motivation, whereas friends' support was the strongest predictor of Canadian adolescents' school motivation.

DEVIANT BEHAVIOR

Findings from multiple countries provide consistent evidence that most adolescent substance use and delinquent behavior occurs in the company of peers (Steketee, 2012). Adolescents are similar to their friends and affiliates with respect to deviant behavior, and there have been considerable efforts to explain the processes that underlie this similarity.

Tobacco use by peers consistently predicts initial and continued smoking by adolescents in the United States, Europe, and Asia (e.g., Knecht et al., 2011). Most researchers have concluded that both selection and influence processes are important in explaining the similarity between adolescents and their peers (Poulin et al., 2011), with some evidence that the effects of selection are stronger than those of

socialization (Mercken et al., 2009). Country differences in selection and influence were seen in the analysis of adolescent tobacco use in six European countries (Mercken et al., 2009). Whereas selection effects emerged across all countries, influence effects emerged in two. Further research is needed to understand the extent to which selection and influence processes vary as a function of culture, gender, and other characteristics.

The peer influence processes that occur with respect to deviance are likely to be subtle and include modeling, facilitation, and microsocial conditioning rather than the application of overt pressure (Arnett, 2007; Kobus, 2003). The microsocial processes that underlie peer influence were assessed in a series of studies by Dishion and his colleagues (1996) in which dyads of adolescent boys and their friends were videotaped for 30 minutes, and their interactions were coded to identify deviant talk (e.g., substance use, rule breaking) and the reactions to these statements by the other peer. Positive reactions to deviant talk (e.g., laughter) were associated with subsequent substance use, delinquency, and violent behavior, suggesting that adolescents who select deviant peers as friends likely engage in exchanges during which they receive positive reinforcement for rule-breaking behavior, which then leads to subsequent escalation of antisocial behavior (Dishion et al., 1996). This research has been conducted in the United States, and it would be useful to replicate these studies in other countries.

General Conclusions

Much of what we know about adolescent development comes from studies conducted in North America and Europe, with little research conducted outside of the United States on multiple aspects of adolescent development. We echo the argument made by Schneider (1998) of the danger of relying excessively on studies of US populations, and that cross-cultural studies are critical in the efforts to develop general theories of adolescent development. Three areas are particularly in need of further study.

First, it is particularly important to understand how peer relationships are contextualized within cultural norms and values. For example, we would expect that status within the peer group as indexed by social acceptance and popularity mirrors to some extent notions of what is valued within the culture. We also see evidence that the conflict management of even young children incorporates cultural scripts and values (French et al., 2011).

Second, a major parameter that accounts for some of the variation in adolescent development across different cultures is time use and activity structures. It would be useful to explore such issues as the extent to which adolescents spend their time in activity in various settings, engage in activities, and spend time with parents, peers, teachers, and others in multiple countries and to explore the extent to which individual differences in time use are associated with multiple forms of

adjustment as well as how country differences in time use account for country differences in adolescent development.

Finally, it is also important to connect the study of adolescent peer relationships with research on biological processes, in particular those changes specific to adolescence. For example, it is important to more fully understand how the neurological changes associated with increased risk-taking during adolescent are reflected in behavior across cultures (Steinberg, 2010).

References

Abadzi, H. (1984). Ability grouping effects on academic achievement and self-esteem in a southwestern school district. *The Journal of Educational Research*, *77*(5), 287–292. doi:10.1080/00220671.1984.10885542

Allen, J. P., & Antonishakm, J. (2008). Beyond the dark side. In M. J. Prinstein & K. A. Dodge (Eds.), *Understanding peer influence in children and adolescents* (pp. 141–160). New York, NY: Guilford.

Arnett, J. J. (2007). The myth of peer influence in adolescent smoking initiation. *Health Education & Behavior*, *34*(4), 594–607. doi:10.1177/1090198105285330

Asher, S. R., & Coie, J. D. (Eds.). (1990). *Peer rejection in childhood*. New York, NY: Cambridge University Press.

Aukrust, V. G., Edwards, C. P., Kumru, A., Knoche, L., & Kim, M. (2003). Young children's close relationships outside of the family: Parental ethnotheories in four communities in Norway, United States, Turkey, and Korea. *International Journal of Behavioral Development*, *27*, 481–494. doi:10.1080/01650250344000109

Bearinger, L. H., Sieving, R. E., Ferguson, J., & Sharma, V. (2007). Global perspectives on the sexual and reproductive health of adolescents: Patterns, prevention, and potential. *Lancet*, *369*, 1220–1231. doi:10.1016/S0140-6736(07)60367-5

Bellmore, A., Nishina, A., & Graham, S. (2011). Peer popularity in the context of ethnicity. In A. H. N. Cillessen, D. Schwartz, & L. Mayeux (Eds.), *Popularity in the peer system* (pp. 193–215). New York, NY: Guilford.

Boisvert, S., & Poulin, F. (2016). Romantic relationship patterns from adolescence to emerging adulthood: Associations with family and peer experiences in early adolescence. *Journal of Youth and Adolescence*, *45*(5), 945–958. doi:10.1007/s10964-016-0435-0

Bond, M. H. (1991). *Beyond the Chinese face: Insights from psychology*. Hong Kong: Cambridge University Press.

Brown, B. B., Eicher, S. A., & Petrie, S. (1986). The importance of peer group ("crowd") affiliation in adolescence. *Journal of Adolescence*, *9*(1), 73.

Card, N. A., Stucky, B. D., Sawalani, G. M., & Little, T. D. (2008). Direct and indirect aggression during childhood and adolescence: A meta-analytic review of gender differences, intercorrelations, and relations to maladjustment. *Child Development*, *79*(5), 1185–229. doi:10.1111/j.1467-8624.2008.01184.x

Caspi, A., Lynam, D., Moffitt, T. E., & Silva, P. A. (1993). Unraveling girls' delinquency: Biological, dispositional, and contextual contributions to adolescent misbehavior. *Developmental Psychology*, *29*(1), 19–30. doi:10.1037/0012-1649.29.1.19

Chang, J., & Le, T. N. (2005). The influence of parents, peer delinquency, and school attitudes on academic achievement in Chinese, Cambodian, Laotian or Mien, and Vietnamese youth. *Crime & Delinquency*, *51*(2), 238–264. doi:10.1177/0011128704273469

Chen, J. J. (2005). Relation of academic support from parents, teachers, and peers to Hong Kong adolescents' academic motivation: The mediating role of academic engagement. *Genetic Psychology Monographs: Genetic, Social, and General Monographs*, *13*, 77–127. doi:10.3200/MONO.131.2.77-127

Chen, J., Yu, J., Wu, Y., & Zhang, J. (2015). The influence of pubertal timing and stressful life events on depression and delinquency among Chinese adolescents. *PsyCh Journal*, *4*(2), 88–97. doi:10.1002/pchj.83

Chen, X. (2011). Culture and children's socioemotional functioning. In X. Chen & K. H. Rubin (Eds.), *Socioemotional development in cultural context* (pp. 29–52). New York, NY: Guilford.

Chen, X., Cen, G. Z., Li, D., & He, Y. F. (2005). Social functioning and adjustment in Chinese children: The imprint of historical time. *Child Development*, *76*, 182–195. doi:10.1111/j.1467-8624.2005.00838.x

Chen, X., French, D. C., & Schneider, B. (2006). Culture and peer relationships. In X. Chen, D. C. French, & B. Schneider (Eds.), *Peer relationships in cultural context* (pp. 3–22). New York, NY: Cambridge University Press.

Chen, X., Kaspar, V., Zhang, Y., Wang, L., & Zheng, S. (2004). Peer relationships among Chinese and North American boys: A cross-cultural perspective. In N. Way & J. Chu (Eds.), *Adolescent boys in context* (pp. 187–218). New York, NY: New York University Press.

Chen, X., Rubin, K., & Li, Z. (1995). Social functioning and adjustment in Chinese children. *Developmental Psychology*, *31*(4), 531–539.

Cheng, C. L. (2010). Sociometric and perceived popularity in adolescence: Links to relational aggression and loneliness. *Bulletin of Educational Psychology*, *42*, 143–162.

Choi, S. C., Kim, U., & Choi, S. H. (1993). Indigenous analysis of collective representations: A Korean perspective. In U. Kim & J. W. Berry (Eds.), *Indigenous psychologies: Research and experience in cultural context* (pp. 193–210). Newbury Park, CA: Sage.

Cillessen, A. H. N., Schwartz, D., & Mayeux, L. (Eds.). (2011). *Popularity in the peer system*. New York, NY: Guilford Press.

Connolly, J., Furman, W., & Konarski, R. (2000). The role of peers in the emergence of heterosexual romantic relationships in adolescence. *Child Development*, *71*(5), 1395–1408. doi:10.1111/1467-8624.00235

Davis, D. A., & Davis, S. S. (2012). Morocco. In J. J. Arnett (Ed.), *Adolescent psychology around the world* (pp. 47–59). New York, NY: Psychology Press.

Delsing, M. J. M. H., Ter Bogt, T. F. M., Engels, R. C. M. E., & Meeus, W. H. J. (2007). Adolescents' peer crowd identification in the Netherlands: Structure and associations with problem behaviors. *Journal of Research on Adolescence*, *17*(2), 467–480. doi:10.1111/j.1532-7795.2007.00530.x

Dishion, T. J., Dodge, K. A., & Lansford, J. E. (2006). Findings and recommendations: A blueprint to minimize deviant peer influence in youth interventions and programs. In K. A. Dodge, T. J. Dishion, & J. E. Lansford (Eds.), *Deviant peer influences in programs for youth* (pp. 366–394). New York, NY: Guilford.

Dishion, T. J., Spracklen, K. M., Andrews, D. W., & Patterson, G. R. (1996). Deviancy training in male adolescent friendships. *Behavior Therapy*, *27*, 373–390.

Dodge, K. A., & Crick, N. R. (1990). Social information-processing bases of aggressive behavior in children. *Personality and Social Psychology Bulletin*, *16*(1), 8–22. doi:10.1177/0146167290161002

Doornwaard, S. M., Branje, S., Meeus, W. H. J., & ter Bogt, T. F. M. (2012). Development of adolescents' peer crowd identification in relation to changes in problem behaviors. *Developmental Psychology*, *48*(5), 1366–1380. doi:10.1037/a0026994

Edwards, C. P. (1992). Cross-cultural perspective on family-peer relations. In R. D. Parke & G. W. Ladd (Eds.), *Family-peer relationships: Modes of linkage* (pp. 285–316). Hillsdale, NJ: Erlbaum.

Erikson, E. H. (1968). *Identity: Youth and crisis*. New York, NY: Norton.

Farver, J. A. M. (1999). Activity setting analysis: A model for examining the role of culture in development. In A. Göncü (Ed.), *Children's engagment in the world: Sociocultural perspectives* (pp. 99–128). New York, NY: Cambridge University Press.

Feldman, S. S., & Rosenthal, D. A. (1991). Age expectations of behavioural autonomy in Hong Kong, Australian and American youth: The influence of family variables and adolescents' values. *International Journal of Psychology*, *26*(1), 1–23. doi:10.1080/00207599108246846

Fortuin, J., van Geel, M., & Vedder, P. (2016). Peers and academic achievement: A longitudinal study on selection and socialization effects of in-class friends. *The Journal of Educational Research*, *109*(1), 1–6. doi:10.1080/00220671.2014.917257

French, D. C. (2011). Cultural context of child and adolescent conflict management. In X. Chen & K. H. Rubin (Eds.), *Socioemotional development in cultural context* (pp. 263–280). New York, NY: Guilford.

French, D. C. (2015). Cultural templates for child and adolescent friendships. In L. A. Arnett (Ed.), *The Oxford handbook of human development and culture: An interdisciplinary perspective* (pp. 425–437). New York, NY: Oxford University Press.

French, D. C., Bae, A., Pidada, S., & Lee, O. (2006). Friendships of Indonesian, South Korean, and US college students. *Personal Relationships*, *13*(1), 69–81. doi:10.1111/j.1475-6811.2006.00105.x

French, D. C., Chen, X., Chung, J., Li, M., Chen, H., & Li, D. (2011). Four children and one toy: Chinese and Canadian children faced with potential conflict over a limited resource. *Child Development*, *82*(3), 830–41. doi:10.1111/j.1467-8624.2011.01581.x

French, D. C., Pidada, S., & Victor, A. (2005). Friendships of Indonesian and United States youth. *International Journal of Behavioral Development*, *29*(4), 304–313. doi:10.1080/01650250544000080

French, D. C., Purwono, U., & Rodkin, P. (2014). Indonesian Muslim adolescents' use of tobacco and alcohol: Associations with use by friends and network affiliates. *Merrill-Palmer Quarterly*, *60*(4), 385–402. doi:10.1353/mpq.2014.0022

Fussell, E., & Greene, M. E. (2002). Demographic trends affecting youth around the world. In B. B. Brown, R. W. Larson, & T. S. Saraswathi (Eds.), *The world's youth: Adolescence in eight regions of the globe* (pp. 21–60). New York, NY: Cambridge University Press.

Gottman, J. M., & Parker, J. G. (1986). *Conversations of friends: Speculations on affective development*. Cambridge, UK: Cambridge University Press.

Greenfield, P. M., Keller, H., Fuligni, A., & Maynard, A. (2003). Cultural pathways through universal development. *Annual Review of Psychology*, *54*(1), 461–490. doi:10.1146/annurev.psych.54.101601.145221

Gummerum, M., & Keller, M. (2008). Affection, virtue, pleasure, and profit: Developing an understanding of friendship closeness and intimacy in Western and Asian societies. *International Journal of Behavioral Development*, *32*(3), 218–231. doi:10.1177/0165025408089271

Hartup, W. W. (1992). Friendships and their developmental significance. In H. McGurk (Ed.), *Childhood social development: Contemporary perspectives* (pp. 175–205). Hillsdale, NJ: Erlbaum.

Hawley, P. H. (2003). Prosocial and coercive configurations of resource control in early adolescence: A case for the well-adapted Machiavellian. *Merrill-Palmer Quarterly*, *49*(3), 279–309. doi:10.1353/mpq.2003.0013

Hirschi, T., & Gottfredson, M. (1983). Age and the explanation of crime. *American Journal of Sociology*, *89*(3), 552–584.

Huang, G. C., Okamoto, J., Valente, T. W., Sun, P., Wei, Y., Johnson, C. A., & Unger, J. B. (2012). Effects of media and social standing on smoking behaviors among adolescents in china. *Journal of Children and Media*, *6*(1), 100–118. doi:10.1080/17482798.2011.633411

Jimerson, S. R., & Huai, N. (2010). International perspectives on bullying prevention and intervention. In S. R. Jimerson, S. M. Swearer, & D. L. Espelage (Eds.), *Handbook of bullying in schools: An international perspective* (pp. 571–592). New York, NY: Routledge.

Jordan, A., Trentacoste, N., Henderson, V., Manganello, J., & Fishbein, M. (2007). Measuring the time teens spend with media: Challenges and opportunities. *Media Psychology*, *9*(1), 19–41. doi:10.1080/15213260709336801

Kandel, D. B. (1978). Similarity in real-life adolescent friendship pairs. *Journal of Personality and Social Psychology*, *36*(6), 306–312. doi:10.1037/0022-3514.36.3.306

Kanetsuna, T., & Smith, P. K. (2002). Pupil insights into bullying, and coping with bullying. *Journal of School Violence*, *1*(3), 5–29. doi:10.1300/J202v01n03_02

Keller, H., & Otto, H. (2011). The different faces of autonomy. In X. Chen & K. H. Rubin (Eds.), *Socioemotional development in cultural context* (pp. 164–185). New York, NY: Guilford.

Khong, J. Z. N., Tan, Y. R., Elliott, J. M., Fung, D. S. S., Sourander, A., & Ong, S. H. (2016). *Traditional victims and cybervictims: Prevalence, overlap, and association with mental health among Singaporean adolescents*. Manuscript submitted for publication.

Kitayama, S., & Markus, H. R. (1994). Introduction to cultural psychology and emotion research. In S. Kitayama & H. R. Markus (Eds.), *Emotion and culture: Empirical studies of mutual influence* (pp. 1–22). Washington, DC: American Psychological Association.

Knecht, A. B., Burk, W. J., Weesie, J., & Steglich, C. (2011). Friendship and alcohol use in early adolescence: A multilevel social network approach. *Journal of Research on Adolescence*, *21*(2), 475–487. doi:10.1111/j.1532-7795.2010.00685.x

Kobus, K. (2003). Peers and adolescent smoking. *Addiction*, *98*, 37–55. doi:10.1046/j.1360-0443.98.s1.4.x

La Greca, A. M., Prinstein, M. J., & Fetter, M. D. (2001). Adolescent peer crowd affiliation: Linkages with health-risk behaviors and close friendships. *Journal of Pediatric Psychology*, *26*(3), 131–143. doi:10.1093/jpepsy/26.3.131

Lam, C. B., & McHale, S. M. (2015). Time use as cause and consequence of youth develop-
    ment. *Child Development Perspectives*, *9*(1), 20–25. doi:10.1111/cdep.12100

Larson, R. W., Jensen, L. A., Kang, H., Griffith, A., & Rompala, V. (2012). Peer groups as a
    crucible of positive value development in a global world. In G. Trommsdorff & X. Chen
    (Eds.), *Values, religion, and culture in adolescent development* (pp. 164–187). Cambridge,
    England: Cambridge University Press.

Larson, R. W., & Seepersad, S. (2003). Adolescents' leisure time in the United
    States: Partying, sports, and the American experiment. *New Directions for Child &
    Adolescent Development*, *2003*(99), 53–64. doi:10.1002/cd.66

Larson, R. W., & Verma, S. (1999). How children and adolescents spend time across cul-
    tural settings of the world: Work, play and developmental opportunities. *Psychological
    Bulletin*, *125*(125), 701–736.

Lee, M. (2003). Korean adolescents' "examiniation hell" and their use of free time. In S. Verma
    & R. Larson (Eds.), *Examining adolescent leisure time across cultures: Opportunities and
    risks* (pp. 9–22). San Francisco, CA: Jossey-Bass.

Lee, S. (1994). The cheong space: A zone of non-exchange in Korean human relationships.
    In G. Yoon & S. Choi (Eds.), *Psychology of the Korean people: Collectivism and individu-
    alism* (pp. 85–99). Seoul, South Korea: Dong-A.

Li, J. (2012). *Cultural foundations of learning: East and west*. New York, NY: Cambridge
    University Press.

Li, Z. H., Connolly, J., Jiang, D., Pepler, D., & Craig, W. (2010). Adolescent romantic
    relationships in China and Canada: A cross-national comparison. *International Journal
    of Behavioral Development*, *34*(2), 113–120. doi:10.1177/0165025409360292

Liu, J., Chen, X., Li, D., & French, D. C. (2012). Shyness-sensitivity, aggression, and adjust-
    ment in urban Chinese adolescents at different historical times. *Journal of Research on
    Adolescence*, *22*(3), 393–399. doi:10.1111/j.1532-7795.2012.00790.x

Livingstone, S., Stoilova, M., & Kelly, A. (2016). Cyberbullying: Incidence, trends and
    consequences. In M. S. Pais (Ed.), *Ending the torment: Tacking bullying from the schoolyard to
    cyberspace* (pp. 115–120). Retrieved from http://srsg.violenceagainstchildren.org/page/1496

Lu, T., Li, L., Niu, L., Jin, S., & French, D. C. (2016). *Longitudinal associations between pop-
    ularity and aggression in Chinese middle and high school students*. Unpublished man-
    uscript, Department of Human Development and Family Studies, Purdue University,
    West Lafayette, IN.

Lu, T., Li, L., Niu, L., Jin, S., & French, D. C. (in press). Relations between popularity and
    prosocial behavior in middle and high school Chinese adolescents. *International Journal
    of Behavioral Development*.

Maccoby, E. E. (1998). *The two sexes: Growing up apart, coming together*. Cambridge,
    MA: Harvard University Press.

Magus-Suseno, F. (1997). *Javanese ethics and worldview: The Javanese idea of the good life*.
    Jakarta, Indonesia: Gramedia Pustaka Utama.

Markus, H. R., & Lin, L. R. (1999). Cultural diversity in the meanings and practices of
    conflict. In D. A. Prentice & D. T. Miller (Eds.), *Cultural divides: Understanding and
    overcoming group conflict* (pp. 302–333). New York, NY: Russell Sage Foundation.

Mercken, L., Snijders, T. A. B., Steglich, C., Vartiainen, E., & DeVries, H. (2009). Dynamics
    of adolescent friendship networks and smoking behavior: Social network analyses

in six European countries. *Social Science & Medicine*, *69*, 1506–1514. doi:10.1016/j.socscimed.2009.08.003

Miller, S., Lansford, J. E., Costanzo, P., Malone, P. S., Golonska, M., & Killeya-Jones, L. A. (2009). Early adolescent romantic partner status, peer standing, and problem behaviors. *Journal of Early Adolescence*, *29*(6), 839–861. doi:10.1177/0272431609332665

Newcomb, A. F., Bukowski, W. M., & Pattee, L. (1993). Children's peer relations: A meta-analytic review of popular, rejected, neglected, controversial, and average sociometric status. *Psychological Bulletin*, *113*(1), 99–128. doi:10.1037/0033-2909.113.1.99

Olweus, D. (1978). *Aggression in the schools: Bullies and whipping boys*. New York, NY: Halsted Press.

Olweus, D. (2007). *The Olweus Bullying Questionnaire*. Center City, MN: Hazelden. http://www.hazelden.org/olweus

Pellegrini, A. D., Long, J. D., Solberg, D., Roseth, C., Dupuis, D., Bohn, C., & Hickey, M. (2010). Bullying and social status during school transitions. In S. R. Jimerson, S. M. Swearer, & D. L. Espelage (Eds.), *Handbook of bullying in schools: An international perspective* (pp. 199–210). New York, NY: Routledge.

Peltzer, K. (2010). Leisure time physical activity and sedentary behavior and substance use among in-school adolescents in eight African countries. *International Journal of Behavioral Medicine*, *17*(4), 271–278. doi:10.1007/s12529-009-9073-1

Pettit, G. S., Bates, J. E., Dodge, K. A., & Meece, D. W. (1999). The impact of after-school peer contact on early adolescent externalizing problems is moderated by parental monitoring, perceived neighborhood safety, and prior adjustment. *Child Development*, *70*(3), 768–778. http://doi.org/10.1111/1467-8624.00055

Poulin, F., Kiesner, J., Pedersen, S., & Dishion, T. J. (2011). A short-term longitudinal analysis of friendship selection on early adolescent substance use. *Journal of Adolescence*, *34*(2), 249–56. doi:10.1016/j.adolescence.2010.05.006

Richardson, D., & Hiu, C. F. (2016). Global data on the bullying of school-aged children. In M. S. Pais (Ed.), *Ending the torment: Tackling bullying from the schoolyard to cyberspace* (pp. 101–113). Retrieved from http://srsg.violenceagainstchildren.org/page/1496

Roberts, M. E., Nargiso, J. E., Gaitonde, L. B., Stanton, C. A., & Colby, S. M. (2015). Adolescent social networks: General and smoking-specific characteristics associated with smoking. *Journal of Studies on Alcohol and Drugs*, *76*(2), 247–255. doi:10.15288/jsad.2015.76.247

Rogoff, B. (2003). *The cultural nature of human development*. New York, NY: Oxford University Press.

Salmivalli, C., Kaukiainen, A., & Lagerspetz, K. (2000). Aggression and sociometric status among peers: Do gender and type of aggression matter? *Scandinavian Journal of Psychology*, *41*(1), 17–24. doi:10.1111/1467-9450.00166

Schelgel, A., & Barry, H. I. (2015). Leaving childhood: The nature and meaning of adolescent transition rituals. In L. A. Jensen (Ed.), *The Oxford handbook of human development and culture: An interdisciplinary perspective* (pp. 327–341). New York, NY: Oxford University Press.

Schneider, B. H. (1998). Cross-cultural comparison as doorkeeper in research on the social and emotional adjustment of children and adolescents. *Developmental Psychology*, *34*(4), 793–797. doi:10.1037/0012-1649.34.4.793

Shin, H., & Ryan, A. M. (2014). Early adolescent friendships and academic adjustment: Examining selection and influence processes with longitudinal social network analysis. *Developmental Psychology*, *50*(11), 2462–2472. doi:10.1037/a0037922

Sim, T. N., & Yeo, G. H. (2012). Peer crowds in Singapore. *Youth & Society*, *44*(2), 201–216. doi:10.1177/0044118X10388220

Steinberg, L. (2010). A behavioral scientist looks at the science of adolescent brain development. *Brain and Cognition*, *72*(1), 160–164. doi:10.1016/j.bandc.2009.11.003

Steinberg, L., Graham, S., O'Brien, L., Woolard, J., Cauffman, E., & Banich, M. (2009). Age differences in future orientation and delay discounting. *Child Development*, *80*(1), 28–44. doi:10.1111/j.1467-8624.2008.01244.x

Steinberg, L., & Monahan, K. C. (2007). Age differences in resistance to peer influence. *Developmental Psychology*, *43*(6), 1531–1543. doi:10.1037/0012-1649.43.6.1531

Steketee, M. (2012). The lifestyle of youth and their peers. In J. Junger-Tas, I. H. Marshall, D. Enzmann, M. Killias, M. Steketee, & B. Gruszczynska (Eds.), *The many faces of youth crime: Contrasting theoretical perspectives on juvenile crime across countries and cultures* (pp. 237–284). New York, NY: Springer.

Stone, M. R., & Brown, B. B. (1999). Descriptions of self and crowds in secondary school: Identity claims and projections. In J. McClellan (Ed.), *The role of peer groups in adolescent social identity: Stability and change* (pp. 7–20). San Francisco, CA: Jossey-Bass.

Sullivan, H. S. (1953). *The interpersonal theory of psychiatry*. New York, NY: Norton.

Susman, E. J., & Rogel, A. (2004). Puberty and psychological development. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of Adolescent Psychology* (2nd ed., pp. 15–44). New York, NY: Wiley.

Suttles, G. D. (1970). Friendship as a social institution. In G. McCall, M. M. McCall, N. K. Denzin, G. D. Suttles, & S. B. Kurth (Eds.), *Social relationships* (pp. 95–135). Chicago, IL: Aldine.

Tietjen, A. M. (1989). The ecology of children's social support networks. In D. Belle (Ed.), *Children's social networks and social support* (pp. 37–69). New York, NY: Wiley.

Vitoroulis, I., Schneider, B. H., Vasquez, C. C., del Pilar Soteras de Toro, M., & Gonzáles, Y. S. (2012). Perceived parental and peer support in relation to Canadian, Cuban, and Spanish adolescents' valuing of academics and intrinsic academic motivation. *Journal of Cross-Cultural Psychology*, *43*(5), 704–722. doi:10.1177/0022022111405657

Vygotsky, L. S. (1978). *Mind and society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Wall, J. A., & Blum, M. (1991). Community mediation in the People's Republic of China. *The Journal of Conflict Resolution*, *35*(1), 3–20.

Way, N. (2006). The cultural practice of close friendships among urban adolescent in the United States. In X. Chen, D. C. French, & B. H. Schneider (Eds.), *Peer relationships in cultural context* (pp. 403–425). New York, NY: Cambridge University Press.

Way, N., & Silverman, L. R. (2012). The quality of friendships during adolescence: Patterns across context, culture, and age. In P. Kerig, M. C. Schulz, & S. T. Hauser (Eds.), *Adolescence and beyond: Family processes and development* (pp. 91–112). New York, NY: Oxford University Press.

Weisz, J. R., Chaiyasit, W., Weiss, B., Eastman, K. L., & Jackson, E. W. (1995). A multimethod study of problem behavior among Thai and American children in

school: Teacher reports versus direct observations. *Child Development*, *66*(2), 402–415. doi:10.2307/1131586

Wight, V. R., Price, J., Bianchi, S. M., & Hunt, B. R. (2009). The time use of teenagers. *Social Science Research*, *38*(4), 792–809. doi: 10.1016/j.ssresearch.2009.05.009

Yu, A. B. (1996). Ultimate life concerns, self, and Chinese achievement motivation. In M. H. Bond (Ed.), *The handbook of Chinese psychology* (pp. 227–246). Hong Kong: Oxford University Press.

Zhang, X., Pomerantz, E. M., Qin, L., Logis, H., Ryan, A., & Wang, M. (2016). *Characteristics of social status in the early adolescent peer system in the United States and China*. Unpublished manuscript, Department of Psychology, University of Illinois, Urbana–Champaign.

The Contribution of Nonfamily Adults to Adolescent Well-Being

A GLOBAL RESEARCH AND POLICY PERSPECTIVE

Peter C. Scales and Eugene C. Roehlkepartain

Introduction

For several decades, a burgeoning body of research has documented that relationships with adults outside a child's or youth's family can have significant effects on that young person's well-being (e.g., Benson et al., 2006; Bruce & Bridgeland, 2014; Rhodes et al., 2006). However, as voluminous as the research may be, relatively little is documented about the nature, prevalence, or impact of developmental relationships with nonfamily adults, particularly in non-US contexts (Kesselring et al., 2016).

This chapter reviews what is known about adolescents' relationships with adults beyond their families, particularly highlighting the value of and access to these relationships for young people as well as critical gaps in the available research. It then presents data from studies in 30 developing countries (primarily in Asia and Africa) that begin to shed light on the nature and contribution of these relationships to well-being and thriving across diverse contexts, which sets the stage for ongoing dialogue about the implications for research, policy, and practice.

What Is Known About Relationships With Nonfamily Adults?

Following the United Nation's definition, we define *family* adults as those who are parenting the young person and the other adults who are formally related to them through blood, marriage, or adoption (United Nations, 2016). In many cultures, informal designation of other adults as pseudorelatives (e.g., calling them "uncles," "aunts," or "cousins") or similar expansive conceptions of "family" blurs the distinction between family and nonfamily (Bornstein, 2014). In those cases, we mean *nonfamily* to refer to adults who are outside the usual

designation of family "members." Beyond adults in their families, children and adolescents have the potential to be embedded in webs of relationships with a wide range of adults who can influence, either positively or negatively, their developmental path and well-being. These adults may be in formal roles with young people (i.e., paid or volunteer staff of organizations or programs), such as teachers, volunteer or professional program leaders, coaches, formal mentors, health care providers, employers, and religious leaders. They may also be informal relationships, such as with neighbors, family friends, and others. Both formal and informal roles have potential to influence young people (Scales, 2003), depending on the nature, quality, duration, and salience of the relationship for the young person.

However, the complexity of this potential web of relationships is inadequately understood, particularly in a global context. In fact, the nonparent adult has been described as "the neglected other" in relationship research (Darling et al., 2003, p. 350). Indeed, Bornstein (2014) concluded that international research on parenting itself is limited and biased, with research in the United States and Western Europe dominant and with less than 10% of the research from regions containing 90% of the world's population. The research on young people's relationships with nonfamily adults is even more limited. But, this research, though limited, suggests that a more intentional focus on nonfamily relationships in research, policy, and practice has potential to contribute to significant advances in understanding and promoting young people's well-being.

At the same time, growing interest in expanding nonfamily adult relationships for young people internationally is evident in growing attention to organized one-to-one mentoring programs. Growing from early roots in the United States, Canada, United Kingdom, Australia, New Zealand, and Israel, these have expanded across Europe and South America, with emerging efforts in Africa and Southeast Asia (Goldner & Scharf, 2014). These efforts typically focus on connecting vulnerable or "at-risk" youth to responsible adult volunteers, often in business. As this practice takes shape and grows, it is critical to deepen understanding of the nature, processes, and impact of these relationships within and across diverse cultures and contexts globally.

THE CONTRIBUTION OF NONFAMILY RELATIONSHIPS TO WELL-BEING

A significant impediment to relationships with nonfamily adults is the fear that children might be sexually abused in such relationships (Scales, 2003). Indeed, about 60% of sexually abused children and youth in the United States are abused by someone not in their family but whom they do know (34% are abused by a family member; Finkelhor, 2009). Although the risk is real, several facts add perspective. The great majority of young people are not sexually abused: The percentage of minors sexually abused in the United States is about 3% a year, and one

third of the perpetrators are themselves juveniles, not adults (Finkelhor, 2009). In addition, although few countries have comparable long-term trend data, the incidence of child sexual abuse has been declining in the United States for the past two decades (National Academy of Sciences, 2013); public education, prevention programs, and more rigorous screening of youth program staff may have contributed to the decline (Finkelhor, 2009).

Moreover, a national study of US adults found that, despite concerns, parents were actually more supportive of their children being engaged with nonfamily adults than were nonparents, with parents more likely to see the potential positive value of those relationships (Scales, 2003). In some cultures, norms still persist that support domination of and violence against women (e.g., Scales, Shramko, et al., 2016), and in such contexts, concerns about potential negative effects of adults' relationships with young people are even more pressing. But, while acknowledging legitimate concerns, overall, youth's relationships with adults outside their families can be a highly positive influence.

High-quality relationships with adults, including with adults outside their families, contribute to the development in young people of positive values, self-perceptions, and attitudes that enhance the impact of schooling and educational and other programs (Li & Julian, 2012; Scales et al., 2006). In addition, connections to competent, caring adults are a key factor in youth resilience (Werner & Smith, 2001). Similarly, utilizing a variety of international examples of young people living in highly adverse settings, Ungar (2013) cast resilience not as an individual trait but as a product of empowering relationships with adults.

As Masten noted in her seminal piece on resilience (2001), positive, nurturing relationships with adults outside one's own family are a key part of the "ordinary magic" of human adaptive processes that can mitigate the otherwise-negative effects of exposure to risks. Critically, from an international perspective, she noted that schools are a primary source for young people to experience such healthy relationships with nonfamily adults. This role of schools as relationally positive influences for resilience in the face of vulnerability makes universal access to schools and formal learning centers, especially for females, an urgent necessity for promoting youth well-being worldwide. Stanton-Salazar (2011) also noted that such nonfamily adult relationships can be a key source of social capital for traditionally marginalized youth, including low-income youth and those experiencing racial or ethnic discrimination.

Through relationships, young people shape their perspectives on the world (Thompson, 2014) and shape their own identity and sense of agency (Ryan & Deci, 2000). Larson and colleagues (2002) called the ability to create, manage, and end relationships one of the most important social competencies of the twenty-first century. As they put it, young people

> need to be adept at sizing up people, negotiating trust, and seeking support; they need skills for creating communities, managing conflicts, and repairing

breaches; and they need to have the ability, when necessary, to sever
relationships in an ethical manner and to manage emotional upheavals
when relationships end. (p. 51)

More specifically, across a wide range of studies, positive relationships with
nonfamily adults (including formal mentoring relationships) have been linked
to a diverse array of positive youth development outcomes (summarized in
Scales & Leffert, 2004; also see DuBois et al., 2011; Eby et al., 2008), including
academic (e.g., getting higher grades at school); civic (e.g., volunteering);
psychological (e.g., more hope, positive identity, and sense of purpose; S. E.
O. Schwartz et al., 2013); social-emotional (e.g., greater social competence);
mental health (e.g., reduced depression); spiritual (K. D. Schwartz et al., 2006);
and behavioral development (e.g., less alcohol, tobacco, and other drug use;
Thomas et al., 2013). The impact of these relationships may also have a sus-
tained impact. A large longitudinal study in Switzerland found that students
who experienced positive relationships with teachers in late elementary school
evidenced fewer behavior problems concurrently and up to 4 years later
(Obsuth et al., 2016).

It is important to note that the kind and qualities of nonfamily adult
relationships vary widely as a function of cultural situatedness. For example, ex-
cept for working-class youth in the United States who access formal mentoring
programs, Stanton-Salazar (2010) concluded that "most working-class youth ex-
perience . . . difficulty in establishing resource-ful relationships with nonparental
adult figures," whereas in middle-class families, "both parents and adolescents
themselves coordinate to incorporate nonparental adult figures into their social
networks" (p. 12). In addition, even though time in schooling is now replacing
time in work for increasing numbers of youth worldwide, large percentages of
youth, especially poor youth, continue to work, with implications for the kinds
of relationships they establish with adults in those settings. For example, in five
countries in Africa, pilot studies showed more than 80% of youth who worked in
the last year reported hazardous employment conditions, from exposure to dan-
gerous machines or experiencing sexual abuse in those jobs (unpublished Search
Institute® data on Youth in Action program, 2015).

PREVALENCE OF NONFAMILY RELATIONSHIPS

At a broad level, many young people in the United States have sustained relationships
with adults other than their parenting adults. Unpublished Search Institute data
from surveys of 120,000 secondary school students between 2012 and 2015 across the
United States suggested that about half of American young people (52%) reported
that they received support from three or more nonparent adults. (This includes
extended family members.) However, evidence that examines relationships more
systematically suggests that only a minority of young people (at least in the United

States) enjoy sustained, meaningful relationships with adults outside their families. A survey by MENTOR (reported in Putnam, 2015) of 1,109 US young adults, ages 18–21, found that one in three did not have a sustained mentoring relationship of any kind (formal or informal) while growing up (ages 8 to 18).

Similarly, a national study of 15-year-old youth in the United States found that just 19% had high levels of quality adult–youth relationships, as measured by having an informal or formal mentor or adult who "gets" them (understands and likes them), participating weekly in high-quality out-of-school programs that emphasize building warm and positive relationships, and perceiving that the community values them (Scales et al., 2011). This already low percentage included adult family members other than parents, such as grandparents or aunts and uncles. When those are excluded, an even smaller percentage can be said to have truly high-quality relationships with nonfamily adults.

Of course, not all young people have similar experiences with relationships with adults beyond their families. For example, females in the United States tend to have larger networks of unrelated adults than do males, and they have closer relationships with those adults (Scales & Leffert, 2004). Furthermore, Putnam (2015) found that low-income youth were much less likely than middle- and upper-income youth to have strong nonfamily adult relationships between ages 8 and 18. In fact, about two thirds (64%) of young adults from families with the highest income and education reported that they had informal or "everyday" mentors between ages 8 and 18. However, two thirds (62%) of the young adults from families with the lowest income and education levels *did not* have informal mentors while growing up (ages 8 to 18).

A variety of issues have been identified that affect whether youth and unrelated adults have more frequent and higher quality relationships. Among these issues are cultural traditions or contemporary concerns that encourage or discourage such relationships (e.g., concerns that close relationships with children not one's own could be interpreted as inappropriate or abusive; Scales, 2003). In addition, a deeper examination showed the differing roles of nonfamily adults across cultures, political contexts, and regions globally as well as dynamics in these relationships within and across lines of race, ethnicity, and culture (Goldner & Scharf, 2014; Sánchez & Colón, 2005).

Moreover, Larson and colleagues (2002) pointed out that large percentages of girls, especially in the Middle East and South Asia, remain as restricted as ever to family and perhaps immediate neighborhood. There is ample evidence that gender-linked customs in some countries, such as in sub-Saharan Africa, force young girls into early marriage and childbearing relationships with older men, relationships that stifle their cognitive, social, and psychological development; increase their chances of sexually transmissible diseases and physical abuse; and prevent development of greater economic independence that could break such patterns (Amin et al., 2013; Scales, Shramko, et al., 2016). These dynamics pose significant barriers to young women developing a strong web of relationships with nonfamily adults.

ELEMENTS OF HIGH-QUALITY RELATIONSHIPS
WITH NONFAMILY ADULTS

Although mere exposure to positive adults in different settings may itself be ben-eficial, the quality of the relationships youth experience makes even more of a difference. However, beyond abstract notions of "caring" or "positive" relationships, there is little consistency in what makes for high-quality relationships that con-tribute to well-being, what could be called "developmental" relationships. As noted elsewhere, most research on nonfamily adults has either focused on specific roles (such as teacher relationships), with little cross-pollination across roles, or on broad explorations of relationships that youth describe as meaningful.

Building on the work of Li and Julian (2012), the National Scientific Council on the Developing Child (2004), and a wide range of other scholars, Search Institute launched in 2013 an initiative to build and test an integrated framework of developmental relationships that seeks to articulate elements of relationships in young people's lives in ways that are relevant and actionable across multiple roles and relationships. Echoing self-determination theory (Ryan & Deci, 2000), Search Institute's working definition of developmental relationships is "close connections through which young people develop the character strengths to dis-cover who they are, gain the ability to shape their own lives, and learn how to interact with and contribute to others" (Pekel et al., 2015, p. 12). Consistent with dynamic social systems theory, the power of the relationship emerges from the meaning that youth and adults attach to their real-time interactions with each other (Wubbels et al., 2016).

The original Developmental Relationships Framework grew out of focus groups with youth, parents, educators, youth workers, and others as well as a review of the literature. The framework has since been tested in a national study of families (Pekel et al., 2015) and is the basis for a series of other qualitative and quanti-tative studies of family, student–teacher, peer, and nonfamily adult relationships currently under way. The framework identifies five elements of developmental relationships that are evident in extant research on mentoring and other nonfamily adult relationships (as well as other research across different role-based studies):

1. **Express care.** Expressing care includes a strong emotional bond or attachment, mutual enjoyment, self-disclosure, and trust. It is the dimension of relationships that is most consistently articulated across role-centered and person-centered approaches. This element is typically understood as foundational or essential to successful mentoring relationships (e.g., Chan & Ho, 2008; Janssen et al., 2013; Vazsonyi & Snider, 2008). "Without some connection—involving such qualities as trust, empathy, authenticity, mutual respect, sensitivity, and attunement—the dynamics through which mentoring relationships can promote positive developmental outcomes seem unlikely to unfold" (Rhodes et al., 2006, p. 696).

2. **Challenge growth.** This element emphasizes the ways that people hold each other accountable to follow through on what they say they will do and to do what is needed to live up to one's potential. In the context of school and teaching, the ways teachers communicate educational goals, values, and expectations as well as the ways they give feedback and react to successes and failures influence students' own goals and expectations (Wentzel & Wigfield, 1998). Other areas of development are also motivated by encouragement from a trusted coach (Scales, 2016), mentor, friend, parent, or friend to push harder to meet expectations and achieve goals. Similarly, Feeney and Collins (2015) described this element of relationships as "validating a close other's goals, dreams, and aspirations (both big and small); encouraging a close other to challenge or extend himself/herself to grow as an individual (e.g., leave one's comfort zone to try challenging as well as familiar activities); . . . and providing encouragement to embrace even small opportunities that may be stepping stones to bigger ones" (p. 119).

3. **Provide support.** This element focuses on the instrumental support needs that are met through relationships, such as providing academic support in mentoring relationships (Chen et al., 2003). In a classroom, this element could include the kinds of instructional supports a teacher provides, such as encouraging students to solve problems, scaffolding learning activities, and providing feedback (Pianta & Hamre, 2009). Similarly, Larson and Angus's (2011) study of youth in arts and leadership programs found that youth were more likely to develop strategic thinking capacities for achieving their goals when adult leaders gave youth control (shared power) while also giving nondirective help when needed.

4. **Share power.** Sharing power builds on Bronfenbrenner's (1979) notion of optimal dyadic interactions in which "the balance of power gradually shifts in favor of the developing person" (p. 60). This element raises important (and unresolved) cross-cultural issues, yet it appears to have broad salience, though it may be expressed differently. How power is shared is a salient factor across a wide range of relationships, including nonfamily adult relationships. In their qualitative study of mentees or protégés in the Netherlands, Janssen et al. (2013) identified "encouraging self-initiation" or autonomy as a core function of mentoring relationships. Mentees indicated that their mentors made them feel that they have "the right to do or say what (s)he wants without being controlled" and to help "the protégé decide whether the behavior (s)he is performing is in line with his/her own interests" (p. 24).

5. **Expand possibilities.** Mentors and nonfamily adults are sometimes described as high-resource adults who introduce young people to

opportunities that they would not otherwise be aware of or have access to. When young people value the opportunities they can explore (Sullivan & Larson, 2009), these interactions introduce young people to the broader world. In so doing, they help young people discover different aspects of themselves and open up new options for their future through learning how diverse worlds function, as well as by connecting with ideas, people, and places to which they might not otherwise have access.

LIMITATIONS IN EXTANT RESEARCH

The preponderance of research has been conducted in Western, developed countries, mostly in the United States. In a global context, the samples in most studies have been comparatively affluent, literate, and educated. In addition, the youth in these samples have been socialized in a historical cultural and temporal milieu that prioritizes individual achievement, independence, and acquisition of material wealth as signs of maturity and success. Multicountry studies of youth well-being, such as the Global Youth Wellbeing Index (Goldin et al., 2014), the Children's Worlds Survey (Rees & Main, 2015), the Young Lives study of childhood poverty (http://www.younglives.org.uk), and the international Health Behaviour in School-Aged Children (HBSC) study (Inchley et al., 2014) rarely acknowledge these nonfamily adult relationships, much less explore their contribution to well-being. Moreover, when the nature of the relationships youth have with nonfamily adults is measured, the measurement usually is limited to relatively vague descriptions of how "positive" or "caring" the relationships are. Studies rarely elaborate on more specific features that include but go beyond expressing care and providing support, to include other features that characterize what have been called more *developmental* relationships, including providing a challenge to help young people grow, expanding their possibilities, and sharing influence or power with them (Pekel et al., 2015). The relative dearth of information on how young people globally experience their relationships with adults outside their families is one reason why a working group of UNICEF (United Nations Children's Fund) recommended including "relationships" within measurement frameworks for child well-being (Lippman et al., 2009).

Nonfamily Adult Relationships in Developmental Assets Research

The Developmental Assets Framework—which built on the conceptual underpinnings of Bronfenbrenner's (1979, 2005) bioecological approach to human development—has included a focus on nonfamily adult relationships as a core

factor in youth well-being and development. First introduced in 1990 (Benson, 1990) and refined in 1995 (Benson, 1997), the framework synthesized research and practitioner input from prevention science, youth development, resilience, adolescent development, and related fields to "provide greater attention to the positive developmental nutrients that young people need for successful development, not simply to avoid high-risk behaviors, and to accent the role that community plays in adolescent well-being" (Benson et al., 2011, p. 198). Half of the 40 identified assets are "external assets," addressing the supports, relationships, opportunities, and structures that families and communities offer to support young people's successful development. The other 20 internal assets address the personal strengths of young people, highlighting their capacities, skills, and agency in their own development. The framework explicitly includes "other adult relationships" as an external asset, and several other external assets (including caring neighborhood, caring school climate, school boundaries, neighborhood boundaries, and adult role models) include reference to, and measures of, specific components of nonfamily adult relationships.

Over the past 25 years, more than 5 million children, youth, and young adults have completed surveys measuring their reported experience of developmental assets. Both cross-sectional and longitudinal studies have consistently shown that the more developmental assets young people experience, the better off they are on dozens of academic, social-emotional, psychological, and behavioral indicators of well-being (Benson et al., 2011).

THE DEVELOPMENTAL ASSETS PROFILE

The 58-item Developmental Assets Profile (DAP) was introduced in 2005 as a brief measure of developmental assets. It subsequently has become the primary developmental assets survey instrument used worldwide. DAP data have been collected from more than 30 countries, nearly all in the developing world, and in more than 30 languages other than English. The instrument has been used by multiple international development organizations as part of their monitoring, evaluation, and learning efforts; the organizations include World Vision International, Save the Children, Education Development Center, and the Institute for Reproductive Health at Georgetown University. Overall, the DAP measures have been shown to be internally consistent, reliably stable, and valid in these diverse cultural settings (Scales, Roehlkepartain, et al., 2016).

International DAP results show that (a) youth across multiple countries report levels of developmental assets that are considered just barely adequate for positive youth development; (b) higher levels of assets are linked to positive youth development outcomes; and (c) increases in developmental assets over time are associated with higher levels of positive youth development outcomes (Scales, Roehlkepartain, et al., 2016; Scales, Shramko, et al., 2016).

NONFAMILY ADULT RELATIONSHIPS IN THE DAP

Because of its inclusion of nonfamily adult relationships as a critical aspect of development and because of its widespread use, the DAP offers a unique window into the relational supports that young people experience globally. Though not fully aligned with the emerging Developmental Relationships Framework, the extant DAP data provide insight on the critical role of nonfamily adult relationships in youth development and well-being.

The DAP subscales for the School and Community contexts are especially illuminating about the kinds of care, support, and challenge that nonfamily adults offer. Table 8.1 shows selected items from the School, Community, and Social context subscales and which of the five elements of developmental relationships are conceptually aligned with each item. Youth are asked to respond to each item by checking how true the item is for them now or in the last 3 months, according to a four-point scale that combines both frequency and intensity of response: Not at all/Rarely, Somewhat or Sometimes, Very or Often, and Extremely or Almost Always.

The School and Community context views in particular also provide a glimpse into some of the best and worst developmental contexts in young people's lives worldwide. Across 50 data sets in 30 countries, the School context is the ecological niche most often reported to be the strongest in providing relationally based developmental assets, receiving the highest score even more often than the Family context.

In contrast, the Community context was never reported to be the strongest developmentally nourishing context and was by far more often reported to be the worst (Scales, Roehlkepartain, et al., 2016). The percentages of youth worldwide who reported below-adequate developmental assets in those contexts sharply illustrates the disparity: 71% of young people had below-adequate developmental experiences in the Community context versus just 32% who were below adequate in developmental assets reflecting the School context (unpublished analysis of data from Scales, Roehlkepartain, et al., 2016).

FOCUSING ON NONFAMILY ADULT RELATIONSHIPS

For this chapter, we conducted new analyses of the 30-country DAP database of 32,316 youth and young adults ages 9–31 (the great majority 11–18). We created revised School, Community, and Social subscales, now consisting only of the 20 items in Table 8.1 that have a clear theoretical relevance to one or more of the five features of developmental relationships with nonfamily adults. Results showed that these new scales had adequate internal consistency reliability (School and Community, each .78; Social, .69). We then examined the extent to which youth worldwide experience these developmental assets that most reflect developmental relationships and the degree to which they are associated with positive developmental outcomes.

The patterns are quite clear: Children and youth worldwide simply do not experience an adequate level of developmental relationships with nonfamily adults

TABLE 8.1 Selected Developmental Assets Profile Items and Their Link to Elements of Developmental Relationships

Context	Selected Developmental Assets Profile (DAP) Items	Related Elements of Developmental Relationships
School	I feel safe at school.	Support
	I have a school that gives students clear rules.	Challenge
	I have a school that cares about kids and encourages them.	Care
	I have teachers who urge me to develop and achieve.	Challenge Growth
	I have a school that enforces rules fairly.	Support, Challenge
Community	I am helping to make my school, neighborhood, or city a better place.	Expand Possibilities, Share Power
	I am involved in a church, synagogue, mosque, or other religious group.	Care, Challenge, Expand Possibilities
	I am involved in a sport, club, or other group.	All
	I am trying to help solve world problems like hunger or disease.	Challenge, Expand Possibilities
	I am given useful roles and responsibilities.	Share Power
	I am involved in creative things such as music, theater, or art.	Challenge, Expand Possibilities
	I am serving others in my community.	Expand Possibilities
	I have a safe neighborhood.	Support
	I have good neighbors who care about me.	Care
	I have neighbors who help watch out for me.	Support
Social	I feel valued and appreciated by others.	Care
	I am encouraged to try things that might be good for me.	Challenge
	I am encouraged to help others.	Expand Possibilities
	I have adults who are good role models for me.	Challenge
	I have support from adults other than my parent(s).	Care, Support

that feature care, challenge, support, sharing of power with adults, and expansion of young people's possibilities. We examined these results by gender as well and found that there were no significant differences between boys and girls. Regardless of gender, young people worldwide do not experience nearly enough developmental relationships to satisfactorily promote their well-being.

Only in the school setting was young people's experience of developmental relationships adequate, and even then, barely so (the "Adequate" range begins with a score of 21 out of 30, which the school context reaches only because of rounding up from 20.81). In both the omnibus "social" and especially the community contexts, the frequency of developmental relationships experienced was below adequate (19.58 in Social and 16.25 in Community), placing youth in a life position where their well-being is vulnerable. These inferences are based on the repeated correlation of scores on relational assets with youth's academic, social-emotional, psychological, and behavioral well-being indicators (Benson et al., 2011; Scales, Roehlkepartain, et al., 2016).

As stark as these averages are in revealing insufficient levels of developmental relationships, the distribution of young people's scores shows that only in the school setting does a majority of youth have adequate or good relationships with nonfamily adults, and even there, it is only a bare majority of 52% (31% good and 21% adequate): Nearly half of youth in this multicountry sample reported less-than-adequate developmental relationships with the adults in their school or learning settings. Outside school, in the community setting, 75% of youth had inadequate levels of these developmental relationships. The situation was a bit better in the social context, which is made up of items not clearly focused in either the school or community settings; but, even there, a majority of young people, 56%, had less-than-adequate levels of developmental relationships with nonfamily adults.

CORRELATIONS WITH YOUTH WELL-BEING

These low levels of developmentally positive relationships with adults outside the family are distressing because, as noted previously, higher levels of developmental relationships are associated with better well-being. For this chapter, we correlated scores on these school, community, and social developmental relationships scales with scores on a variety of indicators of well-being in 11 data sets from 10 countries in the developing world. The well-being indicators included measures of workforce readiness, educational attainment, violence, positive identity, and sexual responsibility.

As shown in Table 8.2, in all but a handful of cases, the linkages of developmental relationships with well-being were significant and at meaningful levels. The strongest correlations between these measures of relationships (in community, school, and social contexts) were with positive identity (Tanzania); workforce readiness (Jordan, Honduras); workplace teamwork (Uganda); and spiritual development (Bolivia).

How meaningful are these associations? The US Department of Education's What Works Clearinghouse (2008) described an effect size of .25 as indicating an association that is substantively important. That effect size corresponds to a correlation of .124 (Cohen, 1988). Of the 57 correlations in Table 8.2, 45, or 79%, are at .12 or higher. Thus, four out of five of these linkages between youth's well-being and their experience of developmental relationships with adults outside the family are not only significant statistically, but also substantively important.

Future Directions

Understanding and supporting the role of nonfamily adults in the development and well-being of adolescents is a promising but underdeveloped area of research, policy, and practice within the context of global development. We end this chapter by exploring proposed future directions for research, policy, and practice.

TABLE 8.2 Correlation of Developmental Relationships With Nonfamily Adults and Well-Being Indicators in Selected Countries in the Developing World

	Community Context	School Context	Social Context
Rwanda—USAID (*n* = 658)			
Workforce readiness	.27	.16	.22
Education	.19	.26	.25
Violence avoidance	.07 *ns*	-.032 *ns*	.11 (.006)
Bangladesh—USAID (*n* = 997)			
Workforce readiness	.25	.27	.21
Education	.02 *ns*	.18	.08 (.018)
Violence avoidance	.13	.08 (.008)	.09 (.003)
Honduras—USAID (*n* = 534)			
Workforce readiness	.40	.28	.32
Education	.10 (.027)	.16	.14
Violence avoidance	.14	.07 *ns*	-.01 *ns*
Jordan—USAID (*n* = 953)			
Workforce readiness	.52	.29	.26
Education	.31	.24	.29
Violence avoidance	.29	.26	.33
Burkina Faso—Save the Children (*n* = 126)			
Workplace teamwork	.21 (.019)	.29 (.001)	.26 (.003)
Egypt—Save the Children (*n* = 111)			
Workplace teamwork	.21 (.011)	.20 (.015)	.32
Uganda—Save the Children (*n* = 198)			
Workplace teamwork	.43	.36	.46
Malawi—Save the Children (*n* = 138)			
Workplace teamwork	.25 (.003)	.16 *ns*	.20 (.021)
Uganda—Georgetown University (*n* = 941)			
Sexual responsibility	.15	.08 (.027)	.15
Tanzania—University of Mississippi (*n* = 1,241)			
Positive identity	.40	.44	.51
Bolivia—World Vision International (*n* = 153)			
Spiritual development	.33	.35	.47

All correlations significant at *p* ≤ .0001 except where indicated.

FUTURE DIRECTIONS FOR RESEARCH

Aside from the expanding base of research on mentoring in the United States, global research on the role of nonfamily adults in youth well-being is in its infancy. International research is needed that addresses seven crucial questions.

1. **What is the nature, scope, and impact of various relationships in young people's lives**? A corollary question is: Are there unique dynamics of nonfamily adult relationships in the lives of different subpopulations of young people, such as sexual minority youth who may experience estrangement from family and other supportive social networks (Sterrett et al., 2015)?

2. **How do diverse cultural values, contexts, and norms affect relationships with mentors and other nonfamily adults**? For example,

how do the values of individualism, collectivism, or familism affect the role and influence of nonfamily adults and mentors?

3. **What is the association between youth well-being and more comprehensive and culturally contextualized measures of developmental relationships with nonfamily adults?** The data presented here are a start, but they were derived from limited measures and post hoc analyses.

4. **How do the linkages between developmental relationships and specific indicators of well-being vary by cultural context?** For example, Goldner and Scharf (2014) theorized that a mentoring relationship in a collectivist society may have as a primary objective "promoting social cohesion and belongingness and preventing social disintegration" (p. 191) compared to a focus on fostering "self-competence, self-worth, and personal success" (p. 191) in a more individualistic society.

5. **Are young people's current relationships—and even more so, positive changes in the quality of those relationships—linked to *future* well-being, and if so, at what levels of magnitude?** There is an urgent need for longitudinal investigations that follow the same youth over time especially to understand which specific aspects of developmental relationships (and changes in them) are associated with which specific kinds of well-being (and changes in them).

6. **For which youth are the positive effects of developmental relationships most powerfully achieved?** In addition, it is crucial to know *which of the five principal features of developmental relationships work best for which youth*. That is, do expressing care, providing challenge, providing support, sharing power, and expanding possibilities have differing effects for different groups of youth?

7. **Which elements of developmental relationships are most salient in which relationships as young people grow from childhood through adolescence into adulthood?** The shifts in roles and influence between parents and peers is well documented (e.g., Brown & Larson, 2009). What might be the place of nonfamily adults in complementing, compensating, or enriching other relationships for different purposes, in different situations, and across this developmental trajectory?

FUTURE DIRECTIONS FOR POLICY

As a policy imperative, increasing the degree to which young people around the world experience these kinds of developmental relationships does not substitute for ensuring equitable and affordable access to high-quality nutrition, education, health care, and workforce development opportunities. However, it does raise important questions about how policies either encourage or thwart relational connections in communities and organizations. As such, it calls for reexamination

of priorities placed on teachers, program leaders, health care providers, and others in formal roles with young people. How can relational connections be encouraged and reinforced, rather than undermined by other expectations, such as delivery of content or demands for higher productivity in delivering services? In addition, it invites exploration of how social policy creates safe, creative spaces and opportunities for generations to connect informally as part of their everyday lives.

It might appear, in a Maslowian sense, that well-being influences such as safety, health care, and education might need to be satisfied first, before youth can even experience, much less benefit from, seemingly "higher-order" well-being influences such as developmental relationships. However, even in the most dire of situations, such as refugee camps in war zones, we have found substantial percentages of youth reporting above-average or even good quality relationships and other developmental assets (Scales et al., 2015). Moreover, the literature on resilience demonstrates that such relationships are actually among the most critical reasons why many youth can *overcome deficits* in more apparently "basic" developmental nutrients (e.g., Masten, 2001).

From a pragmatic perspective, recognizing the value and potential of nonfamily relationships (including role-specific relationships, such as teachers and program leaders) presses for investing in strengthening those relationships so they have more of the features of truly developmental relationships. Such investments may be relatively low-cost ways of improving young people's well-being and creating social cohesion. Furthermore, if developmental relationships are, in fact, the "active ingredient" in effective programs and education, as Li and Julian (2012) asserted, then investments in enhancing relationships, aligned with other policy investments in education, health care, prevention, or workforce development, would catalyze those investments in terms of their impact in young people's lives.

Mentoring is often touted as a means of promoting nonfamily relationships, and high-quality mentoring has been shown to advance youth's well-being (DuBois et al., 2011). Yet, taking formal mentoring programs to scale globally would be fiscally daunting. For example, Levine (2014) estimated that 9 million disadvantaged students in the United States lack a caring adult in their lives, and he proposed as a partial means of strengthening their educational well-being a larger investment in community-based mentoring, such as Big Brothers Big Sisters (BBBS). However, he also noted that BBBS matches only about 200,000 students a year and estimated that reaching just 1 million students with quality mentoring programs would cost in excess of $1.5 *billion*. Equipping and supporting teachers, coaches, youth workers, and others to more intentionally build developmental relationships with adolescents would not obviate the need for high-quality mentoring programs. But, a focus on improving youth's developmental relationships with nonfamily adults becomes a comparatively low-cost policy and program accent within the infrastructure of already existing programs (Beam et al., 2002). Moreover, the intentional emphasis on relational practices,

if targeted *within* other kinds of interventions, could add meaningfully to their effectiveness.

Finally, because policy is guided by the data that are collected, it is vital to find efficient and meaningful ways to collect data on nonfamily adult relationships (and relationships in general) so that they can be tracked and addressed in ongoing policy discussions. In the absence of these data, it is unlikely that these relationships will gain the kind of attention needed for meaningful investment and action.

FUTURE DIRECTIONS FOR PRACTICE

A focus on enhancing nonfamily relationships in the lives of adolescents also has significant implications for practice. Across multiple domains and roles, practitioners who work with adolescents will assert that relationships lie at the core of their effectiveness. Yet, it is less clear that there is a consensus on the elements of relationships that matter in these relationships or that these elements are intentionally tapped in response to the specific developmental tasks and situations of adolescents.

For example, many adults in role-specific relationships (such as teachers) may see their interactions as primarily functional or transactional: "I have content to teach these students." Yet, current evidence suggests that those functions are much more likely to be effective if they are completed in the context of warmth or emotional connection (Wubbels et al., 2016). Thus, equipping professionals in both preservice and in-service development opportunities to be attentive to relational dynamics has great potential to enhance effectiveness across fields.

In addition, Li and Julian (2012) challenged fields of practice to move beyond overreliance on "evidence-based programming" (p. 10), which is challenging both to scale and sustain, toward recognizing "developmental relationships as the active ingredient upon which the effectiveness of other program elements depend" (p. 62). They continued:

> In program design, the focal question ought to be "How does a (practice, program, system, or policy) help to strengthen relationships in the developmental setting?" . . . Beyond activities, if the design choices have to do with infrastructure (e.g., center-based vs. home-visiting services), the question is not just logistics or financials, but whether the infrastructure choices enhance or inhibit the growth of developmental relationships. (pp. 62–63)

Such an approach challenges current priorities across many fields. Although high-quality programs, curricula, and services still matter, the focus on developmental relationships presses for recognizing that these investments will be insufficient for impact without an intentional commitment to attending to the relational context in which they are delivered.

Conclusion

Nonfamily adults represent a vast, often-overlooked, resource for adolescent development and well-being globally. The existing research suggests the need for a much greater focus on these relationships, their dimensions, and their unique role in young people's well-being and development. Such an investment has potential to unleash a vast, untapped resource for young people and, by extension, the societies in which they live.

Acknowledgments

References

Amin, S., Austrian, A., Chau, M., Glazer, K., Green, E., Stewart, D., & Stoner, M. (2013). *Adolescent Girls Vulnerability Index: Guiding strategic investment in Uganda*. New York, NY: Population Council.

Beam, M., Chen, C., & Greenberger, E. (2002). The nature of adolescents' relationships with their "very important" nonparental adults. *American Journal of Community Psychology*, *30*(2), 305–325.

Benson, P. L. (1990). *The troubled journey: A portrait of 6th–12th grade youth*. Minneapolis, MN: Search Institute.

Benson, P. L. (1997). *All kids are our kids: What communities must do to raise caring and responsible children and adolescents*. San Francisco, CA: Jossey-Bass.

Benson, P. L., Scales, P. C., Hamilton, S. F., & Sesma, A., Jr. (2006). Positive youth development: Theory, research, and application. In W. W. Damon & R. M. Lerner (Eds.), *The handbook of child psychology* (6th ed., Vol. 1, pp. 894–941). New York, NY: Wiley.

Benson, P. L., Scales, P. C., & Syvertsen, A. K. (2011). The contribution of the Developmental Assets Framework to positive youth development theory and practice. In R. M. Lerner, J. V. Lerner, & J. B. Benson (Eds.), *Advances in child development and behavior: Positive youth development research and applications for promoting thriving in adolescence* (pp. 195–228). New York, NY: Elsevier.

Bornstein, M. H. (Ed.). (2014). *Handbook of cultural developmental science*. New York, NY: Psychology Press.

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.

Bronfenbrenner, U. (2005). *Making human beings human: Bioecological perspectives on human development.* Thousand Oaks, CA: Sage.

Brown, B. B., & Larson, J. (2009). Peer relationships in adolescence. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology: Vol. 2: Contextual influences on adolescent development* (Vol. 2, pp. 74–103). Hoboken, NJ: Wiley.

Bruce, M., & Bridgeland, J. (2014). *The mentoring effect: Young people's perspectives on the outcomes and availability of mentoring.* Washington, DC: Civic Enterprises with Hart Research Associates for MENTOR: The National Mentoring Partnership.

Chan, C. C., & Ho, W. C. (2008). An ecological framework for evaluating relationship-functional aspects of youth mentoring. *Journal of Applied Social Psychology*, *38*(4), 837–867.

Chen, C., Greenberger, E., Farruggia, S., Bush, K., & Dong, Q. I. (2003). Beyond parents and peers: The role of important non-parental adults (VIPs) in adolescent development in China and the United States. *Psychology in the Schools*, *40*(1), 35–50.

Cohen, J. L. (1988). *Statistical power analysis for the behavioral sciences.* Hillsdale, NJ: Erlbaum.

Darling, N., Hamilton, S. F., & Shaver, K. H. (2003). Relationships outside the family: Unrelated adults. In G. R. Adams & M. D. Berzonsky (Eds.), *Blackwell handbook of adolescence* (pp. 349–370). Malden, MA: Blackwell.

DuBois, D. L., Portillo, N., Rhodes, J. E., Silverthorn, N., & Valentine, J. C. (2011). How effective are mentoring programs for youth? A systematic assessment of the evidence. *Psychological Science in the Public Interest*, *12*(2), 57–91.

Eby, L. T., Allen, T. D., Evans, S. C., Ng, T., & DuBois, D. L. (2008). Does mentoring matter? A multidisciplinary meta-analysis comparing mentored and non-mentored individuals. *Journal of Vocational Behavior*, *72*(2), 254–267.

Feeney, B. C., & Collins, N. L. (2015). A new look at social support: A theoretical perspective on thriving through relationships. *Personality and Social Psychology Review*, *19*(2), 113–147. http://doi.org/10.1177/1088868314544222

Finkelhor, D. (2009). The prevention of child sexual abuse. *The Future of Children*, *19*(2), 169–194.

Goldin, N., Patel, P., & Perry, K. (2014). *The Global Youth Wellbeing Index.* Washington, DC: Center for Strategic & International Studies and International Youth Foundation.

Goldner, L., & Scharf, M. (2014). International and cross cultural aspects in youth mentoring. In D. L. DuBois & M. J. Karcher (Eds.), *The handbook of youth mentoring* (2nd ed., pp. 189–199. Los Angeles, CA: Sage.

Inchley, J., Currie, D., Young, T., Samdal, O., Torsheim, T., Augustson, L., . . . Barnekow, V. (2014). *Growing up unequal: Gender and socioeconomic differences in young people's health and well-being. Health Behaviour in School-Aged Children (HBSC) Study: International report from the 2013/2014 study.* Geneva, Switzerland: World Health Organization.

Janssen, S., van Vuuren, M., & de Jong, M. D. (2013). Identifying support functions in developmental relationships: A self-determination perspective. *Journal of Vocational Behavior*, *82*(1), 20–29.

Kesselring, M., de Winter, M., van Yperen, T., & Lecluijze, S. (2016). Partners in parenting: An overview of the literature on parents' and nonparental adults' perspectives on shared responsibilities in childrearing. *Issues in Social Science*, *4*(1), 69–97. doi:10.5296/iss.v4i1.8764

Larson, R. W., & Angus, R. M. (2011). Adolescents' development of skills for agency in youth programs: Learning to think strategically. *Child Development*, *82*(1), 277–294.

Larson, R. W., Wilson, S., Brown, B. B., Furstenberg, F. F., & Verma, S. (2002). Changes in adolescents' interpersonal experiences: Are they being prepared for adult relationships in the twenty-first century? *Journal of Research on Adolescence*, *12*, 31–68.

Levine, P. B. (2014). *Proposal 4: Designing effective mentoring programs for disadvantaged youth*. Washington, DC: Brookings Institution, Hamilton Project, Supporting Disadvantaged Youth.

Li, J., & Julian, M. M. (2012). Developmental relationships as the active ingredient: A unifying working hypothesis of "what works" across intervention settings. *American Journal of Orthopsychiatry*, *82*(2), 157–166. doi:10.1111/j.1939-0025.2012.01151.x

Lippman, L. H., Moore, K. A., & McIntosh, H. (2009). *Positive indicators of child well-being: A conceptual framework, measures and methodological issues* (Innocenti Working Paper No. 2009-21). Florence, Italy: UNICEF Innocenti Research Center.

Masten, A. S. (2001).Ordinary magic: Resilience processes in development. *American Psychologist*, *56*, 227–238.

National Academy of Sciences. (2013, September 12). Rates of physical and sexual child abuse appear to have declined over the last 20 years . . . [News release]. Washington, DC: Author. Retrieved from http://www8.nationalacademies.org/onpinews/newsitem. aspx?RecordID=18331. Accessed December 30, 2016.

National Scientific Council on the Developing Child. (2004). *Young children develop in an environment of relationships* (Working Paper No. 1). Retrieved from http:// www.developingchild.harvard.edu;   https://developingchild.harvard.edu/science/ national-scientific-council-on-the-developing-child/

Obsuth, I., Murray, A. L., Malti, T., Sulger, P., Ribeaud, D., & Eisner, M. (2016). A Non-bipartite propensity score analysis of the effects of teacher–student relationships on adolescent problem and prosocial behavior. *Journal of youth and adolescence* [published online], 1–27.

Pekel, K., Roehlkepartain, E. C., Syvertsen, A. K., & Scales, P. C. (2015). *Don't forget the families: The missing piece in America's effort to help all children succeed*. Minneapolis, MN: Search Institute.

Pianta, R. C., & Hamre, B. K. (2009). Classroom processes and positive youth development: Conceptualizing, measuring, and improving the capacity of interactions between teachers and students. *New Directions for Youth Development*, *2009*(121), 33–46.

Putnam, R. D. (2015). *Our kids: The American dream in crisis*. New York, NY: Simon and Schuster.

Rees, G., & Main, G. (Eds.). (2015). *Children's views on their lives and well-being in 15 countries: An initial report on the Children's Worlds survey, 2013–14*. York, England: Children's Worlds Project (ISCWeB).

Rhodes, J. E., Spencer, R., Keller, T. E., Liang, B., & Noam, G. (2006). A model for the influence of mentoring relationships on youth development. *Journal of Community Psychology*, *34*, 691–707.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, *55*(1), 68–78.

Sánchez, B., & Colón, Y. (2005). Race, ethnicity, and culture in mentoring relationships. In D. L. DuBois & M. J. Karcher (Eds.), *Handbook of Youth Mentoring* (pp. 191–204). Thousand Oaks, CA: Sage.

Scales, P. C. (2016). The crucial coaching relationship. *Phi Delta Kappan*, *97*(8), 19–23.

Scales, P. C., Benson, P. L., & Mannes, M. (2006). The contribution to adolescent well-being made by nonfamily adults: An examination of developmental assets as contexts and processes. *Journal of Community Psychology*, *34*(4), 401–413.

Scales, P. C. (with Benson, P. L., Mannes, M., Hintz, N., Roehlkepartain, E. C., & Sullivan, T. K.). (2003). *Other people's kids: Social expectations and American adults' involvement with children and adolescents*. New York, NY: Kluwer Academic/Plenum.

Scales, P. C., Benson, P. L., & Roehlkepartain, E. C. (2011). Adolescent thriving: The role of sparks, relationships, and empowerment. *Journal of Youth and Adolescence*, *40*, 263–277.

Scales, P. C., & Leffert, N. (2004). *Developmental assets: A synthesis of the scientific research on adolescent development* (2nd ed.). Minneapolis, MN: Search Institute.

Scales, P. C., Roehlkepartain, E. C., & Shramko, M. (2016). Aligning youth development theory, measurement, and practice across cultures and contexts: Lessons from use of the *Developmental Assets Profile*. *Child Indicators Research*, pp. 1–34. doi:10.1007/s12187-016-9395-x

Scales, P. C., Roehlkepartain, E. C., Wallace, T., Inselman, A., Stephenson, P., & Rodriguez, M. (2015). Brief report: Assessing youth well-being in global emergency settings: Early results from the *Emergency Developmental Assets Profile*. *Journal of Adolescence*, *45*, 98–102. doi:10.1016/j.adolescence.2015.09.002

Scales, P. C., Shramko, M., & Ashburn, K. (2016). Developmental assets and sexual and reproductive health among 10- to 14-year-olds in northern Uganda. *International Journal of Child, Youth and Family Studies*, *7*, 45–64.

Schwartz, K. D., Bukowski, W. M., & Aoki, W. T. (2006). Mentors, friends, and Gurus: Peer and nonparent influences on spiritual development. In E. C. Roehlkepartain, P. E. King, L. M. Wagener, & P. L. Benson (Eds.), *The handbook of spiritual development in childhood and adolescence* (pp. 310–323). Thousand Oaks, CA: Sage.

Schwartz, S. E. O., Chan, C. S., Rhodes, J. E., & Scales, P. C. (2013). Community developmental assets and positive youth development: The role of natural mentors. *Research in Human Development*, *10*, 141–162.

Stanton-Salazar, R. D. (2010). *A social capital framework for the study of institutional agents and their role in the empowerment of low-status students and youth*. Los Angeles, CA: University of Southern California, Rossier School of Education.

Stanton-Salazar, R. D. (2011). A social capital framework for the study of institutional agents and their role in the empowerment of low-status students and youth. *Youth & Society*, *43*(3), 1066–1109.

Sterrett, E. M., Birkett, M., Kuhns, L., & Mustanski, B. (2015). Non-parental adults in the social and risk behavior networks of sexual minority male youth. *Children and Youth Services Review*, *55*, 62–70. http://doi.org/10.1016/j.childyouth.2015.05.007

Sullivan, P. J., & Larson, R. W. (2009). Connecting youth to high-resource adults: Lessons from effective youth programs. *Journal of Adolescent Research*, *25*(1), 99–123. http://doi.org/10.1177/0743558409350505

Thomas, R. E., Lorenzetti, D. L., & Spragins, W. (2013). Systematic review of mentoring to prevent or reduce alcohol and drug use by adolescents. *Academic pediatrics*, *13*(4), 292–299.

Thompson, R. A. (2014). Why are relationships important to children's well-being? In A. Ben-Arieh (Ed.), *The Handbook of Child Well-Being* (pp. 1917–1954). Dordrecht, the Netherlands: Springer.

Ungar, M. (2013). The impact of youth-adult relationships on resilience. *International Journal of Child, Youth and Family Studies*, *3*, 328–336.

United Nations. (2016). Households and families. UN Department of Economic and Social Affairs. Retrieved from http://unstats.un.org/unsd/demographic/sconcerns/fam/fammethods.htm. Accessed December 29, 2016.

Vazsonyi, A. T., & Snider, J. B. (2008). Mentoring, competencies, and adjustment in adolescents: American part-time employment and European apprenticeships. *International Journal of Behavioral Development*, *32*(1), 46–55.

Wentzel, K. R., & Wigfield, A. (1998). Academic and social motivational influences on students' academic performance. *Educational Psychology Review*, *10*(2), 155–175.

Werner, E. E., & Smith, R. S. (2001). *Journeys from childhood to midlife: Risk, resilience, and recovery.* Ithaca, NY: Cornell University Press.

What Works Clearinghouse. (2008). *What Works Clearinghouse evidence standards for reviewing studies* (Version 1.0). Washington, DC: US Department of Education.

Wubbels, T., Brekelmans, M., Mainhard, T., den Brok, P., & van Tartwijk, J. (2016). Teacher-student relationships and student achievement. In K. R. Wentzel & G. B. Ramani (Eds.), *Handbook of social influences in school contexts* (pp. 127–142). New York, NY: Routledge.

{ SECTION 3 }

Risks and Opportunities

How to End Child Marriage Around the World

STRATEGIES, PROGRESS, AND ACTION NEEDED

Lakshmi Sundaram, Ellen Travers, and Matilda Branson

Girls Not Brides: The Global Partnership to End Child Marriage

Girls Not Brides is a global civil society partnership, bringing together more than 800 civil society organizations from over 90 countries working to address child marriage around the world. It was founded in 2011 by The Elders, a group of independent global leaders brought together by Nelson Mandela to work together for peace and human rights, to address two major gaps: first, the lack of strong international visibility and leadership on the issue of child marriage and, second, the urgent need for greater coordination and collective action among those working at the grassroots, national, regional, and international levels to end this harmful practice. In some countries, *Girls Not Brides* members have come together to form National Partnerships, which focus on supporting the development and implementation of nationwide initiatives to address child marriage.

Introduction

One in four girls around the world is married by the time she reaches 18, denying her the opportunity to reach her potential (United Nations Children's Fund [UNICEF], 2014). When a young girl becomes a bride, the consequences are lifelong—for herself, for her children, for her community, and for her country. The last 5 years have seen unprecedented progress in moving child marriage from a taboo issue to one that is prominent on the international agenda, and a global movement of actors has started to mobilize to end the practice. This chapter critically reflects on what it will take to address child marriage, what progress has been made, and what more remains to be done to make a difference in the lives of millions of girls around the world.

Our analysis draws from (a) our development in 2014 of an overarching theory of change on child marriage; (b) the outcomes of a conference organized by the World Health Organization's Department of Reproductive Health and Research in 2013 on research gaps on child marriage (Svanemyr et al., 2015); (c) our consultations on lessons learned from national initiatives to end child marriage (*Girls Not Brides*, 2015, 2016c); and (d), the process of developing the *Girls Not Brides* Strategy 2017–2020 and our 5-year progress report (*Girls Not Brides,* 2016b).

Child Marriage Around the World: An Entry Point
for Tackling Gender Inequality

Before focusing on how to tackle child marriage, in this section we introduce globally accepted definitions of child marriage and discuss the drivers of the practice. We reiterate the scale of the problem and its impact, both as a fundamental violation of girls' rights and on multiple development outcomes.

WHAT IS CHILD MARRIAGE?

The United Nations Children's Fund defines child marriage as any formal or informal union where at least one of the parties is under the age of 18 (UNICEF, 2016a). Importantly, this definition recognizes varying forms of child marriage. For instance, in Latin America, couples may cohabitate and live "in union" as if married, which raises the same human rights concerns for girls as more traditional and formal forms of marriage do. Additional concerns due to the informality of the relationship—in terms of inheritance, citizenship, and social recognition, for example—can make girls in informal unions extremely vulnerable.

There have been some discussions in the international community about other commonly used terms, including *early* and *forced* marriage, especially in contexts where the age of majority is not 18. United Nations resolutions and the Global Goals for Sustainable Development have settled on the legalistic and inclusive term *child, early and forced marriage*, and the Office of the United Nations High Commissioner on Human Rights provided a definition of the terminology in its report to the United Nations General Assembly in 2014 (Office of the High Commissioner for Human Rights, 2014).

While poverty, lack of education, and insecurity drive the practice, at its heart child marriage is rooted in gender inequality, gender norms and stereotypes, and the fact that girls and women are not valued as equal to boys and men. Specific drivers vary from one community to another, and the practice may look different across regions and countries. In some situations, girls are married to much older men and have little choice in the matter, be it in law or in practice. Yet, there are other contexts where older adolescents express a desire to marry before the age of 18, sometimes to their adolescent peers. Differences in vulnerabilities between

younger and older adolescents have not been a major focus of the field but require exploration for tailored strategies to respond to their specific needs (Svanemyr et al., 2015).

It is crucial to recognize and understand the unique forms of child marriage in a given context and the various factors that contribute to its perpetuation. These can include economic factors, such as a lower dowry or higher bride price if a girl is married young, "transferring" the costs of supporting a daughter to her family of marriage; structural factors, such as a lack of educational or economic opportunities for girls; and social factors, such as a sense of tradition and social obligation, acceptability of pregnancy out of wedlock, and avoiding criticism and community censure if an older girl is not married (UNICEF, 2016a). With more nuanced and context-specific knowledge, it is possible to tailor interventions appropriately and more effectively, especially to meet the needs of marginalized and vulnerable communities where child marriage prevalence rates can be extremely high.

THE SCALE OF THE PROBLEM

Every year, 15 million girls are married below the age of 18. Child marriage occurs around the world and cuts across countries, cultures, religions, and ethnicities: For girls under age 18, 45% are married in South Asia (UNICEF, 2015); 39% in sub-Saharan Africa; 23% in Latin America and the Caribbean; 18% in the Middle East and North Africa; and 15% in East Asia and the Pacific (excluding China); it also occurs in Europe and North America (UNICEF, 2016b). While child marriage is generally seen as a problem predominantly in South Asia and Africa, countries with the greatest burden of child brides include Brazil, Indonesia, Mexico, and Nigeria (Figure 9.1). Boys also marry as children, with 156 million men alive today married before the age of 18, compared to 720 million women (UNICEF, 2014). However, the impact of marriage is generally much more severe on girls (*Girls Not Brides*, 2014b).

While there has been some decrease in the rates of child marriage, population growth means that the overall number of child brides continues to grow. Progress has been notable for girls under the age of 15—particularly in South Asia. However, progress is not happening fast enough and remains uneven across the world's regions and within countries (UNICEF, 2014). Subnational variations and "hot spots" of child marriage within countries can be masked by national averages and may result in missing some of the most marginalized and vulnerable populations who are most at risk of child marriage. Solid measurement, evaluation, and learning, including consistent data collection and disaggregation (at the minimum by location, age, sex, and education level), are needed to identify those hot spots and vulnerable populations and to assess progress and trends. Recent projections predicted that if current trends continue, the total number of women married as children will reach 1.2 billion by 2050 (UNICEF, 2014).

Rates of child marriage*

01	Niger	76%
02	Central African Republic	68%
03	Chad	68%
04	Mali	55%
05	Burkina Faso	52%
06	Guinea	52%
07	Bangladesh	52%
08	South Sudan	52%
09	Mozambique	48%
10	India	47%

Burden of child marriage**

01	India	26,610,000
02	Bangladesh	3,931,000
03	Nigeria	3,306,000
04	Brazil	2,928,000
05	Ethiopia	1,974,000
06	Pakistan	1,875,000
07	Indonesia	1,408,000
08	Mexico	1,282,000
09	Democratic Republic of the Congo	1,274,000
10	Tanzania	887,000
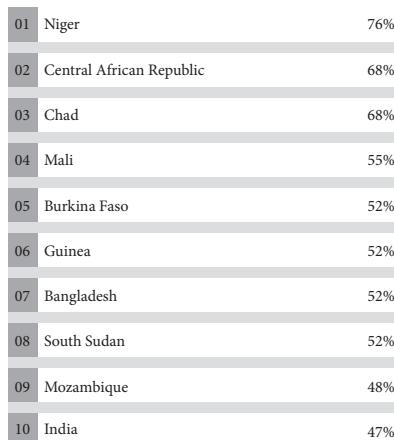
FIGURE 9.1 *Global prevalence of child marriage in most affected countries.*

* Percentage of women 20–24 years old who were married or in union before they were 18 years old. (UNICEF State of the World's Children, 2016b).

** Burden: Number of women 20–24 years old who were first married or in union before they were 18 years old. Based on population in 2015 (UNICEF State of the World's Children, 2016b).

A HUMAN RIGHTS ISSUE AS WELL AS ONE THAT HOLDS BACK DEVELOPMENT OUTCOMES

Child marriage is most common in the world's poorest countries and is closely linked with low levels of economic development and poverty. Girls from poor families are nearly twice as likely to marry before 18 as girls from wealthier families, as marriage is often seen as a way to provide for a daughter's future (Raj & Boehmer, 2013). However, girls who marry young are more likely to be poor and remain poor (International Center for Research on Women, 2007); they do not receive the educational and economic opportunities that help lift them out of poverty and that are necessary to build a sustainable and prosperous future for their communities and countries.

Many organizations that work to address child marriage do so in part because they acknowledge this can lead to improvements on other developmental outcomes: health and nutrition outcomes for mothers and their children, retention of girls in education, poverty reduction, and economic growth. Educated and healthy women are more productive, thereby contributing to greater national productivity and higher gross domestic product. They spend more money on food, housing, education, and income-generating activities, all of which reduce poverty levels and promote sustainable development (Parsons et al., 2015). Child marriage is not only a catalyst for improving development outcomes, but also a strategic entry point for addressing gender inequality. By targeting an issue that affects the long-term trajectory of girls' and women's lives, there is huge potential to have a

catalytic effect on achieving gender equality worldwide. It is, however, critically important to recognize that child marriage is linked to a continuum of violations of girls' and women's fundamental human rights—to health, education, equality, and nondiscrimination and to live free from violence and exploitation, including slavery and servitude.

Significant Progress Has Been Made

While some organizations have been tackling child marriage for decades, especially at the local level, global action has accelerated significantly in recent years. Through joint action by civil society organizations, United Nations agencies, governments, networks of parliamentarians, intergovernmental bodies, and others, child marriage has seen unprecedented global attention in the last 5 years. A number of key advances include the following:

1. *New global and regional commitments*—Child marriage was included as a global development priority in the Global Goals for Sustainable Development, through Target 5.3, which commits all governments to ending child marriage by 2030. Resolutions at the United Nations General Assembly and Human Rights Council have mobilized political support and strengthened the global normative framework. Other regional and intergovernmental bodies, including the African Union and the South Asian Association for Regional Cooperation, have set out regional campaigns and plans of action to end child marriage.

2. *Strengthened legal and policy frameworks*—National strategies have been developed or are in the process of development in at least 14 countries. Many countries have also taken steps to strengthen their laws to address child marriage.

3. *New programs*—The number of programs addressing child marriage has grown dramatically, with increased action from international nongovernmental organizations, community-based organizations, and many others. In March 2016, UNICEF and the United Nations Population Fund launched a new Global Program to Accelerate Action to End Child Marriage in 12 countries.

4. *A movement to end child marriage*—Once a taboo topic with little political or public recognition, child marriage now has international traction as a key development issue for girls; it is the subject of discussions of governments, international organizations, parliamentarians, youth groups, religious and traditional leaders, communities, and donors.

5. *Greater understanding of the scale and impact of child marriage*—There is recognition that child marriage increases in conflict and humanitarian

crisis (CARE United Kingdom, 2015; International Center for the
Research on Women and *Girls Not Brides*, 2016; Women's Refugee
Commission, 2016; World Vision United Kingdom, 2013); increases the
risk of girls becoming HIV infected (*Girls Not Brides*, 2016a); and is
also of concern from a foreign policy perspective (Council for Foreign
Relations, 2014). Child marriage is now increasingly seen both as a
human rights issue and a development issue, with links to slavery and
forced labor (Bokhari, 2009; Turner, 2013; United Nations Human
Rights Council, 2012). New research initiatives are now exploring
the strain that child marriage places on a country's economic growth
prospects and highlighting the economic cost of inaction (Parsons
et al., 2015).

6. *More funding*—Donor governments and private foundations have
   invested millions of dollars into efforts to end child marriage. However,
   the funding available is nowhere near enough to tackle the scale of the
   problem.

It has become increasingly clear that progress is essential at all levels: The
lives of individual girls will only improve if there is a change in their local
context, and they can access programs and services directly. Transformative,
lasting change at any scale requires government action and investment, which
in turn must be supported by the international community. This change can be
catalyzed in many ways: National action requires leadership from governments,
which can be rallied through girls themselves, prominent champions, pressure
from neighboring countries, and commitments in regional or international
bodies or all of these. Progress can also be driven by a strong evidence base
for advocacy and policymaking. Global coordination between actors can
strengthen action at all levels.

The Need for Comprehensive Strategies to Tackle Child Marriage

MOVING AWAY FROM THE QUEST FOR A "SILVER BULLET"

There is no "one-size-fits-all" approach to ending child marriage—it is a complex
issue that requires a comprehensive and holistic response across sectors and at
community, district, national, regional, and international levels. This can some-
times be a difficult message for donors, governments, or other actors who are
facing multiple and often-competing political, development, and humanitarian
priorities.

There are a number of legal, policy, and programmatic approaches that can
be incredibly effective in tackling child marriage. However, when they are
implemented in isolation and not as part of a holistic and comprehensive rights-
based approach, their impact can be limited. In some instances, these approaches
can be distracting, waste resources, or even inadvertently lead to backlash and

entrench discriminatory gender norms. Three examples of actions that are some-
times seen as "silver bullets" to end child marriage are changing the law to ban
child marriage, providing cash transfers to poor families who do not marry off
their daughters, and educating girls.

Changing the Law to Ban Child Marriage

Changing marriage laws is sometimes seen as the first and last step in tackling
child marriage, and political leaders have often turned to legal change as a way of
quickly demonstrating their commitment to the issue. Laws matter because they
set the government's—and thus the country's—position on the issue and send a
signal from the highest levels that child marriage is unacceptable. Countries with
consistent laws against child marriage are more likely to be able to protect girls
against the practice (Maswikwa et al., 2015). A legal setback on child marriage
in one country negatively affects girls far beyond that country's borders, and a
legal victory in one country benefits women and girls around the world. For those
working at community and district levels, having the backing of the law is impor-
tant as it lends credibility to their efforts—otherwise, their work can be challenged
and delegitimized (Svanemyr et al., 2013).

However, legal changes in isolation are not enough. There needs to be ade-
quate investment in ensuring that all actors know about and are able and willing
to enforce the law. If new laws are not accompanied by adequate policy and pro-
grammatic approaches, they risk being irrelevant or ignored or may even lead to
backlash against girls who try to use them.

Providing Cash Transfers to Poor Families Who Do Not
Marry Off Their Daughters

Girls from poor households are almost twice as likely to be married before the
age of 18, compared to those in higher income families (International Center for
Research on Women, 2007). While few cash transfer programs have tried to di-
rectly tackle child marriage, they are increasingly being promoted as a solution to
end the practice. The assumption is that by providing poor families with a cash
incentive to keep their daughters unmarried and in school, cash transfer programs
will help these families resist some of the economic incentives to marry off their
daughters young.

For example, there have been a number of large-scale conditional cash
transfer initiatives in India to incentivize families to delay their daughters'
marriage. The government of Haryana launched the *Apni Beti Apna Dhan* pro-
gram in 1994, which targeted poor households and disadvantaged groups to
delay marriage until after 18 and enhance the value of girls. It is important to
recognize that this kind of initiative from a state government is incredibly valu-
able and a very tangible signal of their commitment to tackling child marriage,
especially when we consider how few governments have been willing to commit
financial resources toward the issue. As the first cohort of girls targeted by the
program were turning 18, the International Center for Research on Women

conducted an evaluation of the program. Overall, the evaluation showed a decline in the number of child marriages, but this was largely attributed to the growing importance of education in the state of Haryana overall and higher rates of schooling and educational attainment among both girls and boys. Girls who were beneficiaries of the cash transfer program had slightly later marriages, but there was more pressure on them to marry during their 18th year (once the family had received the cash transfer). The evaluation found that there was no shift in the attitudes of families about child marriage or the value they placed on their daughters. It is likely that the same resources from the government program could have had a much deeper and more long-lasting impact if there had been an accompanying component focusing specifically on girls' empowerment (International Center for Research on Women, 2014b).

Educating Girls

Keeping girls in school is the single most effective intervention in delaying age of marriage. The more education a girl has, the later she is likely to marry, the fewer children she has, and the healthier and more prosperous she and her family are likely to be (UNICEF, 2010). Education builds knowledge, opens new opportunities, and can help to shift norms around the value of girls in the community. The very act of girls attending school can reinforce to the community that these girls are still children. However, too often, efforts to improve schooling focus more on infrastructure and primary school enrolment. Education programs rarely recognize the unique pressures that girls face and the social norms that keep girls out of school, contribute to their dropout from school, and push them into marriage.

If education is to be a successful tool to help girls avoid child marriage, schools need to be safe, of high quality, and girl friendly. It is important for education initiatives to pay special attention to the needs of girls at their critical transition from primary to secondary schooling, a time when school dropout rates for girls escalate (United Nations Population Fund, 2012). This might involve working with parents and community leaders to raise awareness of the benefits of delaying marriage and girls' education, scholarship programs for girls, female mentors and teachers, equipping schools with sex-segregated toilets, and providing training for teachers on how to ensure a safe environment for all students. For married girls, it is important that schools encourage and support them to continue their education in either an informal or formal setting, such as being part of a safe space program or undertaking part-time, remote, or vocational learning.

TOWARD A COMPREHENSIVE APPROACH TO ADDRESSING CHILD MARRIAGE

Underlying the emerging consensus on what needs to be done to end child marriage is a growing body of evidence on efforts to prevent child marriage or at least delay the age of marriage among girls. In 2011, commissioned by the World

Health Organization, the International Center for Research on Women undertook a systematic review of solutions to end child marriage (International Center for Research on Women, 2011). The review considered the results from evaluated programs that had a child marriage component. Building on this review, *Girls Not Brides* (2014a) conducted consultations with over 150 members and partners to develop a theory of change on child marriage, which highlights four critical strategies, which are explained in the next sections (and in Figure 9.2).

A number of key guiding principles emerged strongly when developing our theory of change: First and foremost, it is not enough to simply delay marriage to 18 without changing anything else about a girl's life. To reap the full benefits of ending child marriage, girls need to be able to make decisions about their own lives and need to be viewed as more than just future wives and mothers. Second, child marriage is not an isolated issue; given its complex nature and multifaceted impact, there is a role for many different stakeholders at different levels in addressing it. Third, change happens within communities when families and communities see better alternatives for their girls, but it does not happen overnight. We therefore need long-term coordinated efforts supported by enabling national, regional, and international environments. Fourth, to make progress, the issue must be recognized as one that holds back both development for communities and nations and a violation of girls' rights. Finally, we need greater investment in research and data collection to inform programs and policies and to track progress. Strategic collaboration between a range of actors is needed to maximize impact.

The four strategies to end child marriage are as follows: empowering girls, mobilizing families and communities, providing services, and creating a supportive legal and policy environment.

Empowering Girls

The reality in many contexts is that a girl's marriageability is her best perceived asset and opportunity in life, and unmarried girls often lack the knowledge, skills, or support to explore alternative futures. Girls who are already married are also vulnerable because of their social isolation and limited power within the household or community. As such, it can be difficult for them to access information, services, and programs—therefore, more targeted programs to reach and engage them are needed.

To enable girls to make genuine decisions about their lives, it is important to work directly with them to build their skills and knowledge, so that they can understand and exercise their rights and develop support networks. If girls and parents have safe, viable, and socially accepted and valued alternatives to marriage, they may be more likely to delay marriage and consider other opportunities. When girls are viewed simply as future wives and mothers, without any consideration of their individual interests and aptitudes, it is crucial to tackle the underlying gender inequalities and social norms and attitudes that hold girls back.

GIRLS NOT BRIDES
The Global Partnership to End Child Marriage
www.GirlsNotBrides.org

VISION:
A world without child marriage where girls and women enjoy equal status with boys and men and are able to achieve their full potential in all aspects of their lives.

Girls can decide if, when, and whom to marry | **Married girls lead healthy, empowered lives**

IMPACT

| Girls at risk of child marriage participate more in decisions that affect them, including regarding marriage | Girls are better able to avoid early pregnancy and to refuse unwanted sex | Married girls are better protected from violence, exploitation or abuse | Married girls increasingly access and use services and supports of all kinds | Married girls increasingly access divorce, annulment and child custody | Community, traditional and religious leaders take greater action to end child marriage and realise the rights of girls | Community, traditional and religious leaders increasingly support alternative roles for girls beyond marriage | Men and boys increasingly take action to end child marriage | Families engage less in exchange of dowry and bride price | Service providers take greater action to prevent child marriage and support the needs of married girls | Law enforcement officials increase implementation and enforcement of legal frameworks to prevent child marriage and protect married girls | Law enforcement officials increase use of civil registration systems for birth and marriage |

RESULTS

OUTCOMES

GIRLS
- Girls are increasingly aware of their rights
- Girls have the opportunity to develop solidarity with one another through peer groups and collective action
- Alternative economic, social roles for girls and women exits and are valued
- Increased access of married and unmarried girls to health, education, economic, and legal support

FAMILIES AND COMMUNITIES
- Families, communities and young people are increasingly aware of the harmful impact of child marriage and alternatives available
- Families, communities and young people value alternative options to child marriage
- Families and communities prefer not to marry girls as children
- Men prefer not to marry girls who are still children
- Increased use of media to inform and support norm change to end child marriage

SERVICES
- Increased access to safe, quality formal and non-formal education for girls
- Increased access to health services for adolescent girls, married and unmarried
- Health and education services establish protocols on identifying the warning signs and addressing the risks of child marriage
- Improved economic security for girls
- Improved commitment of programmes to prevent and mitigate risk of child marriage

LAWS AND POLICIES
- National laws reflect international and regional human rights standards
- Robust legal framework against child marriage in place that sets 18 as the minimum legal age for marriage and protects girls and women's rights
- Governments develop supportive policy frame works with adequate resourcing across Ministries to increase educational, economic and social opportunities for girls at risk of child marriage and married girls
- Strengthened civil registration systems for birth and marriage
- Increased accountability and monitoring of national/regional/community institutions

STRATEGIES

EMPOWER GIRLS
A wide range of programmes invest in girls, their participation and their well-being

MOBILISE FAMILIES & COMMUNITIES
Families, communities and young people are engaged to change attitudes and behaviours related to child marriage

PROVIDE SERVICES
Services across sectors reinforce one another and are tailored to the specific needs of girls at risk of child marriage and married girls

ESTABLISH AND IMPLEMENT LAWS & POLICIES
A robust legal and policy framework for preventing child marriage and supporting married girls is in place and effectively enforced

CATALYSING STRATEGY

Ending child marriage will require long-term, sustainable efforts. Change will ultimately take place within communities, but has to be supported and catalysed by collective efforts at national, regional and international levels. Adequate resources must be made available to support effective implementation of strategies. All those working to address child marriage should evaluate programmes, share promising practices, and coordinate their efforts to achieve maximum scale and impact. Recognising that child marriage does not take place in a vacuum, efforts to end child marriage should not be isolated from broader development efforts and should play an integral part in achieving development goals around the world.

PROBLEM:
Every year approximately 15 million girls are married as children across countries, cultures, religions and ethnicities. Child marriage is rooted in gender inequality and in the low value accorded to girls, and is exacerbated by poverty insecurity and conflict. It denies girls their rights, choice and participation, and undermines numerous development priorities, hindering progress towards a more equal, healthy and prosperous world.

FIGURE 9.2 *Theory of change to end child marriage.*

Source: Girls Not Brides. (2014a). *A theory of change on child marriage.* London, England. Reprinted with permission.
https://www.girlsnotbrides.org/child-marriage-theory-of-change/

Strategies that empower girls often include involving girls meaningfully in interventions as leaders and role models. Supporting young people to be agents of change is important because (a) they are directly affected and thus best placed to articulate their specific needs; (b) they can be role models and break the intergenerational cycle of child marriage because when girls are able to delay or avoid an early marriage, they will likely want to ensure a better future for their own children; (c) with the sheer size of the youth population in many countries, young people are critical to achieving results on a large scale—in many developing countries where child marriage is common, such as Uganda or Tanzania (UNICEF, 2016b), young people under the age of 24 comprise approximately half of the population; and (d) young people bring creativity, innovation, and legitimacy to efforts to end child marriage. *Girls Not Brides* members frequently mention the positive impact youth advocates have had in enlightening and convincing senior government officials about the importance of investing in interventions to address child marriage, making more daring policy demands, and being able to open up previously closed policy spaces with influential decision makers. High-profile legal cases and strategic litigation involving girls who experienced child marriage have also resulted in the changing of national laws and constitutional amendments to the legal age of marriage by governments such as Zimbabwe[1] and Tanzania.[2]

Mobilizing Families and Communities

Many families and communities practice child marriage because it is seen as the norm and has been part of their traditions for generations (Ghimire & Samuels, 2014). Changing norms is difficult and requires sustained intervention at many levels (Mackie & Le Jeune, 2009; Marcus & Harper, 2014). There is also a "market" element to marriage (Bruce, 2016) because it requires brides and grooms (and those who make decisions on their marriages) to subscribe to the norms that govern the practice. A single family may not want to delay marriage for their daughter for fear that she will be seen as "too old" or "undesirable" by potential partners. However, if a significant proportion of a community decides to change the unofficial rules of marriage, it will become much more acceptable for individual families to make this choice.

Whether the practice is cited as cultural or religious, child marriage is often driven by inequitable gender norms, such as an emphasis on protecting a girl's (and, by extension, her family's) honor by focusing on her virginity at marriage and controlling her sexuality (International Women's Health Coalition, Nirantar, CARE, American Jewish World Service, & Greeneworks, 2016). For change to happen, the values and norms that support the practice of child marriage need to shift. This requires working with families and the wider community to change attitudes and reduce the acceptance among those who make the decision to marry girls as children.

Nongovernmental organizations working at the grassroots level are using a variety of techniques—from community conversations, to street theater, to local

radio and art—to reflect on the practice of child marriage and its impacts for girls and their communities. Working with men and boys can be an important part of efforts to end child marriage as they are often the ones who hold the power and make the decisions regarding girls' marriages in many communities. Interventions targeting fathers, brothers, husbands, male relatives, and future husbands are important in helping men and boys reflect on the status quo and see the benefits of a community that values and supports girls and women to fulfill their potential (Greene, M. E., Stephanie Perlson, Alice Taylor, & Giovanna Lauro, 2015).

Religious and traditional leaders also have the potential to play a role in speaking out against child marriage and changing community attitudes. In communities where religious and traditional leaders play a prominent role in decision-making or influencing the prevailing norms, targeted interventions can support them to become positive advocates for change who fully understand the implications of child marriage for girls, their families, and communities (Karam, 2015).

A growing number of organizations are using mass media campaigns and channels such as radio, television, and digital media to raise awareness of girls' rights and the impact of child marriage. There are promising signs that messages promoting new norms, role models, and positive deviants can help change attitudes and behaviors concerning the value of girls and women (Center for Media and Health, 2016; Population Foundation India, 2016).

Providing Services

Preventing child marriage and supporting the needs of married girls requires tackling the economic and structural barriers that drive the practice. The most vulnerable girls tend to be those who have no access to education and health care and fall through the gaps of child protection mechanisms (UNICEF, 2014). Ensuring that integrated services are available to girls is important. As discussed, increasing access to accessible, high-quality, and safe schooling is a critical strategy in ending child marriage. Both unmarried and married girls need high-quality, adolescent-friendly health services to live healthy and safe lives. Both married and unmarried girls in countries with high rates of child marriage often have an unmet need for sexual reproductive health care, which means they are at risk of early pregnancy and contracting HIV (*Girls Not Brides*, 2016a) and other sexually transmitted diseases. Girls need to know about their bodies as well as the types of services and health care available to them. Making sure health services are adolescent friendly and that girls are able to access care without judgment and without male supervision are also important (World Health Organization, 2002). Ensuring there are adequate child protection mechanisms in place is an important part of our efforts to end child marriage. Establishing protocols on identifying the warning signs and addressing the risks of child marriage is a key part of this work. Child protection services need to be accessible via a number of channels, including education, health care

providers, community workers, and the police. Working with service providers to build their capacity can help to ensure that cases of child marriage in the community are responded to effectively.

Girls and women also need to have economic security if they are to live safe, healthy, and empowered lives. When they are accompanied by initiatives that seek to empower women and girls and change discriminatory social norms, direct economic incentives such as conditional cash transfers can help encourage families to consider alternatives to child marriage. Economic empowerment schemes such as microfinance or village savings and loan schemes can help girls to support themselves and their families without having to be married (Ara & Das, 2010; Kabir et al., 2007). Furthermore, ensuring girls have the opportunity to become financially literate and have the ability to open and easily access a bank account (without male supervision) can help them save in a secure way and become financially independent.

Creating a Supportive Legal and Policy Environment

The establishment and implementation of a strong, coherent, and comprehensive legal and policy framework can provide an important backdrop for improvements in services, changes in social norms, and girls' empowerment. While most countries have a minimum legal age of marriage, this is often not effectively enforced, and the age of marriage is often lower for women than for men. The legal age of marriage is often lower than 18 years, contravening the United Nations Convention on the Rights of the Child and a number of other international human rights standards. Even in countries with a marriage age of 18, pluralistic legal systems mean that religious or customary law can contradict and override national law. In addition, gender discrimination and loopholes in legislation continue to be rife, especially when it comes to issues around sexual consent, exceptions to the minimum age of marriage with parental consent, the right to own and inherit property, separation and divorce, and access to professional services and support.

Weak or nonexistent civil registration systems, particularly birth registration, prevent girls from providing official proof that they are too young for marriage. Registering births and marriages is important to prove the age of both partners and can help girls and women seek financial and legal redress if the marriage ends (Hanmer & Elefante, 2016). For change to be truly transformative, governments must show strong and sustained political leadership by making child marriage an issue of national importance.

The Role of Governments in Addressing Child Marriage

One of the key takeaways from the strategies identified previously is that child marriage is a cross-cutting issue that involves a range of stakeholders—girls,

boys, parents, families, communities, religious and traditional leaders, civil society, service providers, development partners, donors, and many others. Due to the scale and complexity of child marriage, it cannot just be addressed through a project-based approach; we need comprehensive, countrywide action, led by governments but with the active participation of civil society. By adopting the Global Goals for Sustainable Development, all United Nations member states have made a commitment to end child marriage by 2030 (Target 5.3).

To achieve this goal, governments need to initiate a national-level dialogue on how to accelerate progress to prevent child marriage and support married girls. National governments have a crucial role in addressing the practice. They have the ability to go to scale through structural interventions and can mobilize support for coordinated action. By demonstrating political will, they can provide an important signal to motivate others to take action. Furthermore, governments can take a stance against child marriage regionally and internationally, encouraging other countries to act.

A small but growing number of countries affected by child marriage have started to develop national initiatives to address the practice. Our consultations over the past 2 years explored lessons learned from national initiatives to end child marriage in 11 countries: Bangladesh, Burkina Faso, Chad, Egypt, Ethiopia, Ghana, Mozambique, Nepal, Uganda, Zambia, and Zimbabwe. In this research, we considered the process of development, content, and prospects for implementation of national initiatives. A number of common lessons emerged, discussed next.

LESSON 1: SUSTAINED GOVERNMENT LEADERSHIP AND POLITICAL WILL ARE NEEDED TO IMPLEMENT NATIONAL INITIATIVES TO END CHILD MARRIAGE

The success of a national initiative ultimately hinges on the leadership and commitment of the government. Without strong political will, any efforts to tackle child marriage through a whole-of-government approach cannot reach scale and result in transformative, lasting change for girls. In some countries, heads of government or the cabinet (or equivalent) have played a critical role in demonstrating public commitment to ending child marriage, which then gives the lead ministry responsible for coordinating a national initiative (usually a gender, women's, children's, or social welfare ministry) with the mandate and political clout to be able to influence other ministries to take action on child marriage in their own sectoral plans and policies. Political leadership and will are particularly important in contexts where slow judicial processes, constitutional amendments, and political stalemates on child marriage legislation may stall the progress or implementation of a national initiative.

LESSON 2: DEDICATED NATIONAL INITIATIVES ON CHILD MARRIAGE HELP WITH AGENDA SETTING AND COHERENCE, BUT RESPONSES NEED TO BE INTEGRATED ACROSS SECTORS RATHER THAN "STAND ALONE"

Integrated and comprehensive responses are needed from a range of sectors to address child marriage and improve the lives of girls. However, this does not mean all interventions need to be specifically or exclusively designed with "ending child marriage" as their sole goal. What is required is for each line ministry or department to integrate a focus on child marriage in the design, implementation, and monitoring of their work so that they can maximize their impact on preventing child marriage and supporting married girls. A national initiative that is driven and championed by the government can serve as a "road map" for coordinating and aligning efforts to address child marriage across sectors and ministries and help other actors—civil society, development partners, and donors, among others—outside the government better understand where to concentrate their efforts, how to work better with one another, and how to complement government efforts to ensure all vulnerable girls are supported.

Our research identified a number of ways in which a line ministry or department can integrate a focus on child marriage in the design, implementation, and monitoring of their work: working with the Ministry of Health to provide quality adolescent-friendly sexual and reproductive health programming, information, and services to girls, including those at risk of child marriage and married girls; working with the Ministry of Education to ensure girls at risk of child marriage and married girls are targeted in education efforts to ensure they have access to, and stay in, quality education (both primary and secondary); and working with child protection systems and services to strengthen response mechanisms to gender-based violence and violence against children, especially girls.

LESSON 3: THE PROCESS TO DEVELOP A NATIONAL INITIATIVE NEEDS TO BE INCLUSIVE AND PARTICIPATORY TO HELP FOSTER LONGER TERM IMPACT

In the development of a national initiative, inclusive and participatory development processes need to be supported by strong communication and collaboration between stakeholders, led by government, in order to build alignment across sectors and actors. Our research showed that efforts to address child marriage at the country level are often splintered, uncoordinated, and sporadic. In some countries, there may be multiple actors working toward the same end goal of ending child marriage, but without any coordination. For this reason, the development of a national initiative needs not only to be initiated and led by government from the very beginning, but also to take into account and incorporate work that is already

happening in the country. The process of developing a national strategy can play a key role in catalyzing a national movement to end child marriage.

CASE STUDY: PROCESS OWNERS IN EGYPT

> In 2014, in the development of Egypt's strategy, subcommittees were developed on specific technical aspects of the strategy, such as (a) legal issues; (b) sectoral technical issues—health, education, economic development; (c) financial challenges (working with Ministry of Finance and other bodies to ensure funding for implementation); and (d) social and religious challenges (working with cultural norms, the media, etc.). They were dubbed "process owners" and took responsibility for a certain part of the strategy development. This process helped to foster broad ownership of the strategy because implementers were being consulted and could identify the specific areas of the strategy they had fed into.

LESSON 4: NATIONAL INITIATIVES SHOULD BE INFORMED BY EVIDENCE AND RESEARCH TO ENSURE THEY ARE RESPONSIVE TO SUBNATIONAL VARIATIONS AND THE SPECIFIC NEEDS OF BOTH GIRLS AT RISK OF CHILD MARRIAGE AND MARRIED GIRLS

Research and evidence about the prevalence and context of child marriage, and what works to address it, should inform the strategic direction of national initiatives. Many of the countries we analyzed had conducted formative research on the prevalence, context, and drivers of child marriage in the country, as well as on existing interventions. Such research can help to identify hot spot areas of high prevalence (in terms of geographic location/vulnerable communities), as well as the most effective approaches in these contexts. Formative research is critical for identifying girls who are hardest to reach because of their location, those who are members of traditionally marginalized and excluded communities, girls who are out of school or who were never in school, migrant child laborers, trafficked or exploited girls, or girls who are not legally recognized or lack citizenship because their births, marriages, or citizenship were never registered. While scale and cost-effectiveness of interventions are important in planning for initiatives, it is also crucial to ensure that work is done to identify and tailor approaches to reach the most vulnerable girls.

Research and evidence should also inform the prioritization of approaches within the national initiative. It is important that the specific local barriers and root causes of child marriage are taken into account. For example, as discussed, while it may be tempting to see legal reform as a quick-fix solution, it is important to recognize that progress will not happen in some communities if underlying social norms are not tackled.

LESSON 5: CIVIL SOCIETY HAS A VITAL ROLE TO PLAY IN THE PLANNING, DEVELOPMENT, IMPLEMENTATION, AND MONITORING OF NATIONAL INITIATIVES, AND HOLDING GOVERNMENTS ACCOUNTABLE TO THEIR COMMITMENTS TO ADDRESS CHILD MARRIAGE

Civil society has an important role in holding governments to account to implement national initiatives, as well as their international and regional commitments and responsibilities around child marriage. Local civil society organizations have an important role in providing context-specific expertise and a more nuanced subnational understanding of child marriage to ensure interventions will target the hardest-to-reach and most marginalized girls. Civil society organizations are also crucial partners of local government in the sharing and adapting of national initiatives to local contexts.

CASE STUDY: CIVIL SOCIETY GENERATING EVIDENCE TO INFORM GOVERNMENT POLICY IN MOZAMBIQUE

In 2013, the Coligação para la Eliminação e Prevenção dos Casamentos Prematuros (CECAP), also known as *Girls Not Brides* Mozambique, comprising over 40 civil society organizations working together to accelerate the reduction of child marriage in Mozambique, was formed. CECAP worked closely with the government and development partners, especially UNICEF and United Nations Fund for Population Activities (UNFPA), in the development of research and policy analyses, which provided the evidence base and programming directions that directly influenced the eight defined pillars of the government's National Strategy to Prevent and Eliminate Child Marriage (2016–2019).

LESSON 6: GOVERNMENTS NEED TO STRENGTHEN THEIR CAPACITY TO COORDINATE EFFORTS TO ADDRESS CHILD MARRIAGE ACROSS MINISTRIES, PLAN AND COST OUT INTERVENTIONS, AND ALLOCATE THE REQUIRED FUNDING TO ADDRESS CHILD MARRIAGE

It is important for governments to put in place a functioning coordination mechanism (also known as a steering committee, advisory council, or coordinating unit) to ensure that efforts to address child marriage are aligned across line ministries—health, education, justice, child protection, social protection, and others. From the 11 countries analyzed, most coordination mechanisms seem to be chaired by the gender or women's ministry, and many have several functioning parts, such as an interministerial advisory body that takes important decisions on a national initiative, as well as a government-chaired technical working group or task force

composed of nongovernment stakeholders who focus on content and technical aspects.

Budgeting for national initiatives is also an ongoing challenge in terms of both accurately costing a national initiative and ensuring adequate budget allocation for its implementation. Of the countries analyzed, while some national initiatives have indicative figures allocated in implementation plans, no government has as yet demonstrated how it will find and allocate sufficient funds for a comprehensive response to child marriage.

CASE STUDY: THE COST OF INACTION ON CHILD MARRIAGE IN NEPAL

In 2014, UNICEF Nepal assessed the economic cost of inaction on child marriage in Nepal (Rabi, 2014), with the assessment presented to the Ministry of Finance. This showed that failure to address child marriage in Nepal had cost the country 3.87% of its gross domestic product. The economic loss was calculated based on potential cash flow from the labor market that could have been generated had girls delayed their marriage until the age of 20. The figure is considered to be a conservative estimate given the study only focused on educational deprivation and consequent loss in earnings as a result of child marriage and did not incorporate other costs in the areas of health, mortality, or psychological deprivation. As a result of the study, the Ministry of Finance played an active role in Nepal's child marriage strategy development process, providing strategic support on both national-level planning and budgeting across ministries and pointing out allocations available for addressing child marriage through local government mechanisms.

Conclusion and Recommendations

Over the last 5 years, child marriage has moved from a taboo issue to one of international concern, supported by a growing global movement. While progress has been made in a relatively short time, there is still much to do to ensure millions of girls are not married as children and are empowered to make decisions about their bodies and lives, including if, when, and whom to marry. This chapter has explored emerging solutions to prevent and respond to child marriage across sectors and levels of society. While there are no silver bullets, we know what needs to be done. The *Girls Not Brides* theory of change and its four strategic approaches—empowering girls, mobilizing families and communities, providing services, and establishing and implementing laws and policies—provides a useful starting point to structure a comprehensive response to this complex and multifaceted issue. In particular, we have focused here on the role of governments, as they are critical in terms of providing the leadership and political will needed to make child marriage a priority on national agendas.

Our research and discussions with civil society organizations, governments, United Nations agencies, donors, development partners, and research organizations have consistently pointed to a number of key actions that need to be taken now if we want to see progress toward ending child marriage:

1. The development, implementation, and adequate resourcing of comprehensive national policies, programs, and plans to end child marriage and support married girls, led by governments and in partnership with civil society and other key stakeholders, are critical.

2. Increased funding for efforts that prevent child marriage and support married girls is needed. This also includes support for grassroots groups working directly with those affected and initiatives that tackle social norm change over the long term, as well as large-scale investment in education and health programs for girls.

3. Efforts to end child marriage need to be evidence based. Some of the biggest gaps that must be filled to better inform policies and programs to tackle the practice were identified by a number of organizations together in 2014 (Svanemyr et al., 2015) and remain relevant today: drivers of child marriage in less well studied areas—like Central Asia, North Africa, and Latin America; the impact of evolving social, political, economic, and environmental factors on child marriage; protective factors that prevent child marriage in places it would be expected; the intergenerational impact of child marriage; differences in vulnerability between younger and older adolescents; and what works to address child marriage and support married girls at scale. Lessons from other movements will be critical to improve our understanding of how social norm change concerning child marriage will take place, especially at scale, and what a strong multisectoral response will look like in a range of national and subnational contexts.

4. For the global movement to continue to grow and deepen, it is essential to celebrate and share successes, including case studies of individuals overcoming child marriage, of communities that have united to promote a better future for their girls, of policy change or programmatic initiatives that have had a large-scale impact, and ultimately of regions and countries where child marriage has been tackled in a holistic and comprehensive manner. New stakeholders, new partnerships, and new champions with young people at the forefront of the movement will be needed.

5. Finally, as the movement has transitioned from agenda setting to implementation, it will be vital to hold governments accountable to their international, regional, and national commitments, in particular to developing ambitious plans for implementing Target 5.3 of the Global Goals for Sustainable Development with clear indicators for progress.

As we continue to expand our collective work on tackling child marriage, it is important to recognize the underlying gender inequality and patriarchal norms and values that drive and perpetuate the practice. Child marriage cannot be ended without addressing the underlying root of the issue—that girls and women are not valued as equal to boys and men. While programmatic and policy efforts will vary in scope and focus across countries, a key principle to help everyone in the global movement to remain aligned is to keep coming back to our joint vision: of a world free of child marriage where girls are able to achieve their full potential in all aspects of their lives.

Notes

1. See *Loveness Mudzuru & Ruvimbo Tsopodzi v. Minister of Justice, Legal and Parliamentary Affairs N.O., Minister of Women's Affairs, Gender & Community Development and Attorney General of Zimbabwe,* Constitutional Court of Zimbabwe, 2015.

2. See *Rebeca Z. Gyumi v. The Attorney General,* High Court of Dar es Salaam, 2016.

References

Ara, J., & Das, N. (2010). *Impact assessment of Adolescent Development Programme in the selective border regions of Bangladesh* (Working Paper No. 14). Dhaka, Bangladesh: BRAC.

Bokhari, F. (2009). *Stolen futures: Trafficking for forced marriage in the UK.* London, England: ECPAT UK.

Bruce, J. (2016). The difficulties of "living white girl." *Journal of Virus Eradication, 2*(3), 177–182.

CARE United Kingdom. (2015). To protect her honour: Child marriage in emergencies, the fatal confusion between protecting girls and sexual violence. London, England: Author.

Constitutional Court of Zimbabwe. (2015). Loveness Mudzuru & Ruvimbo Tsopodzi vs. Minister of Justice, Legal and Parliamentary Affairs N.O., Minister of Women's Affairs, Gender & Community Development and Attorney General of Zimbabwe. Constitutional Court of Zimbabwe, Judgement No. CCZ 12/2015, Const. Application No. 79/14.

Ghimire, A., & Samuels, F. (2014). *Continuity and change in social norms for Nepali adolescent girls: Looking into changes, drivers and inhibitors in marriage and education* (Policy brief). London, England: Overseas Development Institute.

Girls Not Brides. (2014a). *A theory of change on child marriage.* Available form https://www.girlsnotbrides.org/theory-change-child-marriage-girls-brides/

Girls Not Brides. (2014b). *Understanding the scale of child marriage.* Retrieved from https://www.girlsnotbrides.org/resource-centre/understanding-scale-child-marriage/. Accessed January 14, 2016.

Girls Not Brides. (2015). *Lessons learned from selected national initiatives to end child marriage.* Available from https://www.girlsnotbrides.org/resource-centre/lessons-learned-from-selected-national-initiatives-to-end-child-marriage/

Girls Not Brides. (2016a, July). *Child marriage and HIV: A relationship ignored for too long.* Information brief prepared for the 21st International AIDS Conference convened in Durban, South Africa.

Girls Not Brides. (2016b). *It takes a movement: Reflecting on five years of progress towards ending child marriage.* Available from https://www.girlsnotbrides.org/wp-content/uploads/2016/09/IT-TAKES-A-MOVEMENT-ENG.pdf

Girls Not Brides. (2016c). *Reflecting on National Initiatives to End Child Marriage: Lessons From 11 Countries.* Available from https://www.girlsnotbrides.org/resource-centre/lessons-learned-national-initiatives-child-marriage-2016/

Greene, M. E., Stephanie Perlson, Alice Taylor, & Giovanna Lauro. (2015). *Engaging Men and Boys to Address the Practice of Child Marriage.* Washington, DC: GreeneWorks. https://promundoglobal.org/wp-content/uploads/2015/04/Engaging-Men-and-Boys-to-End-the-Practice-of-Child-Marriage1.pdf

Hanmer, L., & Elefante, M. (2016). *The role of identification in ending child marriage: Identification for Development (ID4D).* Washington, DC: International Bank for Reconstruction and Development/World Bank.

High Court of Dar es Salaam. (2016). *Rebeca Z. Gyumi v. The Attorney General,* Matter of a petition to challenge constitutionality of Section 13 and 17 of the Law of Marriage Act (CAP 29 R.E. 2002), Miscellaneous Civil Cause No. 5 of 2016, High Court of Dar es Salaam, United Republic of Tanzania.

International Center for Research on Women. (2007). *How to end child marriage: Action strategies for prevention and protection.* Available from https://www.icrw.org/publications/how-to-end-child-marriage/

International Center for Research on Women. (2011). *Solutions to end child marriage.*

International Center for Research on Women. (2012). *Girls' education, empowerment, and transitions to adulthood.*

International Center for Research on Women. (2014a). *Impact of conditional cash transfers on girls' education.*

International Center for Research on Women. (2014b). *Impact on marriage: Program assessment of conditional cash transfers.*

International Center for Research on Women. (2015). *Making change with cash? Evaluation of a conditional cash transfer program to improve the status of girls in Northern India.* Synthesis of findings.

International Center for Research on Women & Girls Not Brides. (2016). *Taking action to address child marriage: The role of different sectors: conflict and humanitarian crisi*s.

International Women's Health Coalition, Nirantar, CARE, American Jewish World Service, & GreeneWorks. (2016). *Child, early and forced marriage and the control of sexuality and reproduction, a brief.* Available from http://www.care.org/sites/default/files/documents/Greeneworks-brief-CEFM-color.pdf

Kabir, M., Afroze, R., & Aldeen, M. (2007). *Impact assessment of Adolescent Development Programme (ADP) of BRAC* (BRAC Research Report). Dhaka, Bangladesh: BRAC.

Karam, A. (2015). Faith-inspired initiatives to tackle the social determinants of child marriage. *The Review of Faith & International Affairs*, *13*(3): 59–68.

Mackie, G., & Le Jeune, J. (2009). *Social dynamics of abandonment of harmful practices: A new look at the theory* (Special Series on Social Norms and Harmful Practices Working Paper 2009-06). Florence, Italy: UNICEF Innocenti Research Centre.

Marcus, R., & Harper, C. (2014). *Gender justice and social norms—Processes of change for adolescent girls: Towards a conceptual framework 2.* London, England: Overseas Development Institute.

Maswikwa, B., Richter, L., Kaufman, J., & Nandi, A. (2015). Minimum marriage age laws and the prevalence of child marriage and adolescent birth: Evidence from sub-Saharan Africa. *International Perspectives on Sexual and Reproductive Health, 41*(2), 58–68. doi:10.1363/4105815

Office of the United Nations High Commissioner for Human Rights. (2014). *Annual report of the United Nations High Commissioner for Human Rights and reports of the Office of the High Commissioner and the Secretary-General* (A/HRC/26/22). Geneva, Switzerland: Author.

Parsons, J., Edmeades, J., Kes, A., Petroni, S., Sexton, M., & Wodon, Q. (2015). Economic impacts of child marriage: A review of the literature. *The Review of Faith & International Affairs, 13*(3), 12–22. doi:10.1080/15570274.2015.1075757

Population Foundation India. (2016). *A case study on multi-media edutainment initiative "Main Kuch Bhi Kar Sakti Hoon."* Available from https://www.girlsnotbrides.org/wp-content/uploads/2016/02/Case-study-Mobilise-families-PFI.pdf

Rabi, A. (2014). *Cost of inaction: Child and adolescent marriage in Nepal* (UNICEF Nepal Working Paper Series [WP/2014/001]). Kathmandu, Nepal: UNICEF Nepal.

Raj, A., & Boehmer, U. (2013). Girl child marriage and its association with national rates of HIV, maternal health, and infant mortality across 97 countries. *Violence Against Women, 19*(4), 536–551.

Svanemyr, J., Chandra-Mouli, V., Raj, A., Travers, E., & Sundaram, L. (2015). Research priorities on ending child marriage and supporting married girls. *Reproductive Health Journal, 12*, 80. doi:10.1186/s12978-015-0060-5

Svanemyr, J., Scolaro, E., Chandra-Mouli, V., Blondeel, K., & Temmerman, M. (2013, November 2). *The contribution of laws to change the practice of child marriage in Africa.* Working paper for the Inter-Parliamentary Union (IPU)/Pan African Parliament 2013 Women's Conference on Parliamentarians Responding to Violence Against Women and Girls in Africa "From Legislation to Effective Enforcement." Johannesburg, South Africa.

Turner, C. (2013). *Out of the shadows: Child marriage and slavery.* London, England: Anti-Slavery International.

United Nations Children's Fund (UNICEF). (2010). *Progress for children: Achieving the MDGs with equity.* UNICEF, New York. Available from https://www.unicef.org/publications/files/Progress_for_Children-No.9_EN_081710.pdf

United Nations Children's Fund (UNICEF). (2014). *Ending child marriage: Progress and prospects.* UNICEF, New York.

United Nations Children's Fund (UNICEF). (2015). *The state of the world's children.* New York, NY: Author.

United Nations Children's Fund (UNICEF). (2016a). *Child protection from violence, exploitation and abuse: Child marriage.* Retrieved from https://www.unicef.org/protection/57929_58008.html. Accessed January 23, 2017.

United Nations Children's Fund (UNICEF). (2016b). *The state of the world's children.* New York, NY: Author.

United Nations Children's Fund (UNICEF) & Girls Not Brides Nepal. (2014). *Formative research to inform Nepal's National Strategy to End Child Marriage.* Formative research findings. UNICEF and Girls Not Brides Nepal, Kathmandu.

United Nations Human Rights Council. (2012, July). *Thematic report of the special rapporteur on contemporary forms of slavery, including its causes and consequences, to the UN Human Rights Council, on Servile Marriage* (A/HRC/21/41). Geneva, Switzerland: Author.

United Nations Population Fund. (2012). *Marrying too young: End child marriage.* UNFPA, New York. Available from https://www.unfpa.org/sites/default/files/pub-pdf/MarryingTooYoung.pdf

Women's Refugee Commission. (2016). *A girl no more: The changing norms of child marriage in conflict*. Women's Refugee Commission, New York. Available from https://reliefweb.int/sites/reliefweb.int/files/resources/Changing-Norms-of-Child-Marriage-in-Conflict.pdf

World Health Organization (WHO). (2002). *Adolescent-friendly health services—An agenda for change.* WHO, Geneva: Switzerland.

World Vision United Kingdom. (2013). *Untying the knot: Exploring early marriage in fragile states.* World Vision, United Kingdom.

Adolescents and Armed Conflict

WAR, CONFLICT, AND CHILD SOLDIERS

Theresa S. Betancourt, Stephanie Zuilkowski, Emily Coles,
Katharine Collet, and Musu Jambai

The world is witnessing a rapid rise in the number of war-affected youth. At present, an estimated 250 million children live in countries affected by war (United Nations Children's Fund [UNICEF], 2016). Despite the importance of adolescent development for economic progress and peace in war-affected regions, attention to the health and life opportunities for young people is often absent in fragile states. For instance, in Syria, Yemen, and Iraq, ongoing violence has severely constrained access to education and life opportunities for a generation of developing young people (UNICEF, 2015).

The "social ecology," or the multiple and interrelated layers of influence that shape a young person's health and well-being, is critical for developing an understanding of the impact of armed conflict on adolescent development and mental health (Betancourt & Khan, 2008; Betancourt et al., 2013; Bronfenbrenner, 1979). Societies affected by violence often face disruption to the entire social ecology. This disruption can continue over time, well into the postconflict recovery period. Thus, life outcomes of war-affected youth are shaped by much more than direct war-related exposures to violence and loss (Zuilkowski & Betancourt, 2014). Often, actors in modern conflicts target the fabric of day-to-day life, including the many places where young people spend their time, such as schools and neighborhoods (Ager et al., 2015; Omole et al., 2015; Oyewole, 2016). Despite the longer term consequences of modern warfare, too often research and interventions related to war-affected children, youth, and families are characterized by a short-term vision with little attention to the types of investments in health and social services strengthening that might be sustainable in the postconflict period. In the context of war-affected adolescents, longitudinal research has the potential to illuminate longer term needs and arrive at health promotion and services models that better reflect developmental realities

for war-affected young people and leverage factors that help young people to thrive despite significant life adversity.

In addition to adopting an ecological approach, research can be strengthened by integrating a human security perspective. The human security agenda has grown in recent years (Human Security Unit, 2009), building on the UN Convention on the Rights of the Child (CRC) and the Paris Principles and Guidelines on Children Associated With Armed Forces or Armed Groups. Proponents of this approach argue that, beyond national security, there is an inherent obligation to also attend to the human security needs and rights of the civilian populations in situations of danger (Bruderlein, 2000; Stichick & Bruderlein, 2001).

Researchers and policymakers alike must also acknowledge that children and youth facing adversity are not singularly victims of war. To survive in the face of numerous threats, they demonstrate tremendous agency, often assuming roles as heads of households, student leaders, and actors in peace building, while others may be drawn into more risky survival strategies, such as becoming a soldier in an armed group (Raynaut, 1997). Treating this group as children incapable of making their own decisions and taking action results in missed opportunities to develop resilience and promote healing in the postwar context.

This chapter explores the consequences of war on the development and mental health of adolescents globally and the implications for prevention and intervention programs. We use the example of war-affected youth in Sierra Leone to illustrate the interrelatedness of the core security needs and rights of adolescents, using the SAFE model of child protection as a lens for analysis. In addition, the chapter proposes ideas for how to promote youth development and well-being in the context of violence and other forms of adversity.

Adolescents in Conflict Settings

Adolescents in areas affected by war and communal violence face loss; separation from family, friends, and their extended social networks; lack of access to critical health and social services; and obstacles to educational and vocational opportunities. Overall, modern warfare upsets the entire social ecology that normally supports healthy development and life outcomes in adolescents as they transition to adulthood. Modern warfare has witnessed increased involvement of nonstate actors (Geneva Centre for the Democratic Control of Armed Forces & Geneva Call, 2015), who are much less likely than state armies to know about, or hold themselves accountable to, international humanitarian law (Bellal et al., 2011). When state actors do not protect basic security needs, adolescents in war-affected regions are often left vulnerable to risky survival strategies that can feed predatory and abusive practices, including sexual exploitation and recruitment and abduction of young people into armed groups.

Despite their vulnerability, however, adolescents in war-affected settings should be seen not only as victims but also as individuals with the agency to act and make decisions in accordance with their evolving capacities. The ability of young people to act on their own behalf and to participate in decision-making that affects their lives is constantly evolving as an adolescent matures. The importance of considering adolescent views, and their right to participate in decision-making, is a core theme of the UN CRC articulated in Articles 12–15 and discussed further in the next section.

THE UN CONVENTION ON THE RIGHTS OF THE CHILD
AND ADOLESCENT DEVELOPMENT IN WAR

The UN CRC is central to any discussion of war-affected youth and encompasses the minimum conditions required for the survival and development of children in humanitarian crises, armed conflicts, natural disasters, as well as massive social and economic crises. Several key CRC articles have particular relevance to the situation of adolescents in war. These include the rights to life and development (Article 6); protection from all forms of violence (Article 19) and exploitation (Articles 34–36); access to an adequate standard of living (Article 27); and health and education (Articles 24 and 28). The CRC also underscores a child's/adolescent's right to a name, a family, and a national identity as well as protection from unjust separation from one's family, including provisions for reunification (Articles 7–10). There is specific reference to the protection of children and adolescents who are refugees (Article 22) or otherwise affected by armed conflict (Article 38) and their rights to physical and psychological recovery and social reintegration (Article 39) (Arts, 2014). The CRC defines children as "every human being below the age of 18 years unless, under the law applicable to the child, majority is obtained earlier" (United Nations, 1990). While countries may have different thresholds for childhood and understandings of adolescents (usually the period from 13 to 17 years of age), the age of 18 is a standard threshold in international law.

Beyond this normative framework laid out by the CRC, a human security perspective is useful in understanding the situation of adolescents facing multiple forms of adversity as is common in situations of armed conflict. Like the issues included in the CRC, the security issues facing war-affected adolescents are interrelated and interdependent and should be viewed holistically. For example, adolescents who suffer sexual violence in armed conflicts may be made vulnerable to both disease and mental health problems (World Health Organization [WHO], 2002). Interruptions to the basic security needs of developing adolescents in war-affected settings may undermine their chances of reaching their maximum developmental potential, including school success and economic self-sufficiency, even once a conflict subsides. In this manner, adolescent survival depends on physiological necessities, safety, communal relationships, and opportunities for personal development. While safety and physiological needs are addressed by food, health

care, and physical protection, children's personal development needs are intimately linked to their social environment—their families and communities. The survival of communities in turn relies on security of the younger generation. In essence, adolescent human security is just as concerned with maintaining attachment relationships as it is with providing for physiological and physical security needs.

Informed by a human security perspective, the SAFE model of child and adolescent protection is a rights-based, holistic model of child protection with relevance to understanding the situation of adolescent development in situations of armed conflict (Betancourt, Fawzi, et al., 2010; Betancourt et al., 2012, 2015). It situates adolescent health, well-being, and protection within the nested social ecologies of families and communities and their larger political, cultural, and historical context. The SAFE model shown in Figure 10.1 examines the interplay between rights that are essential for life, survival, and development: *s*afety/freedom from harm; *a*ccess to basic physiological needs and health care; *f*amily and connection to others; and *e*ducation/economic security. The model is a framework for analysis of child protection in any context, including those affected by war. While fundamental physical conditions and basic needs for personal safety are necessary for adolescent well-being, they are not alone sufficient.

In situations of armed conflict, as in other situations of risk, adolescents faced with insecurity in any of the SAFE domains may engage in adaptive behaviors and survival strategies that put them at risk in other areas. For example, if children are abused and neglected in their family or community, they may seek to protect themselves by joining armed forces or armed groups (Kohrt et al., 2016). For instance, in Nepal, 38% of female former child soldiers and 34% of male child soldiers said they had joined the Maoists "to escape distress" (Kohrt et al., 2016). Banding together for protection and personal advancement can foster a sense of identity and community for adolescents, even when shaped by war or retribution

The SAFE Model of Child Protection

Safety, freedom from harm

Economic security; education

Access to basic physiological needs (i.e., food, shelter, water, health care)

Family and connection to others
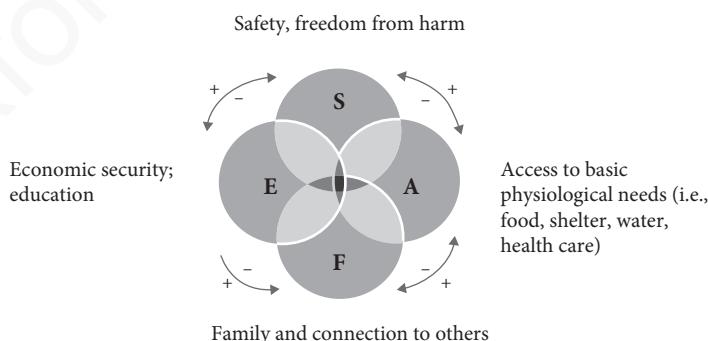
FIGURE 10.1 *The SAFE (*s*afety/freedom from harm; *a*ccess to basic physiological needs and health care; *f*amily and connection to others; and *e*ducation/economic security) model of child protection.*

ideology (Parra et al., 2012). For example, among a sample of female demobilized child soldiers in Colombia, the most common reasons given for joining armed groups were categorized as "self-assertive"—including the desire for adventure and freedom (Parra et al., 2012). Joining an armed group may help young people to secure their basic needs for food, shelter, and a livelihood (Kohrt et al., 2016). In Nepal, poverty was a particular risk factor for boys (Kohrt et al., 2016). In the long run, however, these choices put them at even greater risk of mental and physical harm.

The SAFE model underscores the agency of adolescents by elucidating the survival strategies that are set into motion when any given domain is insecure (Betancourt, Fawzi, et al., 2010). A model such as SAFE is intended to identify and build on adaptive strategies and to highlight risky strategies in order to enact preventive interventions, provide alternatives, or end third-party manipulation. Using the SAFE lens for analysis can help point to programs and policies that ensure participation of adolescents in the identification or creation of viable, alternative adaptive strategies that can secure the protection of adolescents facing insecurity in situations of armed conflict.

Using examples from our longitudinal study in Sierra Leone, the next section examines the situation of human security and adolescent transitions to adulthood. Similar analyses are relevant to the ongoing Syrian refugee crisis as well as processes of youth demobilization and reintegration in transitioning postconflict settings like Colombia.

The Example of War-Affected Youth in Sierra Leone

Sierra Leone's 11-year civil conflict (1991–2002) involved a number of warring groups, including the Revolutionary United Front (RUF), the Sierra Leonean Armed Forces Revolutionary Council (AFRC), the Sierra Leone Army (SLA), and other local groups, such as the Civil Defense Forces (CDF). During this period, tens of thousands of civilians were killed, and an estimated 75% of the population was displaced at some point during the conflict (Medeiros, 2007; Williamson & Cripe, 2002). A wide range of human rights abuses were documented, including mass mutilations and pervasive use of children in armed conflict. As many as 28,000 children were conscripted into fighting forces, some as young as 7 years old (Coalition to Stop the Use of Child Soldiers, 2008; Mazurana & Carlson, 2006). While many were abducted into their role as child soldiers, other children assumed a more active role in joining forces, in part due to an extremely limited set of opportunities. This was caused by a breakdown in family and community systems, as well as insufficient educational opportunities for youth (Ashby, 2002).

As a result of youth involvement with armed forces and groups, many witnessed, and even perpetrated, acts of intense physical and sexual violence. Violent acts

included executions, death squad killings, torture, rape, detention, bombings, forced displacement, destruction of homes, and massacres. Throughout this time, involved youth were continually deprived of their rights to the protection of their families and denied education basic needs, such as food, water, clothing, and shelter.

METHODOLOGY

In 2002, one of us (T. S. B.) and the International Rescue Committee (IRC) joined together to conduct a longitudinal study of former child soldiers and other war-affected youth in Sierra Leone. The overall aim of the study was to examine risk and protective factors shaping social reintegration and psychosocial adjustment over time. This research explored a number of issues that are relevant to the development of children in war. Research questions focused on the underlying issues continuing to affect, and thus prevent, war-affected youth from being fully reintegrated back into their communities. This included their experiences securing a livelihood, caring for their families, completing school, engagement in high-risk behavior, and involvement in civil society. The study examined factors such as age of involvement with armed groups, individual experiences of loss, violence exposure, family relationships, social support, and societal stigma, in addition to macro-level opportunities, such as school and work access (Betancourt & Khan, 2008). The study has continued to track the original cohort of war-affected youth who were 10–17 years old at the beginning of the study and their caregivers. A fourth wave of data collection has been completed (by T. S. B.); this includes, in addition to the original participants, interviews with their intimate partners and offspring.

The intergenerational longitudinal study of war-affected youth (LSWAY) used a mixed-methods design, integrating both quantitative and qualitative methods over multiple periods of data collection. Qualitative data on local constructs informed the development and selection of core constructs of interest for the quantitative survey, such as community acceptance and family support. Surveys were conducted among war-affected youth and their caregivers at four time points: 2002, 2004, 2008, and 2016 (Table 10.1).

In addition, a series of in-depth qualitative interviews with a subset of youth and their caregivers were completed in 2004 (T2), 2008 (T3) and 2016–2017 (T4).

TABLE 10.1 Intergenerational Longitudinal Study

	Wave 1, 2002	Wave 2, 2004	Wave 3, 2008	Wave 4, 2016–2017
Initial cohort, enrolled	401 enrolled	529 enrolled	529 enrolled	529 enrolled
Initial cohort, surveyed	401 interviewed	337 interviewed	387 interviewed	348 interviewed
Caregivers of initial cohort, surveyed		354 interviewed	434 interviewed	274 interviewed

A number of focus groups were also held in major resettlement communities with community members, caregivers of war-affected youth, and young people, including individuals involved and not involved in armed groups (Betancourt et al., 2008).

The sample of youth participating in the interviews captured an array of degrees of involvement with different types of armed groups as well as a range of reintegration experiences, including self-reintegration and disarmament, demobilization, and reintegration (DDR) programs. The analyses below make use of data up through T3. All of the interviews focused on their overall experiences as a result of the war, especially concerning reintegration, stigmatization, and coping mechanisms.

CASE STUDIES

Consistent with the SAFE model of security and rights of children, our intergenerational research has highlighted several interrelated processes shaping trajectories of risk and resilience in war-affected youth (Betancourt, Agnew-Blais, et al., 2010; Betancourt, Borisova, et al., 2010; Betancourt, Brennan, et al., 2010; Betancourt, Zaeh, et al., 2010). There were notable differences in the experiences of youth by nature of involvement in armed groups as well as across gender and age. Next, we present the stories of two Sierra Leonean youth who participated in our longitudinal study. The experiences of Komba, a male who was 24 years old at T3 in 2008, and Fanta, a female participant who was 20 years old in 2008, help illustrate the interplay between different domains of human security and youth development.

Komba's Story

Komba is a young man living in a diamond-mining area of eastern Sierra Leone. He was abducted by RUF rebels at a young age (approximately 5) and remained with them for 10 years until the conflict ended. Komba's older brother recalled the abduction: "After I was born one child was born before [Komba] was born. . . . We were captured together with him. But the rebels let us go and took him."

While with the RUF, Komba first carried out domestic chores, which was common for young children. However, in time he was trained by the group and became involved in reconnaissance and direct combat. He witnessed torture, death, and massacres. His grandmother reported that Komba watched a hot iron being put into a woman's vagina. He also injured or killed strangers and acquaintances, beating one man to death. In one interview, he reported that he killed close friends and extended family. Komba was also a victim of violence—he was beaten, threatened, stabbed, shot, and raped three times by his captors. To numb him and make him compliant, the rebels forced him to ingest *jamba* (marijuana), cocaine, and amphetamines.

When the war ended, Komba (approximately 16 years old) was reunited with his family, who were extremely thankful, as his brother remembers:

> We offered sacrifices to God. We had pledged before that time that if we found him again we would offer sacrifices to God. So when he came back we did this and also took him to the mosque so that prayers would be offered for him. We had made a commitment to God that we would do these things. . . . After he was reunited with us we sat him down and asked him about how he was treated and what had happened to him so that he would know that we cared.

Despite the initial warm welcome, Komba struggled at first with family and village life after his return, having spent his formative years with the RUF. As his brother explained:

> When he initially came back he was very mean and cruel. He was very cruel. He had no fear for others including us his elders. . . . There were lots of complaints about him. So some of our relatives got tired of sorting things out for him. They concluded that it was the rebel's ways that he was continuing. They used to say bad things against him.

Two years after this initial interview, Komba reported that he had come far in his adjustment: "I'm happy now, I live with my parents and they give me food." When faced with life's difficulties, he said "I usually sit quietly until I feel better and at times, I pray." He was happy to be attending school and had received financial help with school fees from nongovernmental organizations (NGOs): "I don't pay school charges because of [NGO] . . . and [NGO] gave me rice seeds to plant." Overall, he felt liked, welcomed, and trusted by those in his family and community. He reported a sense of satisfaction and confidence. He said that he does not suffer from bad dreams or memories, but continued to use coping skills such as putting his faith in God, playing sports with friends, and seeking advice from others as needed.

Despite showing positive signs of improved mental health and reintegration in 2004, by 2008 Komba was again experiencing problems. He reported suffering from some physical and emotional difficulties, including feeling weak and having headaches, a lack of energy, and a poor appetite from time to time. Komba discussed unwelcome dreams of the past, trouble sleeping and concentrating, and getting into fights. He blamed himself for his actions and behavior while with the RUF. He said that sometimes he felt hated in his family. At this point, Komba said that he suffered from *poil hat*[1] and *toment*,[2] local terms for depression-like and anxiety-like problems. To cope, Komba mentioned trying to see things in a more positive light and seeking advice or counseling from those close to him.

One factor that may have contributed to this change in 2008 was that Komba no longer received NGO school fee support and was not able to finish his schooling. Despite this change, he still had a vision for his future and hoped to "go to college," "have money," and even one day "be the president of Sierra Leone."

Fanta's Story

Fanta is a young woman living in a small town in the diamond-mining region of Sierra Leone. She was abducted by RUF fighters at the age of 5 to serve as a domestic servant and was held for 10 years, from 1992 until 2002. At one point during this period, Fanta was part of the SLA, which the RUF was fighting against. Caregiver interviews indicated that Fanta's mother was devastated when her daughter was taken:

> You know when the rebels attacked the whole place was in disarray and we were hiding in the [bushes] so they attacked and we ran in a different direction. That was when she was captured. When I came back to collect her where I hid her, she was not there.

Fanta initially performed chores such as cooking and cleaning in the rebel camp, as well as carrying arms and ammunition through the bush for the rebels. She was eventually trained to fight by the RUF and was involved in spying and relaying war activities to her commanders. She reported having killed or injured at least one person during this time. Fanta witnessed the abduction of other children, violent punishments, maimings, torture, rapes, shootings, killings, and massacres. She was subject to terrible beatings: "I was also afraid of the constant beating; they used to tie us up and throw water on us as they flog us." In addition to the beatings, Fanta was forcibly raped at the age of 8: "I was afraid of being killed, because they use to kill people on regular basis, and thought they will make me one of their wives."

At the end of the war, children were reunited with parents and caregivers. Fanta recounted the experience:

> They took me along and crossed the big river to Daru. I stayed there until they announced that all children with the fighting forces should be brought to them so that they will trace their parents. . . . I went and gave my name; they gave us food and took us in a helicopter to Kenema. [At the time] I felt happy . . . because I wanted to see my mother. . . . I hoped to see my relatives once more so I prayed every day for such to happen.

It was extremely difficult to locate Fanta's family as she had been abducted at such an early age and did not remember the name of her village or where it was. "The [NGO] were looking for our relatives; they used to put us in a vehicle and roam about the streets of Kenema and maybe our relatives or somebody will recognize us and take us to our parents." Fanta explained that it was luck that she was reunified with her family. "One day . . . we were taken to a camp where I saw my grandma's sister in that camp so I ran to her. . . . Therefore, she took me to her house in Nyadayaima camp in Kenema." Fanta stayed with the relative for a time in another district and then was moved to her home district to other relatives, though she still could not find her parents, who had escaped to

Guinea during the war. It was only by chance that she was eventually reunited with her parents:

> My mother's younger brother went to the village and to our house and begged for water. By then he had not seen my father yet. I went and brought the water. When he saw me he asked if I am [Kamara's] younger sister as they call my brother by his surname. Then I said yes and ran to him and embraced him. He then called my parents and they came for me.

At the time of the baseline survey in 2002, Fanta had not yet reunited with her parents; she was staying with an aunt and uncle, cousins, and some of her siblings and was in school. She reported that she played and spent time with her friends, was helpful to adults, felt good about her future. She said she never cried, felt lonely, lacked friends, or felt unloved. Fanta reported decent family and community support and that she felt welcomed, liked, supported, and loved. However, she never felt safe when alone, confident on her own, or satisfied with herself. She reported that she rarely did things like others or had love for her peers. She also said that she had little need or desire for the respect of others. Overall, while Fanta appeared to be doing well in her community and among her family and friends, there were many unspoken issues that she internalized.

In 2004, Fanta had returned to her original village and had been reunited with her parents, though her father had died recently. Her mother stated in her interview that the father's death was worse than anything Fanta experienced while with the rebels. Fanta said that "it is a problem because the encouragement he used to give to me. No one has encouraged [me] so yet," and she was no longer able to go to school. To deal with her emotional distress, she reported that she "prays" and "puts faith in God and the Christian religion."

In 2008, Fanta, now age 21, had a 7-month-old baby and reported being in love with the child's father, although he lived in a different town. She had become a gardener. She lamented the discontinuation of her education and dreamed of returning to school and becoming a nurse; in fact, she was refusing the marriage proposal of her boyfriend of 3 years until her education could be completed. She reported having at least three close friends who she could rely on and share with, and that she enjoyed taking part in church activities, stating: "Yes, I have engaged in different activities but they are all church activities, such as I have been a youth member and I have also taken part on an *osusu*,[3] which I was a member." Fanta also said that her family was very close, and that they are behind her and give her advice when needed. Fanta said that in the past she had suffered from poil hat and reported present struggles with a sense of a "sad heart." She told the interviewer:

> The good things that have happened are the fact that I have come back to my family and that I have started schooling. . . . I want the future to be bright

and fine. And in five-years-time I believe I will attend and complete my ed-
ucation, I will like to become a nurse.

<div align="center">DISCUSSION</div>

Although of different genders and ages, a number of common themes resonate
across the interviews of both Komba and Fanta. From an adolescent development
perspective, it is noteworthy that both participants were abducted by RUF rebels
at a young age. As the conflict continued, both young people eventually came to
be directly involved with paramilitary actions within the RUF over the course of
about 10 years, the majority of their young lives.

In the case of safety and freedom from harm (*S* of the SAFE model), both case
examples illustrate how exposures to war-related violence, particularly experiences
of "toxic stress" due to war violence, had an indelible impact on the young people
in our study. Both Komba and Fanta were forced to witness, facilitate, and
even participate in violent acts, including tortures, beatings, shootings, deaths,
massacres, abductions, and rape. For many youth in our sample, the fear of being
killed presented a primary motivation for participating in violent acts as young
people were seen as disposable by the rebels. Both Fanta and Komba operated
under the threat of being killed themselves. Additionally, both participants were
victims of violence perpetrated by their RUF superiors. Child soldiers were often
forced to ingest drugs to desensitize them to participating in violent acts, as was
the case for Komba.

In the domain of access to basic physiological needs (*A* in the model), though
access to medical care was not directly examined until recent phases of the survey, a
measure of "daily hardships" (including having sick or impaired family members),
assessed in 2004, did emerge as a major mechanism linked to risk of depression.
One of the critical findings of the study is that the long-term mental health of
former child soldiers is influenced not only by conflict-related exposures, such as
violence exposure (*S*), but also by postconflict contextual factors, including com-
munity stigma, social support (*F*), and the degree to which the family struggled
with food or housing insecurity (Newnham et al., 2015). Being able to pursue one's
ambitions for education (*E*) was also positively associated with prosocial attitudes
and behaviors (Betancourt, Borisova, et al., 2010).

Although Komba and Fanta reported improvements in their mental health
issues over the waves of data collection, they both recalled how they felt when they
were suffering from mental health problems in the past. For example, Komba said
he suffered "from weakness and head spinning, headaches, lack of energy, and
poor appetite." He also blamed "himself for things in his past." Komba used two
local terms—*poil hat* (a depression-like syndrome characterized by hopelessness
and sometimes self-harming thoughts/behavior or suicidality) and *toment* (an
anxiety-like syndrome that has aspects of guilt, withdrawal, and sometimes fear-
fulness)—to better explain what he went through. These conditions had negatively

affected his daily life. Fanta also suffered from poil hat, and although she reported in recent interviews that her problems had improved, she continued to feel that she had a "sad heart" at times. Importantly, over the course of the waves of data collection, mental health status was shown to be variable, drawing attention to its complexity and the need to have support and supportive services.

Many participants wanted to advance their education but were not able to do so because of obligations to their families or lack of resources. Our research revealed that war-affected youth who were supported in pursuing their educational ambitions and those who benefitted from stronger social support and positive community relationships were on a much more resilient trajectory. Komba's brother reported that Komba had to stop his schooling because of problems with paying school fees. Fanta had to halt her schooling because her father, who had been paying the fees, died. Many young people in the study reported not losing hope in dreams of returning to school. However, our research shows that it is unlikely that these youth will be able to continue to pursue these goals.

As the case studies of Komba and Fanta show, it is clear that mental health in former child soldiers is shaped by the interaction of both war-related trauma and postconflict experiences, such as perceived acceptance, social support, and access to school. Our findings have highlighted the impact of toxic stress experiences (e.g., killing others, surviving rape) and the importance of staying in school and broad social support in promoting resilient outcomes in war-affected youth over time. Our research has also identified stigma as an issue of critical importance in the social reintegration of former child soldiers. Previously, much of the research on the reintegration and rehabilitation of child soldiers had focused on exposure to past war-related violence and mental health outcomes, without exploring how postconflict stigma, perceived and felt, might influence long-term psychosocial adjustment. We have observed that stigma (manifest in discrimination as well as lower levels of community and family acceptance) is a critical factor shaping psychosocial adjustment. Child soldiers differed from one another with regard to their postwar experiences, and these differences profoundly shape psychosocial adjustment over time. Our research has illuminated that (a) discrimination was inversely associated with family and community acceptance; (b) higher levels of family acceptance were associated with decreased hostility; and (c) improvements in community acceptance were associated with adaptive attitudes and behaviors. Postconflict experiences of discrimination largely explained the relation between past involvement in wounding or killing others and subsequent increases in hostility. Stigma similarly mediated the relation between surviving rape and depression; however, surviving rape continued to demonstrate independent effects on increases in anxiety, hostility, and adaptive/prosocial behaviors after adjusting for other variables (Betancourt, Agnew-Blais, et al., 2010).

In addition, our research indicated that stressors such as childhood exposure to war and armed conflict are not deterministic and documented the need for greater attention to the postconflict environment and the nature of family,

peer, and community relationships that surround young people who have lived through war-related trauma. These findings pointed to the complexity of psychosocial adjustment and community reintegration and the need to take broader and more family-based and community-based approaches in planning psychosocial interventions for former child soldiers and other children affected by war.

Our qualitative data indicated that, in most cases, war-affected youth, even those exposed to extreme forms of toxic stress, could reintegrate if they had strong family and community support helping them to navigate difficult community relationships and their own problematic behaviors and attitudes borne of trauma. For example, Komba's brother said that "when he initially came back to us he was very mean and cruel. He was very cruel. He had no fear for others including us his elders." However, in Komba's case, strong family support was available to him, and with tolerance and support from his family, Komba's behaviors eventually improved. Youth who lacked guidance, advocacy, and support, especially from family, were on a much riskier path, including high-risk behavior, such as substance abuse, as well as anger and social isolation. When met with community stigma, these dynamics of risk worsened. Our research highlights the family and community layers of the social ecology as critical to supporting successful postconflict reintegration and maximizing the positive agency of war-affected adolescents.

Using the SAFE model (Figure 10.2) to understand the current survival strategies of war-affected youth is particularly compelling for researchers, practitioners, and policymakers because many of these strategies can be modified, whereas past war experiences cannot. Using models like SAFE, program developers can analyze the drivers of risky survival strategies and work to provide alternatives as well as to address third-party exploitation. Similarly, an understanding of what young
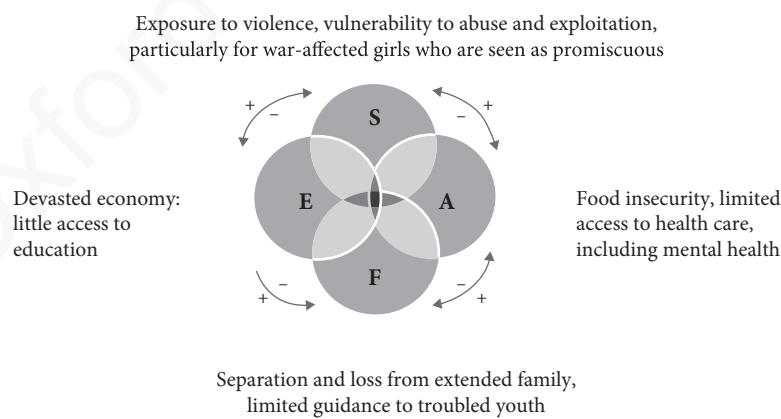
FIGURE 10.2 *The SAFE (safety/freedom from harm; access to basic physiological needs and health care; family and connection to others; and education/economic security) model of child protection: survival strategies of war-affected youth in Sierra Leone.*

people themselves and their families are doing to meet these basic needs and rights can be informative for developing programs to support rather than supplant naturally occurring agency.

This research and the case studies presented here provide new insights into the long-term well-being of children exposed to extreme violence. While both war experiences and postconflict factors contribute significantly to the long-term mental health and social reintegration of former child soldiers, the postconflict environment presents many intervention opportunities that remain untapped. This includes the development of policies and interventions that are long term, sustainable, and focused on supporting adolescent agency and strengthening family and community support, with active participation of adolescents throughout. In this regard, catch-up education and youth employment programs present exciting opportunities, both for promoting healthy options for war-affected adolescents and for the integration of mental health and family services via integration models.

It is evident in these findings that psychosocial adjustment and community reintegration for former child soldiers are complex processes involving a range of factors both during and after wartime. While meeting their needs is a challenge in postconflict settings, with limited human and financial resources and many competing demands, the costs of not doing so may be devastating for communities, as discussed next.

Preventing Adolescent Recruitment Into Armed Groups

The recruitment of children into armed groups has remained a global issue, with up to 300,000 children estimated to be involved with armed forces and armed at any one time (Machel, 1996, 2001). In fact, Machel's approximation of 300,000 "potentially underestimates the gravity of the problem" (Achvarina & Reich, 2006). However, it is recognized that this type of involvement is seldom on a voluntary basis. Rather, joining an armed group is often spurred by lack of any other viable alternative for survival for the child. The child could face immediate death from refusing the orders of a commander or, as an alternative, living in the bush without access to food or protection. As cited by Dye: "This is not a choice . . . when you have nothing else, it's not a choice" (Dye, 2007). Alternatively stated, children and adolescents joining armed groups and even participating in acts of violence can be termed a survival strategy.

Children who are most vulnerable to recruitment into armed forces are often in or near conflict zones, separated from or without families, socially or economically marginalized, or members of targeted minorities (Boothby, 1986). In this manner, the SAFE model can be employed to identify, understand, and analyze the factors that contribute to children's involvement in armed forces and thus contribute to the examination of prevention strategies using risky and adaptive survival strategies as a guide.

The specific needs of adolescents, and adolescent combatants in particular, are rarely considered in postconflict periods, and this omission can lead to further instability. Formal peace agreements often leave out DDR pathways. A mix of government agencies, UN organizations, and NGOs, often with no organized mental health strategy, lead DDR programs (Dallaire, 2015). Beyond separating those under and over age 18, these interventions do not accommodate for the varied life stages (early, middle, late childhood, adolescence) of former combatants or the concept of evolving capacities as the children grow. Effective and sustainable programs integrate opportunities for the participation of young people and their communities into all stages of program and policy planning. They also help to ensure that local social forces are engaged in the health and well-being of war-affected youth. In the absence of this careful planning, adolescents with previous experience with an armed group—voluntary or not—are likely at higher risk of rejoining due to a lack of other survival options.

Effective approaches to both programming and preventive interventions to address the issue of child soldiers must work to actualize the spirit of human rights principles, as well as the Paris Principles and Guidelines on Children Associated With Armed Forces or Armed Groups (UNICEF, 2007). Humanitarian responses after the postwar reconstruction period present a particular opportunity to launch the development of sustainable, community-based services and supports to maximize the capacity of war-affected youth long after the end of hostilities.

From the prevention end of the spectrum, there is an array of suggested best practices for the prevention of enrollment of children in armed groups. The Paris Principles and Best Practices (UNICEF, 2007) include a focus on the prevention of recruitment. These principles target the safety and protection of children (S in the SAFE model), including the establishment of reliable birth registration systems and legal requirements for the age limit on participation in armed forces. These provisions create an age criteria and are thus integral to preventing young adolescents' involvement. One of the recommendations encapsulated in the Cape Town Principles (Achvarina & Reich, 2006; UNICEF, 1996) highlights the need to adequately protect (S) internally displaced persons (IDP) and refugee camps. They argue that lack of protection itself accounts for the increased use of children in armed groups. A present gap in protection underscores neglect of interrelated issues of safety/freedom from harm (S), access to basic physiological needs and medical care (A), family and connection to others (F), and educational/economic prospects (E), factors that prevent important leverage points for preventing initial recruitment of children into armed forces and armed groups. The SAFE model contributes both a theory and a model for analyzing the role of survival strategies in the development of a response to both preventing the recruitment of children into armed forces and better guiding longer term rehabilitative and reintegration supports. It stipulates that a focus solely on one element of adolescent security needs can unwittingly undermine others. In the end, the interrelatedness of risks as well as adaptive resources must be analyzed, and that

understanding is a critical pathway for identifying potential leverage points for improving outcomes.

Postconflict Sierra Leone has made some great strides forward with the development of the new Free Child Health Plan (Donnelly, 2011) and Mental Health Policy. A significant update is currently being drafted to address the gaps in the policy, which includes a Ministry of Youth Affairs with a National Youth Commission falling underneath it and the establishment of youth councils at every level of government. The true measure of success will be the degree to which sustainable and high-quality services are implemented to support the ambitions and agency of all war-affected youth. As our study has demonstrated, many of the processes important to supporting the agency of war-affected youth occur in families and in the community context. Thus, it is important that social services and psychosocial supports be integrated into other aspects of community life and services. The integration of mental health services into alternative delivery structures such as education programs, primary health care, and youth employment programs is important.

In countries like Sierra Leone, governments, multilateral organizations, and NGOs are beginning to see the necessity of integrating these types of psychosocial interventions into their normal programming, understanding the critical role that mental health and interpersonal interactions play in not only the country's overall economic development, but also youth's ability to take advantage of and succeed in these types of programs. Sierra Leone now has this opportunity to scale up evidence-based intervention models.

Drawing from our research in Sierra Leone, we have argued for policies and programs for children and adolescents affected by war that (a) are family and community based; (b) address postconflict factors in addition to understanding past trauma and war exposures; and (c) avoid label-driven approaches to programming, which can further increase stigma. In particular, we advocated for improved approaches to screening and assessment to identify youth with accumulated risk factors, lack of protective factors, and persistent distress in order to prioritize intervention planning and resources for the most vulnerable youth rather than developing programs exclusively for former child soldiers. We also advocated for greater investment in services to promote community acceptance, reduce stigma, and expand social supports and educational access.

Our early research was critical to the development and testing of the Youth Readiness Intervention (YRI) in Sierra Leone. The YRI is a group mental health intervention that has demonstrated effectiveness for addressing emotion dysregulation, interpersonal skills, and impairments in daily functioning among war-affected youth. The YRI draws evidence-based components mainly from cognitive behavioral therapy (CBT) and group interpersonal therapy (IPT) adapted to the adolescent Sierra Leonean postwar context. This intervention has been proven to address the most common mental health concerns (anxiety, depression, and emotional dysregulation) of youth who personally experienced the war, as well as

those living in postwar Sierra Leone. The intervention also successfully increased youth's ability to function within the classroom environment, with higher school attendance rates, better classroom behavior, and higher grades (Betancourt et al., 2014).

Our early versions of YRI were designed for delivery within education programs, but our current research is exploring the potential for integration within youth employment programs, both as part of a small pilot trial and the government of Sierra Leone and World Bank's Youth Employment Opportunities Program (YEOP). The latest iteration of the youth employment scheme will allow a cadre of youth employment workers, typically social workers with experience dealing with vulnerable youth seeking employment; these individuals also have no formal mental health training to deliver the intervention. The scale-up offers a unique opportunity to research both the employment workers' ability to deliver the intervention with fidelity and the sustainability of the integration of mental health interventions in alternative delivery platforms by testing two methods of supervision, interagency collaborative teams (ICTs) and supervision as usual by testing supervision using ICT. The ICT model employs a collaborative approach, which seeks to identify and encourage champions of the work while also garnering greater organizational buy-in to enhance sustainability.

We can use models such as SAFE to analyze the adequacy of responses to fundamental security dimensions of child health and well-being. Through systematic data collection, a stronger evidence base can encourage local governments and the international community to invest in effective and sustainable responses to support the developmental needs of all war-affected youth and maintain resilience and strength in families across the span of a child's development into adolescence.

Conclusion

It is important to view the phenomenon of resilience of adolescents and youth affected by violence in context. Holistic, rights-based models such as the SAFE model can help us to see war-affected young people as individuals with *agency* doing their best to respond to the unnatural circumstances of war. We must understand the interrelated and interdependent nature of the security needs of children and youth. Their risky and adaptive survival strategies, a demonstration of the agency of youth and families, can serve as a *road map* for programs and policies to provide more productive alternatives and to work alongside adaptive strategies rather than supplanting them. The interrelatedness of the rights and security needs of adolescents in situations of war also speaks to the need for integrated programs. This does not mean that all services must be all encompassing, but they must be coordinated. Policymakers must also take into account the interrelated nature of security domains in establishing responses to security threats by creating cooperative intersectoral policies and programs (such as mental health programs integrated with youth employment programs). Civil society

and other stakeholders can work with governments to raise awareness and encourage follow-through so that coordination and integration of services become increasingly more of a reality in practice and become enshrined in policies for war-affected youth. Most important, organizations and stakeholders should preemptively plan links to other organizations, individuals, and community networks that can provide needed services and supports to war-affected youth across the four core SAFE domains. When they cannot mount an adequate in-house response or when a protection issue does not explicitly fall under their mandate (e.g., when staff at an education program learn that a child is in need of medical attention), actors must be prepared to make quick referrals to other agencies.

A robust understanding of the interrelated nature of promoting the development and well-being of adolescents in war-affected settings can help governments and service organizations to better utilize the limited resources they have while incurring minimal additional costs. While greater cross-sectoral programming and coordination will likely involve greater startup costs, early investments may be recouped by the prevention of costly negative outcomes or the improved efficiency of existing services in the postconflict setting. Such approaches are critical for optimizing the limited resources available for supporting violence-affected youth. In taking such steps, we can begin to eliminate the silos that exist in the response to youth affected by violence and bolster adaptive solutions drawing from existing resources and maximizing efforts to protect and fulfill the rights of youth and build on their tremendous agency.

Notes

1. *Poil hat* is a depression-like syndrome characterized by hopelessness and sometimes self-harming thoughts/behavior or suicidality.

2. *Toment* is an anxiety-like syndrome that has aspects of guilt, withdrawal, and sometimes fearfulness.

3. An *osusu* is a form of microfinancial capital accumulation found in Africa.

References

Achvarina, V., & Reich, S. (2006). No place to hide: Refugees, displaced persons, and the recruitment of child soldiers. *International Security*, *31*(1), 127–164.

Ager, A. K., Lembani, M., Mohammed, A., Mohammed Ashir, G., Abdulwahab, A., de Pinho, H., . . . Zarowsky, C. (2015). Health service resilience in Yobe state, Nigeria in the context of the Boko Haram insurgency: A systems dynamics analysis using group model building. *Conflict and Health*, *9*(1), 30. doi:10.1186/s13031-015-0056-3

Arts, K. (2014). Twenty-five years of the United Nations Convention on the Rights of the Child: Achievements and challenges. *Netherlands International Law Review*, *61*(3), 267–303. doi:10.1017/S0165070X14001272

Ashby, P. (2002). Child combatants: A soldier's perspective. *Lancet*, *360*(9350), s11.

Bellal, A., Giacca, G., & Casey-Maslen, S. (2011). International law and armed non-state actors in Afghanistan. *International Review of the Red Cross*, *93*(881).

Betancourt, T. S., Agnew-Blais, J., Gilman, S. E., Williams, D. R., & Ellis, B. H. (2010). Past horrors, present struggles: The role of stigma in the association between war experiences and psychosocial adjustment among former child soldiers in Sierra Leone. *Social Science & Medicine*, *70*(1), 17–26.

Betancourt, T. S., Borisova, I. I., Brennan, R. B., Williams, T. P., Whitfield, T. H., de la Soudiere, M., . . . Gilman, S. E. (2010). Sierra Leone's former child soldiers: A follow-up study of psychosocial adjustment and community reintegration. *Child Development*, *81*(4), 1077–1095.

Betancourt, T. S., Brennan, R. T., Rubin-Smith, J., Fitzmaurice, G. M., & Gilman, S. E. (2010). Sierra Leone's former child soldiers: a longitudinal study of risk, protective factors, and mental health. *Journal of the American Academy of Child and Adolescent Psychiatry*, *49*(6), 606–615.

Betancourt, T. S., Fawzi, M. K. S., Bruderlein, C., Desmond, C., & Kim, J. Y. (2010). Children affected by HIV/AIDS: SAFE, a model for promoting their security, health, and development. *Psychology, Health & Medicine*, *15*(3), 243–265.

Betancourt, T. S., & Khan, K. T. (2008). The mental health of children affected by armed conflict: Protective processes and pathways to resilience. *International Review of Psychiatry*, *20*(3), 317–328.

Betancourt, T. S., McBain, R., Newnham, E. A., Akinsulure-Smith, A. M., Brennan, R. T., Weisz, J. R., & Hansen, N. B. (2014). A behavioral intervention for war-affected youth in Sierra Leone: A randomized controlled trial. *Journal of the American Academy of Child & Adolescent Psychiatry*, *53*(12), 1288–1297. doi:http://dx.doi.org/10.1016/j.jaac.2014.09.011

Betancourt, T. S., Meyers-Ohki, S. E., Charrow, A. P., & Tol, W. A. (2013). Interventions for children affected by war: An ecological perspective on psychosocial support and mental health care. *Harvard Review of Psychiatry*, *21*(2), 70–91.

Betancourt, T. S., Simmons, S., Borisova, I., Brewer, S. E., Iweala, U., & de la Soudiere, M. (2008). High hopes, grim reality: reintegration and the education of former child soldiers in Sierra Leone. *Comparative Education Review*, *52*(4), 565–587.

Betancourt, T. S., Williams, T. P., Kellner, S. E., Gebre-Medhin, J., Hann, K., & Kayiteshonga, Y. (2012). Interrelatedness of child health, protection and well-being: An application of the SAFE model in Rwanda. *Social Science & Medicine*, *74*(10), 1504–1511. doi:10.1016/j.socscimed.2012.01.030

Betancourt, T. S., Zaeh, S., Ettien, A., & Khan, L. (2010). Psychosocial adjustment and mental health services in post-conflict Sierra Leone: Experiences of CAAFAG and war-affected youth, families and service providers. In S. Parmentier, J. Sarkin, & E. Weitekamp (Eds.), *New series on transitional justice.* Antwerp, Belgium: Intersentia.

Betancourt, T. S., Zuilkowski, S. S., Ravichandran, A., Einhorn, H., Arora, N., Bhattacharya Chakravarty, A., & Brennan, R. T. (2015). Development of the SAFE Checklist Tool for assessing site-level threats to child protection: Use of Delphi methods and application to two sites in India. *PLoS One*, *10*(11), e0141222. doi:10.1371/journal.pone.0141222

Boothby, N. (1986, May 17). *Children in armed conflicts: Rights, reality and future implications.* Paper presented at the 18th Annual International Save the Children Alliance Conference, Cuernavaca, Mexico.

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.

Bruderlein, C. (2000). *The role of non-state actors in building human security: The case of armed groups in intra-state wars*. Retrieved from https://reliefweb.int/sites/reliefweb.int/files/resources/60D788FFA78FBC23C1256C3E0029C598-hd-security-may00.pdf

Bruderlein, C., & Stichick, T. (2001, May 11–12). *Children facing insecurity: New strategies for survival in a global era*. Policy paper produced for the Canadian Department of Foreign Affairs and International Trade, The Human Security Network, Third Ministerial Meeting, Petra, Jordan.

Coalition to Stop the Use of Child Soldiers. (2008). *Child soldiers: Global report 2008*. Retrieved from https://www.hrw.org/legacy/pub/2008/children/Child_Soldiers_Global_Report_Summary.pdf

Dallaire, R. (2015). Preventing the use of child soldiers, preventing genocide. *UN Chronicle*, *52*(1 & 2).

Donnelly, J. (2011). How did Sierra Leone provide free health care? *The Lancet*, *377*(9775), 1393–1396.

Dye, S. (2007). Child soldiers: New evidence, new advocacy approaches. *Peace Brief*. Retrieved from http://www.usip.org/publications/child-soldiers-new-evidence-new-advocacy-approaches

Geneva Centre for the Democratic Control of Armed Forces & Geneva Call. (2015). *Armed non-state actors: Current trends & future challenges*. Retrieved from https://reliefweb.int/sites/reliefweb.int/files/resources/ANSA_Final.pdf

Human Security Unit. (2009). *Human security in theory and practice*. Retrieved from http://www.un.org/humansecurity/sites/www.un.org.humansecurity/files/human_security_in_theory_and_practice_english.pdf

Kohrt, B. A., Yang, M., Rai, S., Bhardwaj, A., Tol, W. A., & Jordans, M. J. (2016). Recruitment of child soldiers in Nepal: Mental health status and risk factors for voluntary participation of youth in armed groups. *Peace and Conflict*, *22*(3), 208–216. doi:10.1037/pac0000170

Machel, G. (1996). *The impact of armed conflict on children*. Geneva, Switzerland: United Nations.

Machel, G. (2001). *The impact of war on children: A review of progress since the 1996 United Nations report on the impact of armed conflict on children*. New York, NY: United Nations Children's Fund.

Mazurana, D., & Carlson, K. (2006). *The girl child and armed conflict: Recognizing and addressing grave violations of girls' human rights*. Retrieved from http://www.un.org/womenwatch/daw/egm/elim-disc-viol-girlchild/ExpertPapers/EP.12%20Mazurana.pdf

Medeiros, E. (2007). Integrating mental health into post-conflict rehabilitation: The case of Sierra Leonean and Liberian "child soldiers." *Journal of Health Psychology*, *12*(3), 498–504.

Newnham, E. A., Pearson, R. M., Stein, A., & Betancourt, T. S. (2015). Youth mental health after civil war: The importance of daily stressors. *The British Journal of Psychiatry*, *206*(2), 116–121. doi:10.1192/bjp.bp.114.146324

Omole, O., Welye, H., & Abimbola, S. (2015). Boko Haram insurgency: Implications for public health. *Lancet*, *385*(9972), 941. doi:10.1016/s0140-6736(15)60207-0

Oyewole, S. (2016). Rescuing Boko Haram's schoolgirl victims. *New Zealand International Review*, *41*(1), 25.

Parra, J., Martin, F., & Hoyos, J. (2012). Child soldiers in Colombia: Five views. *Universitas Psychologica*, *11*(3), 13.

Raynaut, C. (1997). Africa and AIDS: Questions for anthropology, anthropology called into question. *Sciences Sociales et Santé*, *15*(4), 9.

United Nations. (1990). *Convention on the Rights of the Child*. Retrieved from http://www. ohchr.org/EN/ProfessionalInterest/Pages/CRC.aspx

United Nations Children's Fund (UNICEF). (1996). *The state of the world's children 1996*. Retrieved from https://www.unicef.org/sowc/archive/ENGLISH/The%20State%20 of%20the%20World%27s%20Children%201996.pdf

United Nations Children's Fund (UNICEF). (2007). *The Paris principles: Principles and guidelines on children associated with armed forces or armed conflict*. Retrieved from http://www.diplomatie.gouv.fr/en/IMG/pdf/Paris_Conference_Principles_English_31_ January.pdf

United Nations Children's Fund (UNICEF). (2015). *Education under fire: How conflict in the Middle East is depriving children of their schooling*. Retrieved from https://www.unicef. org/mena/Education_Under_Fire.pdf

United Nations Children's Fund (UNICEF). (2016). *Humanitarian action for children*. Retrieved from https://www.unicef.org/publications/index_89673.html

Williamson, J., & Cripe, L. (2002). *Assessment of DCOF-supported child demobilization and reintegration activities in Sierra Leone*. Retrieved from https://www.unicef.org/wcaro/ Child_DDR_Sierra_Leone_Report_2002_Williamson_Cripe_.pdf

World Health Organization (WHO). (2002). *World report on violence and health*. Retrieved from http://apps.who.int/iris/bitstream/10665/42495/1/9241545615_eng.pdf

Zuilkowski, S. S., & Betancourt, T. S. (2014). School persistence in the wake of war: Wartime experiences, reintegration supports, and dropout in Sierra Leone. *Comparative Education Review*, *58*(3), 457–481. doi:doi:10.1086/675905

Immigrant and Refugee Youth Positive Adaptation and Development

Frosso Motti-Stefanidi

Introduction

Migration is a defining issue of the twenty-first century. A significant number of people have crossed international borders and have settled in Western high-income countries. Their motives are often economic or family-reunion related. Currently, in Europe, North America, and Oceania, international migrants account for at least 10% of the total population (International Organization for Migration, 2016).

However, in addition to immigrants who have lived in different European and North American countries over a period of many years and, in many cases, over generations, large numbers of refugees from Syria, Iraq, and Afghanistan are currently entering and settling mostly in Europe. The 1951 United Nations Convention Relating to the Status of Refugees (Geneva Convention) defines a refugee as someone who has a "well-founded fear of persecution for reasons of race, religion, nationality, membership of a particular social group or political opinion" (United Nations High Commissioner for Refugees [UNHCR], 1951, p. 3).

These migrants flee from their war-stricken countries, and most of them have the right to refugee status. In 2015 alone, more than 1 million people crossed the Mediterranean, risking their lives to reach Greek and Italian shores. Their destination was the affluent northern European countries. However, according to the Dublin Regulation (Regulation No. 604/2013), EU member states can choose to return asylum seekers to their country of first entry to process their asylum claim, with the condition that the country has an effective asylum system. The criticism regarding this regulation is that southern European countries, which are the point of entry in the European Union for most refugees, are least well prepared to offer them an effective asylum system.

According to the UN Refugee Agency, 31% of these refugees are children. Furthermore, about 25,000 of these children are traveling unaccompanied or

have become separated from their families during their migratory journey (United Nations, 2016b). The arrival of large numbers of refugee families and children in a very short period of time and the general increase in migration have created a situation of urgency in receiving countries and are contributing to the social, economic, and political transformation of entire societies of the Western world. Nonetheless, it is important to the economic and political future of both receiving societies and immigrants that the former treat the latter with fairness and dignity. As Wu Hongbo, UN undersecretary general for economic and social affairs noted: "The rise in the number of international migrants reflects the increasing importance of international migration, which has become an integral part of our economies and societies. Well-managed migration brings important benefits to countries of origin and destination, as well as to migrants and their families" (United Nations, 2016b, http://www.un.org/sustainabledevelopment/blog/2016/01/244-million-international-migrants-living-abroad-worldwide-new-un-statistics-reveal/).

Thus, the positive integration of immigrants in receiving societies is crucial for both immigrants' and nonimmigrants' well-being, as well as for the prosperity of society. According to a 2012 report from the Organization for Economic Cooperation and Development (OECD), the litmus test for how well immigrants are integrated into a receiving society is to assess how well their children are doing.

This chapter focuses on immigrant and refugee youth positive adaptation and development. It addresses the question: Who among immigrant and refugee youth do well, concurrently and over time, and why? Extant scientific evidence is organized and examined through the lenses of a conceptual model that integrates developmental, acculturation, and social psychological perspectives to immigrant youth adaptation (Motti-Stefanidi, Berry, et al., 2012).

The chapter includes four sections. The first section examines criteria for judging immigrant and refugee youth positive adaptation. It also lays out key assumptions that allow a better understanding of group and individual differences in their adaptation. The second section presents scientific evidence regarding the effect of different social risks for immigrant and refugee youth positive adaptation and development. The third section examines societal and proximal context, as well as individual-level influences that promote their positive adaptation. The final section presents a mission statement concerning immigrant and refugee youth positive adaptation, which summarizes key findings presented in the chapter and includes recommendations for public policy.

Immigrant Youth Positive Adaptation: Criteria and Assumptions

Like all youth, immigrant and refugee youth face normative developmental challenges (Motti-Stefanidi, Berry, et al., 2012; Motti-Stefanidi & Masten, 2017). A key index for judging the quality of their adaptation is their success in age-salient

developmental tasks, such as doing well in school, having close friends/being liked by peers, knowing or obeying the laws of society, civic engagement, development of self-control, and establishment of a cohesive, integrated, and multifaceted sense of identity (Masten, 2014). These tasks reflect the expectations and standards for behavior and achievement that parents, teachers, and societies set for individuals over the life span in a particular context and time in history. Success in these developmental tasks does not mean that youth should exhibit "ideal" or "superb" effectiveness, but rather they should be "doing adequately well." Adaptive success is multidimensional and developmental in nature. Families and societies value and attend to achievements in salient developmental tasks because these accomplishments forecast future adaptive success (Masten & Cicchetti, 2016).

Moreover, both immigrant and nonimmigrant youth also face the acculturative challenges that stem from living and growing in the context of different cultures. They need to learn to understand, respect, and live with people from other cultures (Sam & Berry, 2016). This requires that all youth, immigrant and nonimmigrant alike, develop intercultural competence (Council of Europe, 2016), which could be considered an index of positive adaptation in contemporary highly diverse societies. Intercultural competence is defined as the ability to mobilize and deploy relevant values, attitudes, skills, knowledge, or understanding in order to respond appropriately and effectively to the demands, challenges, and opportunities that are presented in intercultural situations.

However, immigrant and refugee youth, more than nonimmigrant youth, also have to develop cultural competence, which is another key criterion for judging how well they are doing. Cultural competence is an acculturative task that involves the acquisition of the knowledge and skills of both ethnic and national cultures (Oppedal & Toppelberg, 2016). Culturally competent immigrants are able to communicate effectively in ethnic and national languages, have friends from both their own and other ethnic groups, know the values and practices of both groups, code switch between languages and cultures as necessary, and make sense of and bridge their different worlds.

A related criterion for judging whether immigrant youth are well adapted concerns the development of strong and secure ethnic and national identities, which is an aspect of acculturation (Phinney et al., 2001). These concepts are multidimensional and developmental in nature (Motti-Stefanidi, 2015; Umaña-Taylor et al., 2014). Ethnic identity focuses on the subjective sense of belonging to an ethnic group or culture, whereas national identity refers to the subjective sense of belonging to the national (host) culture (Phinney & Ong, 2007). Even though an integrated identity, that is, the combination of strong ethnic and national identities is considered an important index of positive adaptation (Phinney & Ong, 2007), the former has received significantly more attention, particularly from developmental researchers, than the latter (Umaña-Taylor et al., 2014). Young people are considered to have achieved a strong and secure sense of ethnic identity only after they have, without relying solely on parental and peer influences, first, explored

their ethnicity and what it means to them and, second, accepted and internalized it (see Umaña-Taylor et al., 2014).

Finally, an additional index for judging how well immigrant youth are doing concerns their internal psychological adaptation, which is evaluated mainly by indices of perceived psychological well-being versus distress (Motti-Stefanidi & Masten, 2017). The presence of self-esteem and life satisfaction and the absence of emotional symptoms, such as anxiety and depression, are common markers of psychological well-being used by developmental and acculturation researchers (Berry et al., 2006; Masten, 2014). The absence of other psychological symptoms, such as those related to post-traumatic stress disorder (PTSD), is another key index of positive adaptation, particularly in the case of refugee youth who have been exposed before and during migration to highly traumatic experiences (e.g., Fazel et al., 2012).

These indexes of positive adaptation are closely linked, both concurrently and over time. The link between acculturative tasks on the one hand and developmental tasks and well-being on the other is of particular interest for understanding group and individual differences in immigrant youth adaptation. Extant literature suggests that learning and maintaining both ethnic and national cultures is linked to better developmental outcomes and psychological well-being (Berry et al., 2006; Motti-Stefanidi et al., 2008; Oppedal & Toppelberg, 2016). For example, in a meta-analysis of 83 studies, Nguyen and Benet-Martinez (2013) found an overall positive association between biculturalism and adjustment. They also found that bicultural individuals tended to be as psychologically adjusted (e.g., higher self-esteem and lower anxiety) as they were adjusted with respect to developmental tasks (e.g., better academic performance and conduct).

The link between ethnic and national identities on the one hand and academic achievement, a key normative developmental task, on the other presents interesting and at times contradictory results. Phinney et al. (2001) reported that both stronger ethnic and national identities are linked to higher academic achievement, but that the relation is stronger with national than with ethnic identity. Umaña-Taylor et al. (2012), who focused on affirmation of Latino youth ethnic identity (positive affect that individuals feel toward their ethnic group), found that higher levels of ethnic identity affirmation actually predicted decreases, not increases, in academic adjustment from seventh to eighth grades. They argued that during this developmental period, Latino youth might start realizing that Latinos are being segregated in school into lower achievement tracks. Those Latino students who feel a stronger connection with their ethnic group may begin to underperform, thus confirming the negative stereotype, a phenomenon known as stereotype threat (Steele & Aronson, 1995). Thus, the link between ethnic identity and academic achievement is complex and may depend on the dimension of ethnic identity examined.

In some cases, the acquisition of acculturative tasks is actually expected to precede the acquisition of developmental tasks. For example, immigrant youths' proficiency in the national language, a key acculturative task, is essential for doing well academically in the schools of the receiving nation, which is a developmental

task (e.g., Suárez-Orozco, Suárez-Orozco, et al., 2009). In another example, a cross-lagged study that examined the longitudinal interplay between immigrant youth's orientation toward the host culture, an acculturative task, and their self-efficacy, a developmental task, showed that their orientation toward the host culture predicted changes in self-efficacy, and not vice versa (Reitz et al., 2013). These results suggest that the acquisition of acculturative tasks may function over time as a resource for immigrant youth's success in developmental tasks.

Significant diversity is observed in immigrant youth adaptation (Masten et al., 2012). Because immigrant youth, like all youth, are developing organisms, to account for group and individual differences in their adaptation, it is important to use a developmental lens and thus to examine it in developmental context. Normative developmental processes (e.g., cognitive, social, emotional), as well as the normative socioecological contexts (e.g., family, school, neighborhood) in which their lives are embedded, contribute to their adaptation. However, immigrant youth also face unique contextual influences not faced by their nonimmigrant classmates. Immigrant status and culture, and related social variables such as discrimination (Marks et al., 2015), also are expected to contribute to how well they do.

Thus, their adaptation needs to be examined in developmental and acculturative contexts, taking into account multiple levels of context. Based on the integrative conceptual model, three levels of context are proposed (Motti-Stefanidi, Berry, et al., 2012). The societal level is focused on variations in cultural beliefs, social representations, and ideologies, as well as variables that reflect power positions within society (e.g., social class, ethnicity) that have been shown to have an impact on immigrants' adaptation. The level of interaction is focused on interactions that shape the individual life course of immigrants and that take place in their proximal contexts. These contexts serve the purpose of both development and acculturation and are divided into those representing the home culture (family, ethnic peers, ethnic group) and those representing the host culture (school, native peers). The individual level concerns individual differences in personality, cognition, and motivation. Immigrant youth's own individual attributes, including their personal agency, contribute to the quality of their adaptation. These three levels of influence on immigrant youth adaptation are viewed as interconnected and embedded within each other. Influences stemming from each of these levels of context might place at risk, or instead promote, immigrant youth's positive adaptation. The next two sections examine key risks and resources for immigrant youth positive adaptation and development stemming from different levels of context.

Risks for Immigrant Youth's Positive Adaptation

The first question that arises is whether being an immigrant is a long-term risk for youth's adaptation. To address this question, studies often compare the behavior and achievements of immigrant youth to that of their nonimmigrant peers.

However, such comparisons may lead to the conclusion that immigrant youth are inferior in some way. This "deficit" approach to the study of immigrant youth adaptation has been denounced; instead, it has been argued that the adaptation of immigrant youth needs to be examined in its own right.

However, one could further argue that the assessment of the quality of immigrant youth's adaptation may have to be differentiated by domain. Behaviors and achievements that belong to the public (functional, utilitarian) domain (Arends-Tóth & van de Vijver, 2006) and have consequences for immigrant youth's future adaptation in the receiving society may be compared to those of their nonimmigrant counterparts (Motti-Stefanidi & Masten, 2017). For example, doing adequately well in school presupposes receiving grades that are comparable to the normative performance of nonimmigrant students and not dropping out early, because these are indices of present positive adaptation and forerunners of future adaptation in society for both immigrant and nonimmigrant youth. A different approach may need to be adopted when the focus is on private values related to linguistic and cultural activities, to religious expression, and to the domestic and interpersonal domains of the family.

Regarding the question whether immigrant status is a long-term risk factor for youth's adaptation, the discourse in the North American literature centers on a phenomenon known as the "immigrant paradox" (Garcia Coll & Marks, 2012). A collection of studies showed that immigrant youth adaptation is more positive than expected and in some cases better than the adaptation of their nonimmigrant peers (Berry et al., 2006), or first-generation immigrants are found to be better adapted than later generation immigrants (Garcia Coll & Marks, 2012), whose adaptation converges with that of their nonimmigrant peers (Sam et al., 2008). The immigrant paradox literature focuses on indices of adaptation that are related to developmental tasks, such as academic achievement, school engagement and conduct, as well as on indices of youth's psychological well-being.

These results were not expected because first-generation immigrant youth often experience higher-than-average social and economic disadvantage, are less acculturated and less competent in the national language than later-generation immigrant youth. However, the immigrant paradox has not been observed consistently. It seems to depend to a large extent on the domain of adaptation, the developmental stage and gender of the child, characteristics of the host society and the ethnic group (Garcia Coll & Marks, 2012). This observation is in agreement with Bornstein's (2017) specificity principle, whereby to complement universals in immigrant youth adaptation and acculturation one needs to focus on variations found among contemporary migrants and their circumstances.

A significant number of studies mainly conducted in the United States and Canada comparing first- with second-generation immigrants provided evidence in favor of the immigrant paradox (see Garcia Coll & Marks, 2012). First-generation immigrant youth exhibit fewer risky behaviors, such as substance use and abuse, unprotected sex, and delinquency; have more positive attitudes toward school and

better academic achievement; and present fewer emotional symptoms than their second-generation counterparts. However, a more nuanced examination of these findings shows significant variability by youth's age, gender, and ethnic group. For example, with respect to academic adjustment, the paradox is more pronounced among secondary school, compared to primary school, immigrant students from Asian families compared to students from Latin American (especially Mexican) families. It is also stronger for boys than for girls.

The immigrant paradox has not been widely documented in Europe. In a comparative study including five European countries, Sam et al. (2008) found some support for the immigrant paradox in two of these countries (Sweden and Finland), particularly for adaptation with respect to developmental tasks, such as school adjustment and conduct problems, but not with respect to psychological well-being. In contrast to expectations based on the immigrant paradox literature, second-generation immigrant youth reported better psychological well-being compared both to their first-generation counterparts and to national peers. However, a meta-analysis based on 51 studies conducted across the European continent revealed that being an immigrant was a risk factor for academic adjustment, externalizing and internalizing problems (Dimitrova et al., 2016). In this line, Motti-Stefanidi and colleagues, based on data from the Athena Studies of Resilient Adaptation (AStRA) longitudinal project, also reported that their immigrant adolescents had significantly worse academic achievement, school engagement, and conduct compared to their nonimmigrant Greek peers (Motti-Stefanidi, 2014; Motti-Stefanidi & Asendorpf, 2017). Evidence suggests that at the classroom level of analysis, classrooms with a higher concentration of immigrants also may be a risk factor for all (immigrant and nonimmigrant) students' academic achievement (e.g., Motti-Stefanidi, Asendorpf, et al., 2012; OECD, 2010).

Furthermore, an OECD (2010) review of reading performance of immigrant youth at age 15, based on data from 20 countries, reported that in most countries (except Australia, Canada, Ireland, and New Zealand) immigrant students had on average lower reading performance compared to nonimmigrant students. According to this report, in most European countries, immigrant students, independent of generation, have lower reading performance scores than nonimmigrant students, and second-generation immigrant students had higher reading performance scores than first-generation students.

Longitudinal patterns of the academic achievement, school engagement, and conduct of immigrant and nonimmigrant early adolescents seem to follow similar declining paths (Motti-Stefanidi, Asendorpf, et al., 2012; Suárez-Orozco et al., 2010). The decline in school engagement over the middle school years has been found to be steeper for immigrant youth (Motti-Stefanidi et al., 2014). It is not clear whether these declines reflect purely developmental change or can be attributed to acculturation on the developmental change, and thus entail risk for immigrant youth's adaptation. One would need to study a third group—youth of same ethnicity as the immigrants who remained in their home country—to clarify this issue

(Fuligni, 2001; also see Jugert & Titzmann, 2017). However, in the cases where immigrants start at a lower level of adaptation, compared to nonimmigrants, and their decline over time is steeper, one could argue that immigrant status is a risk factor for change in adaptation over the middle school years.

Does being a refugee present similar challenges for youth compared to being an immigrant? Refugee youth need to address similar developmental and acculturative issues, as well as similar challenges related to their social status in the host society (e.g., discrimination), as immigrant youth. However, unlike most immigrant youth, they face additional challenges linked to the adverse events that necessitated their flight from their country of origin (war, pain, death), the hardship endured during their perilous journey to a destination, and the complex, lengthy, and uncertain legal immigration process after seeking asylum. Thus, they have to deal with developmental and acculturative challenges in the context of dealing with significant trauma and insecurity.

Such negative cumulative experiences throughout the migratory process constitute significant risk factors, concurrently and over time, particularly for refugee youth's mental health and psychological well-being (Eide & Hjern, 2013; Fazel et al., 2012). Extant scientific evidence suggests that refugee youth often suffer from psychological distress in the form of PTSD, depression, and other symptoms, such as irritability, restlessness, sleep problems, somatic symptoms, and conduct disorders (e.g., Bronstein & Montgomery, 2011). Being an unaccompanied minor, having been exposed (personally or as a witness) to violence, as well as losing family support by death or violence, significantly worsen youth's mental health outcomes (Fazel et al., 2012). The few longitudinal studies available showed that, in the long-term, refugee youth follow variable mental health trajectories. In one study, PTSD tended to persist, but depression 3–6 years after arrival in the host country decreased, only to rise again after 6–12 years (Sack et al., 1999). According to another study, 8–9 years after migration, postmigration experiences were more important for youth's mental health than premigration experiences. However, significant resilience has also been reported (see Fazel et al., 2012).

Immigrant and refugee status is associated with a host of social challenges. Both groups often have to deal with the challenges of adapting to a new culture in a context replete with prejudice and discrimination. Perceived discrimination has been shown to have deleterious consequences on immigrant youth's adaptation with respect to developmental tasks, psychological well-being, and mental health (Marks et al., 2015; Vedder & Motti-Stefanidi, 2016). It is a risk factor for academic outcomes (e.g., academic achievement, academic motivation and goals, perceived academic efficacy, academic persistence) and for conduct. However, the domains of mental health and psychological well-being are affected more by perceptions of discrimination (Marks et al., 2015). Higher perceived discrimination is linked to higher depression, more depressive and anxiety symptoms, conduct disorder, oppositional defiant disorder, attention deficit hyperactivity disorder (e.g., Brody et al., 2006), as well as lower self-esteem. Furthermore, longitudinal studies

showed that the negative consequences of perceived discrimination tend to persist (see Marks et al., 2015).

Immigrant youth's proximal family context also may present challenges for their adaptation. Immigrant adolescents and their parents have different experiences of cultures and different future expectations (Kwak, 2003). This acculturation gap between parents and their children may result in conflicts within the family (Vedder & Motti-Stefanidi, 2016). The underlying assumption regarding this conflict is that immigrant children acquire the prevailing values and norms of their settlement society, which often stress the need for the development of autonomy much faster than their parents do, with parents often emphasizing more the need for relatedness.

Differences in acculturation between parents and their children may intensify the normative challenges of this developmental phase. The acculturation gap and the resulting parent–adolescent conflict have been found to be significant risk factors for immigrant adolescents' adaptation and psychological well-being (e.g., Kwak, 2003). However, immigrant youth's cultural orientation toward the mainstream culture may not inevitably lead to higher levels of parent–adolescent conflict or to poorer adaptation. For example, in a study of Chinese American families living in Canada, Costigan and Dokis (2006) found that youth's higher engagement in Canadian culture did not lead to more parent–adolescent conflict or worse adaptation, even when parents did not share their children's orientation toward the host culture. It is plausible that parents want their children to become culturally competent in the host culture, which is a prerequisite for their academic and occupational success.

Resources for Positive Immigrant and Refugee Youth Adaptation

Scientific evidence indicates risk, concurrent and long-term, for adaptation of immigrant and refugee youth. However, significant variation is also reported in the quality of their adaptation. Some youth show resilience, whereas others do less well. Social and personal resources may make a difference regarding who among them will do well in spite of the challenges. Resources for youth's positive adaptation and development, just as risks, may stem from factors situated in the (a) distal (societal, cultural, institutional levels) and (b) proximal (e.g., family, school, community) contexts in which their lives are embedded, as well as within individuals (e.g., personality, motivation, intelligence).

Starting from distal-level contexts, the acculturation ideology and preferences of receiving societies are important influences on immigrants' adaptation (Sam & Berry, 2016; van de Vijver, in press). Societies that value cultural diversity and adopt a multicultural ideology promote their integration and positive adaptation. Furthermore, receiving societies whose immigrant laws are more liberal and grant more rights to immigrants support them in learning the mainstream

language and culture, help them develop a sense of belonging to the larger so-
ciety, and thus promote immigrants' (and their children's) well-being, as well as
that of society (van de Vijver, in press). In such a context, intercultural dialogue
can flourish. Intercultural dialogue has been defined as "the open and respectful
exchange of views between individuals and groups with different ethnic, cul-
tural, religious and linguistic backgrounds and heritage, on the basis of mutual
understanding and respect" (Council of Europe, 2008, https://www.coe.int/t/dg4/
intercultural/whitepaper_interculturaldialogue_2_en.asp). It contributes to the
harmonious interaction between people and groups from different ethnic and re-
ligious backgrounds and provides the basis on which immigrants' and refugees'
successful integration can be built.

The effective and swift implementation of immigration, health care, and edu-
cational and social policies is another distal-level contextual influence particularly
on refugees' adaptation and integration into the host society (Fazel et al., 2012).
However, the large influx of refugee youth in European countries since 2015 re-
vealed great unevenness between countries in their openness and preparedness
to manage efficiently this challenging situation. In certain cases, current asylum
conditions place at risk the adaptation and well-being of refugee youth. Extant
literature shows that postmigration conditions may actually have a more adverse
effect on their adaptation and mental health than what they have experienced ei-
ther before or during their migration.

A number of policies and practices driven at the societal level are consequen-
tial for refugee youth's long-term adaptation and mental health. The speed of pro-
cessing asylum requests and the interim living conditions of refugee youth and
their families may support or instead may hinder their concurrent and long-term
adaptation and mental health. For example, postmigration detention seems to be
deleterious for youth's mental health (see Fazel et al., 2012). Girls are particularly
vulnerable to being confined in restrictive reception settings compared to being
hosted in routine reception facilities. Insecure asylum status and the fear of de-
portation are also associated with a host of psychological problems. Finally, unac-
companied minors seeking asylum are an especially vulnerable group of refugees
for developing PTSD because they are deprived of their closest relationships (Eide
& Hjern, 2013). In one study, four or more relocations of unaccompanied asylum-
seeking minors within the asylum system predicted poor mental health outcomes
(see Fazel et al., 2012).

Variables at the distal-societal level often have an impact on youth indirectly by
filtering through the contexts of youth's proximal context (Motti-Stefanidi, Berry,
et al., 2012). Two key proximal contexts that contribute to individual differences in
immigrant and refugee youth adaptation are schools and families.

Schools are a key social context for immigrant and refugee youth. They con-
tribute to both their development and their acculturation (Vedder & Motti-
Stefanidi, 2016). The school climate, the educational programs schools adopt,
and the quality of relationships in the school context reflect to a large extent the

attitudes of mainstream society toward the presence of immigrants and refugees in the country. Schools that respect their students' fundamental needs for competence, autonomy, and relatedness are expected to promote their self-determined behavior, intrinsic motivation, sense of belonging to their school, as well as their engagement with the learning process (Roeser et al., 1998). For example, meaningful and relevant curricula, related to students' own interests and goals, promote greater school engagement and intrinsic motivation in all students but may be especially important for immigrant youth who need to navigate between at least two cultures. Similarly, caring relationships with teachers have been shown to be particularly important for immigrant youth, supporting them to better adapt to the new country, language, and educational demands (Suárez-Orozco, Pimentel, et al., 2009).

Thus, educational programs implemented in schools may significantly contribute to immigrant and refugee youth acculturation and development. Programs that foster equality and inclusion or value cultural pluralism reflect an acknowledgment that schools are culturally diverse (Schachner et al., 2016). Those that foster equality and inclusion draw on social psychological research on intergroup contact (Pettigrew & Tropp, 2006). They encourage contact, cooperation, and common goals between students of different ethnic groups and stress equal treatment of all groups. They aim at the reduction of prejudice and discrimination. Programs that value cultural pluralism, on the other hand, consider cultural diversity as an asset that can enrich everyone's learning in school. Schools that implement such programs adopt multicultural, multilingual education and culturally responsive teaching. Both types of educational programs promote positive adaptation and development in immigrant and nonimmigrant youth. They have been linked to lower perceived discrimination, more outgroup friendships, fewer conduct problems and emotional symptoms, and a higher sense of belonging to the school (Schachner et al., 2016).

The language(s) taught in school also contribute to immigrant youth adaptation. Some countries use subtractive forms of bilingual education that are designed to assimilate students to the mainstream language and do not protect their ethnic language (Esposito et al., 2017). Other countries adopt programs based on an additive bilingual education model. These are designed to teach both the language of the mainstream culture and that of immigrants' home culture. The latter type of program promotes immigrant youth's academic achievement and social competence and provides cognitive benefits for both immigrant and nonimmigrant students.

Immigrant composition of the classroom also significantly contributes to group and individual differences in immigrant youth peer relationships (Bellmore et al., 2007). How well immigrant youth are doing in this domain is consequential both for their development and their acculturation (Motti-Stefanidi, Berry, et al., 2012). Immigrant adolescents, like all adolescents, need to be liked and accepted by their peers, independently of the ethnicity of these peers, but they also need

to navigate successfully between intra- and interethnic peers (Motti-Stefanidi & Masten, 2017).

Some immigrant families reside in ethnic enclaves, and their children are enrolled in schools of their neighborhood with high immigrant composition. Other families live in communities with fewer co-ethnic residents. Their schools and classrooms may be composed of a nonimmigrant majority or may have high ethnic diversity. Such differences in classroom composition often present a double-edged sword for immigrant youth's development and acculturation with respect to peer relationships.

Extant evidence suggests that, at first contact in the classroom, based on the homophily phenomenon (McPherson et al., 2001), immigrant youth are less liked and have fewer friends compared to their nonimmigrant classmates (e.g., Asendorpf & Motti-Stefanidi, under review; Titzmann, 2014). However, the class-room context differentiates these results. When immigrants are the majority in the classroom, they are more liked and have more friends than the students who are the minority (e.g., Jackson et al., 2006). Over time, through intergroup contact (Pettigrew & Tropp, 2006), immigrant students who were the minority in their classrooms became increasingly more liked by their nonimmigrant classmates (see Motti-Stefanidi & Asendorpf, 2017; Motti-Stefanidi, Asendorpf, et al., 2012; Titzmann, 2014).

These results suggest that classrooms with high immigrant composition may promote positive youth development. First, they promote immigrant students' positive peer relationships (to have a friend and to be liked by peers); second, they protect them from experiences of discrimination and prejudice (Thijs & Verkuyten, 2014). However, they may at the same time contribute negatively to im-migrant youth acculturation (to have and be liked by both intra- and interethnic friends). It should be noted that, in addition to their effect on peer relationships, such classrooms present a risk for all students' academic achievement (Motti-Stefanidi, Asendorpf, et al., 2012; OECD, 2010). In contrast, classrooms with low immigrant composition promote positive acculturation but present a risk for immigrants' development because they place them at risk for low peer acceptance as well as for discrimination. However, over time and through intergroup contact, immigrants become more liked and accepted by classmates (Asendorpf & Motti-Stefanidi, under review). All in all, segregation of immigrants in classrooms with a high proportion of immigrants is not conducive to positive social and educational outcomes.

Immigrant families are a key proximal context that contributes significantly to youth's adaptation. Immigrant parents not only need to enculturate their chil-dren to their home culture but also must support them in getting along in the culture of the receiving society and in succeeding in society at large, furthermore helping them understand and teach them how to deal with issues of discrimina-tion and prejudice (Hughes et al., 2006). Family values, which involve a sense of family cohesion, closeness, and obligation; high parental aspirations for education;

and an emphasis on education, have been shown to promote the positive adaptation of first-generation immigrant youth as compared to their later-generation counterparts (e.g., Garcia Coll & Marks, 2012; Kwak, 2003; Suárez-Orozco et al., 2008). First-generation immigrant youth, many of whom share their family's values and attitudes, are academically motivated and invest energy in school and learning, characteristics that are also connected to positive adaptation. It should be noted that immigrant families differ significantly in their ability to help their children translate their aspiration into success in the educational system (Garcia Coll & Marks, 2012). However, higher levels of parental education, more financial resources, and better information and access regarding educational resources and opportunities are promotive for immigrant youth's academic achievement.

Family, both immediate and extended, is an important source of support for refugee youth adaptation and well-being (e.g., Fazel et al., 2012). Extant evidence suggests that unaccompanied refugee youth, who either migrated alone or lost their family during the migratory journey, had significantly worse developmental and mental health outcomes compared to accompanied youth. Refugee boys living with both parents had significantly, by a large difference, lower rates of psychological symptoms compared to boys living in other arrangements (Tousignant et al., 1999). Interestingly, unaccompanied refugee youth who had contact even from a distance with their families abroad perceived higher levels of support from them compared to youth who did not have such contact (Oppedal & Idsoe, 2015).

Even though contexts play a preponderant role for immigrant youth adaptation, they are clearly not its sole determinant. Young immigrants are active agents in their development and acculturation (Motti-Stefanidi, Berry, et al., 2012). For example, immigrant youth higher in self-efficacy beliefs and locus of control, which are central mechanisms of personal agency, have been shown to predict higher academic achievement and peer acceptance and few emotional symptoms (anxiety and depression) (Motti-Stefanidi, Asendorpf, et al., 2012). In another example, higher openness to experience also promotes immigrants' positive adaptation in the new country because individuals high in this trait are expected to have less rigid views and to make greater efforts to learn the new culture (see Bornstein, 2017).

Influences at each of these three levels of context may contribute independently, or in interaction with each other, to group and individual differences in immigrant youth adaptation (Motti-Stefanidi, Berry, et al., 2012). Resources may interact with risk and differentially predict immigrant youth's adaptation outcomes. For example, acculturation and ethnic identity often play an important role in the link between perceived discrimination, on the one hand, and developmental outcomes and psychological well-being on the other; youth's cultural orientation may function as a moderator. In a study of Chinese American adolescents, the effect of perceived discrimination on delinquency was stronger when they reported high levels of home culture orientation or low levels of receiving culture orientation (e.g., Deng et al., 2010). This finding is interesting in that it runs counter to other findings linking

comparable variables. For example, in another study, Mexican American boys' orientation toward the receiving culture magnified the negative impact of perceived discrimination on both self-esteem and depression (Umaña-Taylor & Updegraff, 2007). Even though these results are contradictory regarding which type of cultural orientation predicts positive adaptation in the context of perceived discrimination, they suggest that cultural orientation may mitigate the negative effects of perceived discrimination on developmental and mental health outcomes.

Public Policy Implications: A Mission Statement

In 2015, a mission statement titled "Positive Development of Immigrant Youth: Why Bother?" was drafted during an experts' meeting[1] that took place on the island of Hydra in Greece and was funded and organized by the Society for Research in Child Development in collaboration with the European Association for Developmental Psychology (EADP) and the European Association for Research in Adolescence (EARA). The mission statement summarized extant evidence regarding the importance of immigrant youth positive adaptation and development for society and for immigrants themselves and, based on this evidence, recommended policies and practices for receiving societies.

The Mission Statement

It is in the best interest of Europe and other receiving countries to have successful adaptations among their immigrant populations. The current refugee influx renders this a particularly timely and pressing issue. However, the successful adaptation of immigrants to new lands is also all the more important in light of increasing life expectancies and decreasing birth rates in receiving societies. As a result, for example, nonimmigrant senior citizens' retirement pensions partly depend on the economic contribution of immigrants. In this context, immigrants are expected to become in the next decades an important force in the economies of receiving societies and also to contribute to the care and support of the aging nonimmigrant, as well as immigrant, populations (Hernandez, 2012). International research suggests that well-informed policies and practices are necessary for the successful incorporation of immigrants into new societies.

- Children's positive adaptations and well being provide the foundation for healthy and productive adult lives (Motti-Stefanidi, Berry, et al., 2012; United Nations Children's Fund [UNICEF], 2013). Investing in childcare, education, and health-related prevention and intervention programs comes with multiple economic and social returns, including

more labor participation and reduction of crime (Heckman & Masterov, 2007; Lundberg & Wuermli, 2012). For some host societies without such programs, immigrant youths' well-being and educational prospects may deteriorate as they age and acculturate to their new environments (Garcia Coll & Marks, 2012).

- Providing immigrant families with economic opportunities and reducing barriers to obtain adequate employment equips parents to raise well-adjusted and productive citizens (Stoessel et al., 2011). It has been shown that immigrants in many countries pay more in taxes over their life course than they receive from the social benefits (Dustmann, Frattini, & Preston, 2013). Without economic opportunities, citizenship documentation, or a clear path to citizenship, children and families suffer in their health and well-being (Suárez-Orozco et al., 2011).
- Policies toward immigrants are important for the successful adaptation of immigrant youth (Filindra et al., 2011). However, countries differ in their policies toward immigrants (Helbling, 2013; Huddleston et al., 2011). Immigrant youth do better in countries with more integration oriented policies; assimilation policies can be counter-productive (Yağmur & Van de Vijver, 2012).
- Immigrant youth adopting the host cultures and languages while also maintaining the heritage culture and language, do better and contribute more to society than youth who learn only one language or cultural orientation (Berry et al., 2006; Nguyen & Benet-Martinez, 2013; Suárez-Orozco et al., 2015).
- Discrimination, racism and exclusion have deleterious effects for positive youth development (Marks et al., 2015) and social cohesion, and are risk factors for radicalization (Pascoe & Richman, 2009; Schmitt et al., 2014). In contrast, feelings of belonging and being accepted by the receiving society, strengthen youths' ties to the host society (Arends-Tóth & van de Vijver, 2006; Motti-Stefanidi et al., 2008).

Based on this scientific evidence the experts that drafted the mission statement recommended that policies and practices in receiving countries concerning immigrants should:

- Be informed by research and interventions that have been shown to have beneficial results.
- Promote non-segregated, welcoming environments and opportunities for intercultural communication and collaboration at all ages.
- Provide economic opportunities to ensure that immigrant families do well and contribute to the country.
- Provide early childcare, education, and health-related prevention and intervention programs to ensure that immigrant youth have the basis for successful integration.

- Create public campaigns that show the contribution of immigrants to the host countries as well as respect to the diversity and needs of various ethnic groups.
- Incorporate these considerations as part of choosing where to resettle refugees in addition to the availability of spaces.

Conclusion

Who among immigrant and refugee youth do well, concurrently and over time, and why? The results highlighted in the chapter reveal a mixture of risk and paradox in adaptation. Impressive resilience was noted, for example, in studies focusing on refugee youth, who often have experienced extreme adversity for prolonged periods of time (Fazel et al., 2012).

This diversity arises from multifaceted and multidetermined processes. Special emphasis was placed on the role of societal-level factors for immigrant and refugee youth long-term adaptation. These influences are filtered through youth's proximal contexts. Youth themselves contribute to their adaptation, but within the limits placed by society.

In general, youth who are equipped and bring to the experience solid, normative human resources adapt more successfully than those who do not have such social and personal capital (Masten, 2014). However, following the specificity principle in acculturation science (Bornstein, 2017), we need not only focus on universals but also disaggregate the data at least by domain of adaptation, age, gender, ethnic group, and receiving society. Bornstein actually argued that this approach brings greater explanatory power than the "one-size-fits-all" belief.

The scientific evidence presented examines the barriers and resources for positive immigrant and refugee youth adaptation and is directly linked to the United Nations Sustainable Development Goals (SDGs) (2016a), namely, to survive, thrive, and transform. Eliminating the barriers to immigrant and refugee youth positive adaptation, enhancing their social and personal resources, and implementing the recommendations presented in the mission statement help materialize key elements of these goals.

Note

1. Working group: Cynthia García Coll, Carlos Albizu University, Puerto Rico; Frosso Motti-Stefanidi, National and Kapodistrian University of Athens, Greece; Brit Oppedal, Norwegian Institute of Public Health, Norway; Vassilis Pavlopoulos, National and Kapodistrian University of Athens, Greece; Dagmar Strohmeier, University of Applied Sciences of Upper Austria, Austria; Fons van de Vijver, Tilburg University, the Netherlands.

References

Arends-Tóth, J. V., & van de Vijver, F. J. R. (2006). Issues in conceptualization and assessment of acculturation. In M. H. Bornstein & L. R. Cote (Eds.), *Acculturation and parent-child relationships: Measurement and development* (pp. 33–62). Mahwah, NJ: Erlbaum.

Bellmore, A., Nishina, A., Witkow, M. R., Graham, S., & Juvonen, J. (2007). The influence of classroom ethnic composition on same- and other-ethnicity peer nominations in middle school. *Social Development*, *16*, 720–740. doi:10.1111/j.1467-9507.2007.00404

Berry, J. W., Phinney, J. S., Sam, D. L., & Vedder, P. (Eds.). (2006). *Immigrant youth in cultural transition: Acculturation, identity and adaptation across national contexts.* Mahwah, NJ: Erlbaum.

Bornstein, M. H. (2017). The specificity principle in acculturation science. *Perspectives on Psychological Science*, *12*(1), 3–45.

Brody, G. H., Chen, Y., McBride Murry, V., Ge, X., Simons, R. L., Gibbons, F. X., . . . Cutrona, C. E. (2006). Perceived discrimination and the adjustment of African American youths: A five year longitudinal analysis with contextual moderation effects. *Child Development*, *77*, 1129–1520. doi:10.1111/j.1467-8624.2006.00927.x

Bronstein, I., & Montgomery, P. (2011). Psychological distress in refugee children: A systematic review. *Clinical Child and Family Psychology Review*, *14*(1), 44–56. doi:10.1007/s10567-010-0081-0

Costigan, C. L., & Dokis, D. P. (2006). Relations between parent-child acculturation differences and adjustment within immigrant Chinese families. *Child Development*, *77*(5), 1252–1267. doi:10.1111/j.1467-8624.2006.00932.x

Council of Europe. (2008). *White paper on intercultural dialogue*. Retrieved from http://www.coe.int/t/dg4/intercultural/whitepaper_interculturaldialogue_2_EN.asp

Council of Europe. (2016). *Intercultural matters*. Retrieved from http://www.coe.int/en/web/Pestalozzi/intercultural

Deng, S., Kim, S. Y., Vaughan, P. W., & Li, J. (2010). Cultural orientation as a moderator of the relationship between Chinese American adolescents' discrimination experiences and delinquent behaviors. *Journal of Youth and Adolescence*, *39*(9), 1027–1040. doi:10.1007/s10964-009-9460-6

Dimitrova, R., Chasiotis, A., & van de Vijver, F. (2016). Adjustment outcomes of immigrant children and youth in Europe: A meta-analysis. *European Psychologist*, *21*(2), 150–162. doi:10.1027/1016-9040/a000246

Dustmann, C., Frattini, T., & Preston, I. P. (2013). The effect of immigration along the distribution of wages. *The Review of Economic Studies*, *80*(1), 145–173. doi:10.1093/restud/rds019

Eide, K., & Hjern, A. (2013). Unaccompanied refugee children–vulnerability and agency. *Acta Paediatrica*, *102*(7), 666–668. doi:10.1111/apa.12258

Esposito, A. G., Sirkin, R. E., & Bauer, P. J. (2017). Bilingual education. In M. H. Bornstein, M. E. Arterberry, K. L. Fingerman, & J. E. Lansford (Eds.), *The SAGE encyclopedia of lifespan human development.* Los Angeles, CA: SAGE.

Fazel, M., Reed, R. V., Panter-Brick, C., & Stein, A. (2012). Mental health of displaced and refugee children resettled in high-income countries: risk and protective factors. *The Lancet*, *379*(9812), 266–282. doi:http://dx.doi.org/10.1016/S0140-6736(11)60051-2

Filindra, A., Blanding, D., & Coll, C. G. (2011). The power of context: State-level policies and politics and the educational performance of the children of immigrants in the United States. *Harvard Educational Review*, *81*(3), 407–438. doi:http://dx.doi.org/10.17763/haer.81.3.n306607254h11281

Fuligni, A. J. (2001). A comparative longitudinal approach to acculturation among children from immigrant families. *Harvard Educational Review*, *71*, 566–578. doi:http://dx.doi.org/10.17763/haer.71.3.j7046h63234441u3

Garcia Coll, C. G. E., & Marks, A. K. E. (2012). *The immigrant paradox in children and adolescents: Is becoming American a developmental risk?* Worcester, MA: American Psychological Association.

Helbling, M. (Ed.). (2013). *Islamophobia in the West: Measuring and explaining individual attitudes*. New York, NY: Routledge.

Heckman, J. J., & Masterov, D. V. (2007). The productivity argument for investing in young children. *Applied Economic Perspectives and Policy*, *29*(3), 446–493. doi:10.1111/j.1467-9353.2007.00359.x

Huddleston, T., Niessen, J., Chaoimh, E. N., & White, E. (2011). *Migrant integration policy index III*. Brussels, Belgium: British Council and Migration Policy Group.

Hughes, D., Rodriguez, J., Smith, E. P., Johnson, D. J., Stevenson, H. C., & Spicer, P. (2006). Parents' ethnic-racial socialization practices: a review of research and directions for future study. *Developmental Psychology*, *42*(5), 747.

International Organization for Migration. (2016). *Mediterranean migrant arrivals reach 345,676; deaths at sea: 4,663*. Retrieved from https://greece.iom.int/en/news/mediterranean-migrant-arrivals-reach-345676-deaths-sea-4663

Jackson, M. F., Barth, J. M., Powell, N., & Lochman, J. E. (2006). Classroom contextual effects of race on children's peer nominations. *Child Development*, *77*(5), 1325–1337. doi:10.1111/j.1467-8624.2006.00937.x

Jugert, P., & Titzmann, P. F. (2017). Trajectories of victimization in ethnic diaspora immigrant and native adolescents: Separating acculturation from development. *Developmental Psychology*, *53*(3), 552–566. http://dx.doi.org/10.1037/dev0000254

Kwak, K. (2003). Adolescents and their parents: A review of intergenerational family relations for immigrant and non-immigrant families. *Human Development*, *46*(2–3), 115–136. doi:10.1159/000068581.

Lundberg, M., & Wuermli, A. (2012). *Children and youth in crisis: Protecting and promoting human development in times of economic shocks*. Washington, DC: World Bank. doi:10.1596/978-0-8213-9547-9

Marks, A. K., Ejesi, K., McCullough, M. B., & Coll, C. G. (2015). Developmental implications of discrimination. In M. E. Lamb (Ed.), *Handbook of child psychology and developmental science* (Vol. 3, pp. 1–42). Hoboken, NJ: John Wiley & Sons, Inc. doi:10.1002/9781118963418.childpsy309

Masten, A. S. (2014). *Ordinary magic: Resilience in development*. New York, NY: Guilford Press.

Masten, A. S., & Cicchetti, D. (2016). Resilience in development progress and transformation. In D. Cicchetti (Ed.), *Developmental psychopathology, theory and method* (Vol. 1). Hoboken, NJ: Wiley.

Masten, A. S., Liebkind, K., & Hernandez, D. J. (2012). *Realizing the potential of immigrant youth*. Cambridge, England: Cambridge University Press.

McPherson, M., Smith-Lovin, L., & Cook, J. M. (2001). Birds of a feather: Homophily in social networks. *Annual Review of Sociology*, *27*, 415–444.

Motti-Stefanidi, F. (2014). Immigrant youth adaptation in the Greek school context: A risk and resilience perspective. *Child Development Perspectives*, *8*(3), 180–185. doi:10.1111/cdep.12081

Motti-Stefanidi, F. (2015). Identity development in the context of the risk and resilience framework. In M. Syed & K. McLean (Eds.), *Oxford Handbook of Identity Development*. Oxford University Press.

Motti-Stefanidi, F., & Asendorpf, J. B (2017). Adaptation during a great economic recession: A cohort study of Greek and immigrant youth. *Child Development*, *88*(4), 1139–1155.

Motti-Stefanidi, F., Asendorpf, J. B., & Masten, A. S. (2012). The adaptation and well-being of adolescent immigrants in Greek schools: A multilevel, longitudinal study of risks and resources. *Development and Psychopathology*, *24*(02), 451–473. doi:10.1017/S0954579412000090

Motti-Stefanidi, F., Berry, J. W., Chryssochoou, X., Sam, D. L., & Phinney, J. S. (2012). Positive immigrant youth in context: Developmental, acculturation and social psychological perspectives. In A. Masten, B. Hernandez, & K. Liebkind (Eds.), *Capitalizing on immigration. The potential of immigrant youth* (pp. 117–158). Cambridge, England: Cambridge University Press.

Motti-Stefanidi, F., & Masten, A. S. (2017). A resilience perspective on immigrant youth adaptation and development. In N. J. Cabrera & B. Leyendecker (Eds.), *Handbook of positive development of minority children* (pp. 19–34). Amsterdam, the Netherlands: Springer.

Motti-Stefanidi, F., Masten, A., & Asendorpf, J. B. (2014). School engagement trajectories of immigrant youth: Risks and longitudinal interplay with academic success. *International Journal of Behavioral Development*. Advance online pulbication. doi:10.1177/0165025414533428

Motti-Stefanidi, F., Pavlopoulos, V., Obradović, J., & Masten, A. S. (2008). Acculturation and adaptation of immigrant adolescents in Greek urban schools. *International Journal of Psychology*, *43*(1), 45–58. doi:10.1080/00207590701804412

Nguyen, A.-M. T., & Benet-Martinez, V. (2013). Biculturalism and adjustment: A meta-analysis. *Journal of Cross-Cultural Psychology*, *44*(1), 122–159. doi:10.1177/0022022111435097

Oppedal, B., & Idsoe, T. (2015). The role of social support in the acculturation and mental health of unaccompanied minor asylum seekers. *Scandinavian Journal of Psychology*, *56*(2), 203–211. doi:10.1111/sjop.12194.

Oppedal, B., & Toppelberg, C.O. (2016). Acculturation and development. In D. L. Sam & J. Berry (Eds.), *Cambridge Handbook of Acculturation Psychology* (2nd ed., pp. 71–92). Cambridge, England: Cambridge University Press.

Organization for Economic Cooperation and Development. (OECD). (2010*). Closing the gap for immigrant students: Policies, practice, and performance*. Paris, France: Author.

Organization for Economic Cooperation and Development. (OECD). (2012). *Untapped skills: Realising the potential of immigrant students*. Retrieved from http://www.oecd.org/edu/Untapped%20Skills.pdf

Pascoe, E. A., & Smart Richman, L. (2009). Perceived discrimination and health: A meta-analytic review. *Psychological Bulletin*, *135*(4), 531. doi:10.1037/a0016059

Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, *90*(5), 751. doi:10.1037/0022-3514.90.5.751

Phinney, J. S., Horenczyk, G., Liebkind, K., & Vedder, P. (2001). Ethnic identity, immigration, and well-being: An interactional perspective. *Journal of Social Issues*, *57*(3), 493–510. doi:10.1111/0022-4537.00225

Phinney, J. S., & Ong, A. D. (2007). Conceptualization and measurement of ethnic identity: Current status and future directions. *Journal of Counseling Psychology*, *54*(3), 271. doi:10.1037/0022-0167.54.3.271

Reitz, A. K., Motti-Stefanidi, F., & Asendorpf, J. B. (2013). Mastering developmental transitions in immigrant adolescents: The longitudinal interplay of family functioning, developmental, and acculturative tasks. *Developmental Psychology*, *50*(3), 754–765. doi:10.1037/a0033889

Roeser, R. W., Eccles, J. S., & Sameroff, A. J. (1998). Academic and emotional functioning in early adolescence: Longitudinal relations, patterns, and prediction by experience in middle school. *Development and Psychopathology*, *10*(02), 321–352.

Sack, W. H., Him, C., & Dickason, D. (1999). Twelve-year follow-up study of Khmer youths who suffered massive war trauma as children. *Journal of the American Academy of Child & Adolescent Psychiatry*, *38*(9), 1173–1179.

Sam, D. L., & Berry, J. W. (Eds.). (2016). *The Cambridge handbook of acculturation psychology*. Cambridge, England: Cambridge University Press.

Sam, D. L., Vedder, P., Liebkind, K., Neto, F., & Virta, E. (2008). Immigration, acculturation and the paradox of adaptation in Europe. *European Journal of Developmental Psychology*, *5*(2), 138–158. doi:10.1080/17405620701563348

Schachner, M. K., Noack, P., Van de Vijver, F. J., & Eckstein, K. (2016). Cultural diversity climate and psychological adjustment at school—Equality and inclusion versus cultural pluralism. *Child Development*, *87*(4), 1175–1191. doi:10.1111/cdev.12536

Schmitt, M. T., Branscombe, N. R., Postmes, T., & Garcia, A. (2014). The consequences of perceived discrimination for psychological well-being: A meta-analytic review. *Psychological Bulletin*, *140*(4), 921. doi:10.1037/a0035754

Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology*, *69*(5), 797. doi:10.1037/0022-3514.69.5.797

Stoessel, K., Titzmann, P. F., & Silbereisen, R. K. (2011). Children's psychosocial development following the transitions to kindergarten and school: A comparison between natives and immigrants in Germany. *International Journal of Developmental Science*, *5*(1–2), 41–55. doi:10.3233/DEV-2011-11077

Suárez-Orozco, C., Abo-Zena, M., & Marks, A. K. (2015). *Transitions: The development of immigrant children*. New York, NY: NYU Press.

Suárez-Orozco, C., Gaytán, F. X., Bang, H. J., Pakes, J., O'Connor, E., & Rhodes, J. (2010). Academic trajectories of newcomer immigrant youth. *Developmental Psychology*, *46*(3), 602. doi:10.1037/a0018201

Suárez-Orozco, C., Pimentel, A., & Martin, M. (2009). The significance of relationships: Academic engagement and achievement among newcomer immigrant youth. *Teachers College Record*, *111*(3), 712–749.

Suárez-Orozco, C., Suárez-Orozco, M. M., & Todorova, I. (2009). *Learning a new land: Immigrant students in American society*. Cambridge, MA: Harvard University Press.

Suárez-Orozco, C., Yoshikawa, H., Teranishi, T., & Suárez-Orozco. M. (2011). Living in the Shadows: The developmental implications of undocumented status [Special issue]. *Harvard Education Review*, *81*, 438–472.

Thijs, J., & Verkuyten, M. (2014). School ethnic diversity and students' interethnic relations. *British Journal of Educational Psychology*, *84*(1), 1–21. doi:10.1111/bjep.12032

Titzmann, P. F. (2014). Immigrant adolescents' adaptation to a new context: Ethnic friendship homophily and its predictors. *Child Development Perspectives*, *8*(2), 107–112. doi:10.1111/cdep.12072

Tousignant, M., Habimana, E., Biron, C., Malo, C., Sidoli-Leblanc, E., & Bendris, N. (1999). The Quebec adolescent refugee project: Psychopathology and family variables in a sample from 35 nations. *Journal of the American Academy of Child & Adolescent Psychiatry*, *38*(11), 1426–1432.

Umaña-Taylor, A. J., Quintana, S. M., Lee, R. M., Cross, W. E., Rivas-Drake, D., Schwartz, S. J., . . . Seaton, E. (2014). Ethnic and racial identity during adolescence and into young adulthood: An integrated conceptualization. *Child Development*, *85*(1), 21–39. doi:10.1111/cdev.12196

Umaña-Taylor, A. J., & Updegraff, K. A. (2007). Latino adolescents' mental health: Exploring the interrelations among discrimination, ethnic identity, cultural orientation, self-esteem, and depressive symptoms. *Journal of Adolescence*, *30*(4), 549–567. doi:10.1016/j.adolescence.2006.08.002

Umaña-Taylor, A. J., Wong, J. J., Gonzales, N. A., & Dumka, L. E. (2012). Ethnic identity a nd gender as moderators of the association between discrimination and academic adjustment among Mexican—origin adolescents. *Journal of Adolescence*, *35*, 773–786. doi:10.1016/j.adolescence.2011.11.003

United Nations. (2016a). *Sustainable Development Goals (SDGs)*. Retrieved from https://sustainabledevelopment.un.org/?menu=1300

United Nations. (2016b). *244 million international migrants living abroad worldwide new UN statistics reveal*. Retrieved from http://www.un.org/sustainabledevelopment/blog/2016/01/244-million-international-migrants-living-abroad-worldwide-new-un-statistics-reveal/

United Nations High Commissioner for Refugees (UNHCR). (1951). *The refugee convention*. Retrieved from http://www.unhcr.org/4ca34be29.pdf

Van de Vijver, F. J. R. (in press). Acculturation. In M. H. Bornstein, M. E. Arterberry, K. L. Fingerman, & J. E. Lansford (Eds.), *The SAGE encyclopedia of lifespan human development* (pp. xx–xx). Los Angeles, CA: SAGE.

Vedder, P. H., & Motti-Stefanidi, F. (2016). Children, families, and schools. In D. L. Sam & J. Berry (Eds.), *Cambridge handbook of acculturation psychology* (2nd ed.). Cambridge, England: Cambridge University Press.

Yağmur, K., & Van de Vijver, F. J. (2012). Acculturation and language orientations of Turkish immigrants in Australia, France, Germany, and the Netherlands. *Journal of Cross-Cultural Psychology*, *43*(7), 1110–1130. doi:10.1177/0022022111420145

Push Out, Pull Out, or Opting Out? Reasons Cited by Adolescents for Discontinuing Education in Four Low- and Middle-Income Countries

Renu Singh and Protap Mukherjee

Introduction

Adolescence or the second decade of life (10–19 years) is recognized as an increasingly important phase of life when children are transitioning into adulthood. Adolescence can be further divided into three distinct phases: early adolescence (10–13), middle adolescence (14–16), and late adolescence (17–19), with children experiencing unique, multidimensional changes based on changes taking place at the individual, familial, and societal levels. There has been recognition in recent years of the significance of adolescence in its power to translate childhood experiences into later competencies (Steinberg & Morris, 2001) and for steering young people on divergent paths based on the accumulation of prior life advantages and risks (Johnson et al., 2011). Within the important phase of adolescence, the criticality of the role of education has received increasing attention, and researchers have highlighted that the extent to which adolescents succeed in school and academics has important implications for their ultimate educational and occupational success (Alexander et al., 2001; Bouchey et al., 2010). This gathers prime importance in light of Sustainable Development Goal 4 (SDG 4), which aims to achieve universal completion of primary and secondary education by 2030 (United Nations, 2015).

The UNESCO Institute of Statistics (UIS) and Global Education Monitoring (GEM) report of 2016 highlighted that globally, 263 million children and adolescents between the ages of 6 and 17 were currently out of school. This number includes 61 million children of primary school age (about 6 to 11 years), 60 million young adolescents of lower secondary school age (about 12 to 14 years),

and 142 million adolescents of upper secondary school age (about 15 to 17 years) for the school year ending in 2014. It is clear that as students enter middle and late adolescence, the number of out-of-school children increases because 1 out of 11 primary school age children, 1 out of 6 lower secondary school age adolescents, and 1 out of 3 upper secondary school age adolescents are not in school (UIS & GEM, 2016). Though these global averages mask considerable differences at regional and country levels, it is important to note that more than half the out-of-school adolescents live in southern Asia (100.8 million) and sub-Saharan Africa (93.3 million), and the current completion rate of upper secondary education in low-income countries is a meager 14%. The report further stated that if we leave the current young generation without adequate schooling, we doom them and the world to future poverty, environmental ills, and even social violence and instability for decades to come. Clearly, there exists a large gap between where a large number of developing as well as developed countries stand today in terms of universalization of secondary education that the world has committed to by 2030; there is no place for complacency.

Understanding Reasons for Dropping Out

In order to ensure that adolescents smoothly transition through primary, middle, and secondary schools, we undoubtedly need to gain a better understanding of why and when students drop out, which requires a consideration of both long-term vulnerabilities and proximal disruptive events and contingencies (Dupere et al., 2015).

Researchers have repeatedly drawn our attention to the fact that dropping out of school should be viewed not as an event, but as an evolving process (Jimmerson et al., 2000; Rumberger, 2011). Dropping out of school is the result of interactions of individual, community, family, and school factors (Tiblier, 2007). Moving beyond "supply-and-demand" factors, a synthesis of literature shows that there are a number of "push" and "pull" factors that influence adolescent decisions to leave schools (Rumburger & Lim, 2008). Push factors largely constitute school-related factors, such as distance to school, teaching quality, and cost of schooling, going beyond personal student attributes. On the other hand, pull factors are external to the school environment and include home and family-related issues such as family size, household poverty, loans taken out by families, and home- and care-related responsibilities. Stearns and Glennie (2006) suggested that personal attributes such as the ethnicity and gender of students may further affect these push and pull factors. Despite increasing interest in "adolescence within the life course," research related to dropping out has been constrained by the inadequate availability of data sets that extend from childhood to the adult years rather than by a lack of theoretical interest on the part of adolescence scholars (Johnson et al., 2011).

Longitudinal Evidence From Young Lives

Given that dropping out of school occurs at different ages of adolescents due to a multiplicity of reasons, longitudinal evidence clearly has an edge in providing us information regarding reasons why children discontinue their education. We draw on Young Lives, a longitudinal cohort study following the lives of approximately 12,000 children in four low- and middle-income countries—Ethiopia, India (in the states of Andhra Pradesh and Telangana), Peru, and Vietnam—over 15 years, to explore reasons associated with discontinuation of schooling cited by adolescents across these four countries. The Young Lives sample of each country consists of two age groups: a Younger Cohort of 2,000 children, who were aged approximately 1 year in the Round 1 survey in 2002, and an Older Cohort (OC) of 1,000 children with an approximate age of 8 years at that time (Galab et al., 2014). Having tracked these two cohorts of children beginning in 2002, the four rounds of quantitative and qualitative survey related to the older cohort, conducted so far, allow us to investigate their education trajectories.

We particularly draw upon data related to the OC children in all four study countries from three rounds (i.e., Round 2, Round 3, and Round 4) when children were approximately 12, 15, and 19 years old, respectively, as well as four rounds of qualitative survey conducted when the children were approximately 13, 14, 16, and 20 years old. The numbers of OC children in each Young Lives study country during their adolescent years from Round 2 to Round 4 are given in Table 12.1, taking attrition into account.

In each country, the Young Lives sampling followed a similar multistage sampling procedure. Although the samples are not statistically representative of national populations, being a pro-poor sample; comparisons with nationally representative data sets showed that they are informative of a large range of living standard conditions in each of the selected countries (Sanchez & Singh, 2016).

ANALYTICAL MODEL

We built a model (Figure 12.1) to explore reasons for children dropping out of school; we drew on Bronfenbrenner's (1999) ecological framework, which views child development as a product of mutual interaction between the child and various complex layers of five nested environments: family; school; community (a microsystem that also encompasses sociodemographic characteristics); the macrosystem, which is characterized by legislation, cultural patterns, and belief

TABLE 12.1 Number of Older Cohort Children by Round and Country

Young Lives Countries	Round 2 (2006), Age 12	Round 3 (2009), Age 15	Round 4 (2013), Age 19
Ethiopia	980	974	908
India	995	977	952
Peru	685	678	635
Vietnam	990	972	886
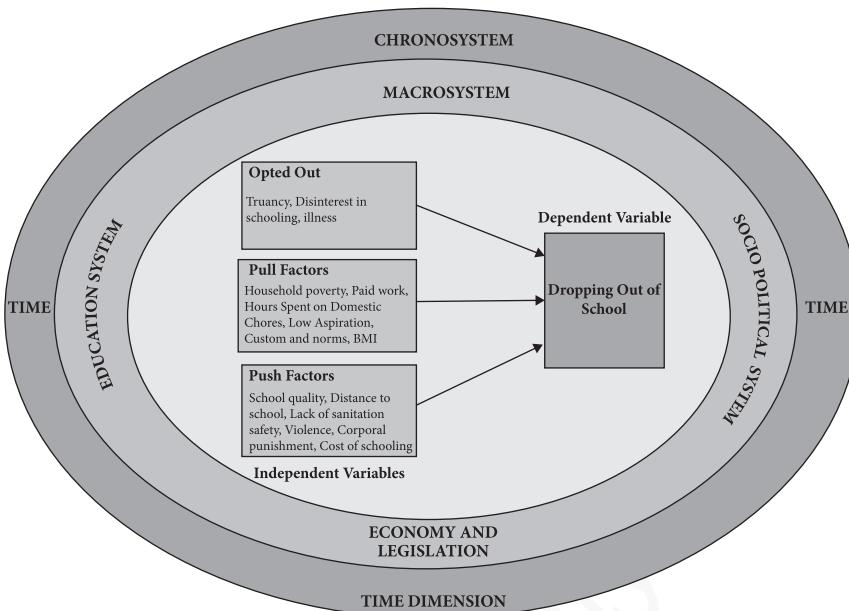
FIGURE 12.1 *Theoretical framework for studying reasons adolescents discontinue education. BMI, body mass index.*

Note: Adapted from Bronfenbrenner's ecological model.

systems; and the chronosystem, which encompasses the dimension of time (Graf, 2003). Adopting a life course perspective, our model recognizes school discontinuation not as an event, but as a culmination of interplay of various factors over time (i.e., in light of previous childhood experiences and outcomes). The model also recognizes the importance of points of rupture and discontinuity in individual trajectories of children, also called "turning points" (Crosnoe & Johnson, 2011).

We therefore examined discontinuation of schooling at various ages by analyzing reasons given by adolescents for "not being in school" during the three phases of adolescence across the four countries. The reasons put forth by children are myriad and are also related to specific stages of adolescence, such as puberty, their own agency, socioeconomic position and family circumstances, geographical location, gender and age expectations, and conflict at school (e.g., rejection and bullying by peers or teachers); these in turn are influenced by both proximate and distal elements of the environment (including social stratification systems) in which the individuals are embedded.

Based on the reasons for leaving school put forth by the OC in Rounds 2, 3, and 4 of the Young Lives survey, the analytical model classifies reasons cited into three broad categories of reasons for early school leaving:

1. *Push factors*, for instance, when adverse situations within the school environment lead to consequences, ultimately resulting in dropout (Jordan et al., 1994)

2. *Pull factors*, which are related to factors outside the school, such as social and economic disadvantage that effects regular attendance in school
3. *Opted out factors* include behavior (truancy), personal characteristics, and attitude (disinterest toward schooling, motivation, etc.)

Who Drops Out? Levels and Patterns of Dropouts

In each survey round across the four countries, education history data were collected, and children who had discontinued their education were asked reasons for the same. Findings show that the percentage of dropped-out children at different adolescent ages, specifically at age 12 or early adolescence (Round 2), 15 or middle adolescence (Round 3), and 19 or late adolescence (Round 4) in each country. We can see the percentage of children discontinuing education at age 12 was low in all four countries: lowest in Peru (0.9%), followed by Vietnam (3.4%) and Ethiopia (5.2%), and highest in India (11.1%). It is important to note here that the total numbers of children discontinuing education at age 12 in Peru was very low (6); therefore, the results need to be interpreted cautiously. Sanchez and Singh (2016) noted that, in Peru and to a lesser degree Vietnam, near-universal levels of enrollment were maintained for the duration of primary schooling; however, in India, children began to drop out of education at younger ages, with this decline particularly pronounced from about the age of 10 years.

This scenario further changes as children reach middle adolescence or age 15. It is interesting to note that while Peru maintained the previous status of lowest number of early school leavers, the percentage of adolescents leaving school in Vietnam increased drastically, and it emerged as the country with the highest number of adolescents leaving school by 15, followed by India and Ethiopia. Once again, findings from Ethiopia need to be interpreted in light of a late start for primary schooling among Ethiopian children. Tafere and Pankhurst (2015) noted that although enrollment in Ethiopia had increased between the ages of 8 and 12, the overall rate of completion of primary school (Grades 1–8) at the age of 15 was very low, and less than a fifth of the children had completed primary school by then. Part of the problem is that children in Ethiopia start school late—especially in rural areas, where they work before commencing school—but it is also down to intermittent attendance and to the poor quality of the education they receive (Young Lives, 2016).

By the time the OC reached late adolescence and turned 19 years in 2013 Round 4 survey, the number of adolescents discontinuing education dramatically increased across all four countries. Technically, at 19, children in all four countries should have been pursuing higher education if they had successfully transitioned from secondary education and continued their studies. However, we observe inequity based on disadvantage persisting across countries. For example, in Vietnam only half the young people from the poorest households were still in education at age 19 compared with almost three quarters of those from wealthier households, while in Ethiopia by the age of 19, 15% of the children who were enrolled were

still in upper primary school. In Peru, 35% of children from better-off households were enrolled in university, compared with only 3% of children from the poorest families (Young Lives, 2016).

Prominent Factors Affecting Dropout During Adolescence

The highest number of adolescents discontinuing education by 19 years was observed in Vietnam (54.4%), followed by India (50.9%), Peru (49.1%), and Ethiopia (40.9%). These aggregates mask specific patterns of why children drop out in early, middle, and late adolescence across the four countries. Reasons for leaving school are complex, and adolescents' agency and roles in the decisions affecting their life pathways are often highly constrained, not least by their material and family conditions and by powerful gender and age expectations, which are nonetheless dynamic (Crivello & Gag, 2016). Table 12.2 provides likelihood of dropping out among adolescents by selected background characteristics by age 19 across the four countries. A multivariate binary logistic regression analysis has been carried out to study the probability of dropping out, and the odds ratio is used in examining the likelihood of dropping out of a specific category in relation to the reference category of the predictor variable.

Findings showed that gender was significantly associated with dropping out in three of the four countries—Ethiopia, India, and Vietnam—but not Peru. However, the gender dimension of dropping out in these three countries was different; whereas girls were 29% less likely to drop out than boys by age 19 in both Ethiopia and Vietnam, the relationship was the opposite in India, where girls were 1.5 times more likely to leave education compared to boys. Interestingly, place of residence or urban-rural residence did not show any significant association with dropping out in any of the four countries after controlling for other predictor variables.

TABLE 12.2 Odds Ratio From Logistic Regression Analysis Predicts the Likelihood of Dropping Out From Education by Age 19

Background		Ethiopia	India	Peru	Vietnam
Gender	Boys[(Ref)]				
	Girls	0.71**	1.46**	1.10	0.71**
Place of residence	Urban[(Ref)]				
	Rural	1.45	0.70	1.11	0.79
Wealth tercile	Bottom[(Ref)]				
	Middle	0.87	0.67**	0.80	0.55***
	Top	0.60**	0.31***	0.38***	0.37***
Mother's education	Nonliterate[(Ref)]				
	Literate	0.58**	0.43**	1.09	0.32***
Mothers' aspiration about child's future education	Below university[(Ref)]				
	University	0.75*	0.27***	1.02	0.28***
Constant		1.01	4.65	1.19	20.28

[(Ref)], reference category.

Significance level: *** 1%, ** 5%, and *10%.

Households that belonged to the top wealth tercile during the Round 1 survey were negatively correlated with dropping out by age 19. It has been observed that children from top wealth tercile households are 40%, 69%, 62%, and 63% less likely to drop out from education in Ethiopia, India, Peru, and Vietnam, respectively. The wealth index is a composite index that reflects the welfare of household members in terms of the quality of the dwelling (e.g., the materials of the walls, roof, etc.); use of durable goods (whether the household owns a radio, TV, bicycle, etc.); and access to basic services (whether the household has drinking water, electricity, etc.). For the ease of interpretation, all households were categorized into three wealth terciles, with the bottom tercile indicating the poorest economic conditions at the household level. For both India and Vietnam, children from the middle wealth tercile also showed a significant negative association with dropping out. Children with literate mothers from Ethiopia, India, and Vietnam were 42%, 57%, and 68% less likely, respectively, to drop out than children with nonliterate mothers. The relationship between a mother's education and dropping out did not show any significant association for children in Peru.

Similarly to mothers' education, mothers' aspiration related to children's education had significant negative association with dropping out in Ethiopia, India, and Vietnam. The result showed that children whose mothers had an educational aspiration pegged at the university level for their children were 25%, 73%, and 72% less likely in Ethiopia, India, and Vietnam, respectively, to drop out of school as compared to children whose mothers had lower educational aspirations.

Exploring Reasons for Discontinuing Education

Based on our theoretical model (Figure 12.1), we categorized and summarized all the reasons cited by children in the four countries into the three categories of push factors, pull factors, and opted-out factors and present the top five reasons under each category or factor of dropping out (Table 12.3).

PUSH FACTORS

The first set of reasons that students reported for discontinuing education classified as push factors were school-related factors. There were 16 distinct push factors identified by the Young Lives children across all four countries. The most important push factor reported was "fees too expensive," which accounted for 38.6% of all push factors; followed by "banned from schooling because children failed to achieve necessary grade" (i.e., expulsion) (24.3%); books and other supplies being too expensive (8.9%); school too far from home (7.1%); and cannot understand the content of the lesson (5.6%). The five push factors together constituted 84.5% of all push factors.

TABLE 12.3 Categorization of Reasons for Dropping Out

Reasons for Dropping Out	Top Five Individual Reasons
Push (Top 5 push factors accounted for 84.6% of the total push factors)	1. Fees too expensive (38.6%) 2. Banned from school because failed to achieve necessary grade/level at school (24.3%) 3. Books and/or other supplies too expensive (8.9%) 4. School too far from home (7.1%) 5. Cannot understand the content of lesson (5.6%) Other push factors reported were *shoes/clothes/uniform for school too expensive, banned from school for behavior reasons, ill-treatment/abuse from teachers/principal, banned from school because away for too long, lack of transport, quality of education at school (teaching and learning) poor, bullying/abuse from peers, stigma and discrimination because of ethnic group/caste/socioeconomic group and the like, not safe to travel to school, transport too expensive, and cannot understand the language in class.*
Pull (Top 5 pull factors accounted for 77.4% of all pull factors)	1. Marriage (23.0%) 2. Have to do paid work to earn money (20.1%) 3. Needed for domestic and/or agricultural work at home (14.5%) 4. Wanted to start working (12.2%) 5. Looking for work (7.5%) Other pull factors include *terminated the course of education; family issues,* such as. *problems at home, need to look after own children, family member ill/disabled/elderly; need to learn a trade/skill; doing military service; it is not appropriate for girls to go to/continue at school; family function; need to stay home to look after siblings; migration with parents; and quality of care (food, noneducational) poor.*
Opted-out Five personal reasons for dropping out were reported	1. Truancy, child does not want to go, not interested (59.5%) 2. No need for schooling for future job (15.9%) 3. Disability, illness (13.9%) 4. Child too young (10.1%) 5. Preparing to enter university/educational institution (0.7%)

Cost of Schooling

Clearly, the fact that cost of schooling emerges as the most cited reason by children needs policy attention because secondary schooling was not free in our study countries and was obviously a huge barrier to retaining the poorest students, particularly as they transitioned into secondary schools. Even at the primary level, where education was free in public schools, in India a large number of families chose private schools charging a low fee, based on parental perception of "better quality English-medium education" offered by the latter.

Singh and Bangay (2014) highlighted, through an analysis of educational expenditure for Round 3 in India, that households sending children to private schools spent 7.5% of yearly per capita household expenditure on education. This is measured against 2.7% of total household expenditure for those sending children to public schools. Families also spent more on boys' education than girls. One mother in India described how her daughter enrolled in a private school charging a low fee would remain absent from school when they could not afford to pay the school fee on time "She studies well, she goes regularly and returns, but when we delay the fee payment then she will not go, she refuses to go and hides behind that wall . . . and says 'Sir will beat me.'"

There also remain "hidden costs" related to education, such as travel cost as well as expense of books, which are not covered by the universal free education offered at the primary level in the study countries. As young people near adulthood, they and their families weigh the costs and benefits of remaining in school, taking into account future opportunities, current costs, social norms, and children's successes and experience at school, which tend to be different for girls and boys (Winters, 2016). Lan and Jones (2007), drawing on longitudinal data from Vietnam, also found that the costs involved in sending children to school—and the opportunities that poor families lose by doing so—made it difficult for poor children to regularly attend or to complete the whole academic year.

Bullying

Bullying also emerged as one of the reasons children cited for leaving school; this bullying varied from physical attack to verbal bullying, such as name-calling or sexual harassment. Pells et al. (2016) found that 15-year-olds across all four countries experienced bullying, with verbal bullying most common across the countries, affecting a third of children in Peru, a quarter in India, a fifth in Vietnam and 14 percent in Ethiopia On the other hand, physical bullying emerged as the least prevalent type of bullying across three of the countries, with the exception of India, where it was found to be nearly as common as the other types.

Once again, bullying was correlated to wealth and ethnicity/caste, with the poorest children experiencing ridicule from their peers. In Ethiopia, Pells et al. (2016) gave the example of 12-year-old Kebenga, living in rural Oromia, Ethiopia, who described being absent from school for 3 days because of having faced insults from his peers: "I went to school barefoot because my shoes were torn apart. Then students laughed at me, and some of them insulted me, calling me a 'poor boy.'"

YThinh, a 16-year-old boy from the Cham H'roi ethnic minority group in Viet Nam, described how he was verbally and physically bullied on account of his ethnicity. At the end of seventh grade, YThinh described how another boy "mocked me for being 'an ethnic' and then punched me with his fist." YThinh could not endure the continued bullying and added, "I couldn't digest the lessons. So, I felt tired of learning." He left school and began working on the family farm (Pells et al., 2016).

While poverty and ethnicity were associated with bullying across contexts, a large number of girls in particular spoke about the negative effect of bullying by boys on their learning. Haftey, from Ethiopia, was harassed on her way to school when she was 12; she said, "We cannot study because we always worry about the boys' threat. We are frightened always."

Qualitative evidence suggests that children who are bullied find it difficult to seek help from peers, teachers, and parents, often fearing harsh punishment. Within schools, bullying is often part of a wider violent environment, where harsh disciplinary practices such as corporal punishment serve to normalize violence (Pells et al., 2016).

Poor Quality of Education

Last, but not the least, quality of education related to children not following the content of lessons taught in school needs to be given due consideration as a key reason for children discontinuing schooling. Children from the poorest households are bound to be pressured to leave school as they enter middle adolescence if parents and children realize that they are not understanding or being taught effectively. Language and medium of instruction are other important reasons that children may not follow what is being taught in schools. Lan and Jones (2007) found a significant difference between Kinh (the Vietnamese-speaking ethnic majority) and non-Kinh children, particularly in literacy skills. Kinh children were three times more likely to read Vietnamese with accuracy, while ethnic minority children were unable to access education in their mother tongue because all books were in Vietnamese, and they often failed to develop fluency in Vietnamese. The authors also highlighted that scant attention was being paid to improving teaching methods or the learning environment, as Singh and Sarkar (2015) indicated for Indian schools. While a "no detention" policy allows children not to be retained i.e repeat a grade during the elementary years of schooling in India (Grades 1–8), there is increasing pressure as children move to secondary school and have to sit for an external examination.

Yashwant, a 15-year-old Backward Class boy, studying in Grade X in a public high school in India, was keen to join a private school, which he felt offered better education. However, because his widowed mother had taken a loan for his sister's wedding and they were in debt, he knew that he could not afford to join a private school due to the cost of books and the like. He lamented, "I am frightened whether I will pass or fail in Grade X. . . . The teacher scolds us, for that I am frightened."

PULL FACTORS

The second set of causal factors cited by adolescents for discontinuing school are categorized as pull factors, which are mostly related to households or external to school factors. The most important pull factors for adolescents by age 19 is "marriage," which constitutes 23.0% of all pull factors, followed by "have to do paid work to earn money" (20.1%), "needed for domestic or agricultural work at home" (14.5%), "wanted to start working" (12.2%), and "looking for work" (7.5%). These five pull factors were 77.3% of the total pull factors reported in four countries.

Early Marriage

Early marriage remains an important factor particularly for girls in developing and middle-income countries; in India, 36.6% of the girls were married by 19. Espinoza and Singh (2016) found that school enrollment at the age of 15 had the most statistically significant impact on the probability of teen marriage, reducing its likelihood by 32.2%.

Singh and Vennam (2016), drawing on data from India, highlighted that persisting patriarchy and son preference were key factors in girls being denied an opportunity to develop skills and agency and pursuing education. They highlighted existing mindsets and perceptions related to adolescent girls (p. 28): "Parents continue [to educate] the boys until college . . . but they don't send girls to college. Because when girls attain puberty, parents arrange their marriages." This is a reflection of the persistence of gender discrimination, and as one community member explained: "Parents think that if they gave a good education to the girl child, it would be useful to her father-in-law's family. But if you provide a good education to [the] boy it is useful to them [the parents]."

Girls in Ethiopia were also observed to leave school and marry during middle adolescence, particularly due to poverty and family circumstances. Haymanot, who lived in Zeytuni in Tigray, got married at 16 because her mother was ill. Haymanot felt she needed to support her mother, who was unable to work and feared that she might die.

Engaging in Paid Work and Domestic Chores

Drawing young children into work during adolescence is undoubtedly a key factor that impedes regular attendance at school; many children in the Young Lives sample reported combining school and work from the early grades of primary school (Singh & Vennam, 2016). Only a third of the Young Lives OC were still in full-time education by age 19, another third combining paid work and education, and a third in paid work and no longer at school. If this is broken down by gender, 37% of boys and 18% of girls were in paid work, while the proportion of those who were still at school full time or doing further or higher education was the exact opposite (Young Lives, 2016).

Beletech was an orphan who lived with her aunt in Ethiopia. In addition to domestic work, she had been involved in wage labor and working in her "brother's" shop. She decided to quit school because she did not have sufficient time to study, resulting in poor grades and lost interest in studying. When the fieldworker said to her: "There wasn't anyone who asked you why you wanted to quit?" She answered, "No one asked me about that. I simply quit the school and decided to marry" (Pankhurst et al., 2016, p. 20).

In Peru, Manuel's family lived in the Andes Mountains and belonged to the Quechua people, one of the largest of the 42 indigenous groups. He had eight siblings and started school late; due to repeating a year, he was over the age of others. He dropped out of school at 13 when he went to work on coffee plantations in the rainforest. After a year of working, he enrolled in a nonregular school, but discontinued this after 2 years. Still, keen to study, Manuel joined the army at 16 hoping that the army would allow him to pursue his studies. However, he was denied permission to study and after becoming sick ran away from there to take a job in a construction company (Young Lives, 2016).

Clearly, inequalities linked to poverty, location, and gender all combined to pull children out of school.

The third category of reasons given as "opted-out" factors reflects reasons related to personal choices that children made in relation to discontinuing schooling. Interestingly "truancy" emerged as the most cited reason for opting out of school and constituted 59.5% of opted-out reasons and 10.7% of all the reasons under push, pull, and opted-out factors. The other opted-out factors that were most cited by children included "no need for schooling for future job" (15.9%) and "disability/illness" (13.9%).

Truancy

Truancy needs to be interpreted with caution because it seems intertwined with pull factors, including "household shocks" that caused children to decide to avoid attending school.

Hung grew up with his older brother, his parents, and his grandparents in a small house in a village in Vietnam. Hung's brother dropped out of school in Grade 9, and Hung had been working on the farm since the age of 10. Though his parents were keen for Hung to continue studying, the family experienced a series of disasters that affected their crop, and his brother fell ill. When Hung failed the exam for admission to Grade 10, he decided that he did not want to do retakes: "My dad told me to retake, or to go to complementary school, but I told him I wouldn't continue studying" (Young Lives, 2016, p. 97).

Salman, a Muslim boy living in an urban crowded slum of Hyderabad, dropped out of school and began working at 13 years old in a shoe shop. His father had died, and Salman said his mother had stopped him from going to school because he had to earn to contribute toward paying the house rent and buying provisions. His mother worked as a domestic maid in three houses, and his elder brother was working as a mechanic. The mother explained "Our situation is like that. . . . Now children have to go to work. . . . We cannot educate, if the child goes to work he can do something in future." She complained that even while enrolled in school, Salman was constantly playing truant from school. "He has friends. . . . This area is not good. . . . He was roaming here and there and learning bad habits. Bad children are here . . . children who smoke. . . . Why should he get spoiled with these children's company? This area is a bad one; if he is placed at work, he can build his destiny."

No Value of Education

It is important to recognize that children do not reach the conclusion that education has no value in a single day or based on a single event. Finn (1989) highlighted a pathway that can lead to dropout called the frustration–self-esteem

pathway: Early school failure leads to the internalization of a negative self-concept, which ultimately results in dropping out. Finn also described a second participation–identification pathway that highlights that some children may enter school ill equipped to participate in classroom activities because of a lack of support and preparation at home. This may well be the cause of adolescents becoming disenchanted with schooling as they grow older and find it difficult to cope. Boyden et al. (2016) stated that boys appear to be increasingly distrustful of schooling as a guarantee of future employment and social mobility, while the opportunity for lucrative paid work also lowers their educational aspirations and performance and leads to early school departure. This definitely seemed to be the case for Hung.

Illness

Health reasons are also seen as key to children attending school irregularly and finally deciding to leave school, unable to cope with the pressure of academics. Seble, from the Oramia region of Ethiopia, was married at the age of 15, after repeated bouts of illness and the need to work forced her to leave school, having completed only two grades.

KEY REASON FOR LEAVING SCHOOL

Further examination of the percentage share of the three categories of reasons for dropping out of schools across all four countries revealed that pull factors are the main reason for dropping out from education during adolescence. The second most important category is related to the push factors, which account for 22.5% of the total reasons reported, followed by the opt-out factor, which accounted for 19.7% of the total reasons cited for leaving school. This is in contrast to some other studies that found push factors as the most often cited reasons for dropping out of school (Lehr et al., 2004).

Further breakup by country revealed differences across contexts by age 19; for example, although pull factors remained the most important reasons for adolescents discontinuing education in all four countries, the second most important reason for dropping out varied by countries. For example, while the push factors emerged as the second most cited reasons for leaving school in Ethiopia and Peru, the opt-out factors were the second most important factors in India and Vietnam for all the children who left education at the end of adolescence.

Further analysis of reasons cited by gender for leaving school highlights diverse gender patterns across all four countries by late adolescence. In Ethiopia, the pull factor as a reason for leaving school was relatively higher for boys (56.9%) than girls (50.7%), whereas we noticed a very different trend in the other three countries: A pull factor was the reason cited by more girls than boys. The gender differential was 19, 13, and 14 percentage points higher for girls in India, Peru, and

Vietnam, respectively. Also, while a higher number of boys cited push factors related to in-school reasons in Vietnam, India, and Peru, more girls cited in-school reasons for school discontinuation in Ethiopia. Last, but not the least, opt-out factors were cited by more boys than girls in India, Peru, and Vietnam; it was the reverse in the case of Ethiopia.

<div align="center">

EARLY ADOLESCENCE (10–12 YEARS)

</div>

Because adolescence has distinct stages, we further examined different patterns of children leaving school in early adolescence (by age 12), middle adolescence (13–15 years), and late adolescence (16–19 years) by gender and location. By age 12, more girls discontinued school compared to boys in India and Vietnam, whereas it was just the opposite in Ethiopia and Peru. Considering place of residence, higher dropouts were observed in rural locations during early adolescence in Ethiopia, India, and Vietnam, although in Peru we observed a slightly higher number of children leaving school from urban areas.

Because children cited differing reasons for leaving school, we observed that across all three countries other than Peru, pull factors were the most cited reasons for leaving school by age 12 and accounted for 70% of all dropouts in Ethiopia, 69% in India, and 33% in Peru.

At age 12, a pull factor was the important reason for dropping out among both boys and girls in Ethiopia and India, but more than three quarters of the girls cited home-related factors as the key reason for leaving school compared to 66.7% and 56.4% of boys in Ethiopia and India, respectively. Frost and Rolleston (2013) explained that the reasons for gender-based dropout rate differences may be because of the need for boys in many rural areas of Ethiopia to undertake farm activities and cattle herding compared to girls at this age. Tafere and Pankhurst (2015) found that schools in rural areas of Ethiopia had a half-day or shift system that allowed children to work. Children felt a strong sense of obligation to work to assist their families, especially those from poor backgrounds or living in households facing health or economic shocks. It appears that many of the children either combined work and education (39%) or engaged only in work activities (38%). The gaps for "studying only" are large, favoring young people who came from the least vulnerable group, urban areas, top wealth quintile, with mothers with better education, and from Addis Ababa sites (Woldehanna & Araya, 2016).

Hadush, the last of eight siblings from rural Zeytuni in Ethiopia, dropped out of school in Grade 1. He explained: "I went to school when I was very young, but soon quit because my parents ordered me to herd the cattle. I did not insist on asking them to send me to school because if they were willing they would have sent me." When Hadush turned 15, school authorities asked his father to send him back to school, but Hadush only attended school for a few days and left because he felt embarrassed that he did not know how to read or write (Crivello & Gaag, 2016).

In Vietnam and Peru, around 50% of boys cited pull factors as the main reason for leaving school, while 100% of the girls cited push factors as the reason behind girls dropping out by age 12 in Peru.

Ho Nit, a Cham H'roi girl, was born in a Vietnamese family and community where most members had not completed secondary school: Her father had left school after Grade 6, her mother after Grade 2, and her brothers in Grades 9 and 5, while almost all her friends had already left school. Ho Nit herself was determined she wanted to leave school after Grade 4 because she was unable to read or write. Her mother described Ho Nit's inability to remember what she was taught by explaining "the letters know her but she doesn't know the letters" (Hang and Huon, 2013). Her inability to follow lessons, which may well be related to teaching quality, may have played a decisive factors in Ho Nit's disinterest in continuing school.

MIDDLE ADOLESCENCE (13–15 YEARS)

In contrast to early adolescence, we found that during middle adolescence (i.e., between the ages of 13 and 15) more boys left school than girls in Peru, Vietnam, and Ethiopia. However, in India we continued to observe relatively more girls (29.0%) discontinuing education than boys (25.4%) during this period when most girls enter puberty. Furthermore, more dropouts were found in rural areas during this phase of adolescence across all four countries.

Pull factors continued to be the predominant reason for children discontinuing education between the ages of 13 and 15 for all four countries. For Peru specifically, the percentage of children citing pull factors increased drastically from 33.3% (by age 12) to 75.8% (between ages 13 and 15), which was in fact highest among all the countries, followed by India (64.7%). For girls in particular, pull factors during middle adolescence emerged as the most common reason for leaving school in India, Peru, and Vietnam, with more than 70% of the girls giving this reason. However, in Ethiopia the pull factor was cited as much stronger among boys (74.3%) compared to girls (46.2%), and the opt-out factor was mentioned by more than one of four girls who left school.

Gemechu, from Leki in Ethiopia, started school when he was 7 and hoped eventually to be a teacher, but lack of educational materials, conflict with his teacher, and his work herding cattle meant he only attended sporadically. When he was 13, his family insisted he leave school to earn income as a guard. He rejoined school, first close to home, and then in a different area where he was staying with his aunt, but faced problems. He experienced continual conflict with his teacher: "When I was fishing, I was not arriving at school on time. Because of that he sent me out of the class, picking me from my classmates, and he said, 'Go back to your home.'" Finally, after becoming ill and returning home, he left school entirely. Gemechu's experience shows how both poverty and the quality of the school experience have an effect on retention, but it also demonstrates the role of gender norms: As a boy,

Gemechu was expected to contribute financially to the household, and his experience of conflict and confrontation with teachers echoes the accounts of other boys in the Young Lives study (Winters, 2016).

For girls, different reasons, including safety, emerged as critical factors that caused barriers in continued education. Lack of transport facilities and distance of secondary schools from small habitations undoubtedly raised safety concerns and were major causes of girls discontinuing their education as they reached puberty and also made a transition to secondary schooling.

It is also interesting to note that children giving reasons falling into the category of opted out was seen to increase during middle adolescence particularly in Vietnam and India. Duc and Tam (2012) observed that, in Vietnam, the main reason that parents gave for their children leaving school was that the child had lost interest in studying and going to school, which may well reflect children and caregivers' perceptions about the value of education and its potential to improve their lives.

LATE ADOLESCENCE (16–19 YEARS)

Between age 16 and 19 or late adolescence, the overall dropout rates in all four countries showed an increase, with distinct gender patterns of dropping out. While in India and Peru, more dropouts were observed among girls, the reverse was true for Ethiopia and Vietnam, where more boys dropped out between the ages of 16 and 19. Once again, we noted that rural children continued to leave school in larger proportion across all countries, though the urban–rural gap in Vietnam remained fairly small.

This is the stage that a large number of children were transitioning from secondary to senior secondary/higher education based on their progress and repetition of grades. Many socially and economically disadvantaged children, faced with failure in secondary school exams, opted out of school and took on jobs to support their families.

Subbaiah left school in India after failing his Grade 10 exams. He spoke about his regret: "I knew how well my parents brought me up, but I didn't live up to their expectations, so I felt bad" (Winters, 2016).

A gender differential based on son preference and gender discrimination became more stark as girls grew into late adolescence. Harika in India had an older and a younger brother and secured a national scholarship at the age of 13. Unfortunately, despite being good in her studies, she was irregular in attending school because she was needed to help her family in the cotton fields. She continued studying up to Grade 12 in a government college and lived in a hostel because there was no senior secondary school in the village. Harika had high aspirations of pursuing a degree to become a teacher or a doctor and was supported by her mother, who had no formal education herself. Her mother believed that "the life of an educated person is always better than others." However, Harika's elder brother

was not in favor of her pursuing higher education because the college was a long way off, and she would have to travel by bus. Harika's mother explained: "He [the brother] knows about these things because he goes out and about. He said it was not good for girls to come and go every day in the bus, and she had enough education. So she had to discontinue her education and is now learning to use a sewing machine."

Harika's mother explained that it is different for boys and girls:

> If there is no bus [boys] can come home in somebody's vehicle. If they miss the bus they can stay where they are. What can a girl do in such situations? How will she come back? Where would she stay? Because she is a girl, we have to be scared of these things. . . . If our younger son doesn't come home, even for three days, we don't worry. . . . He will come when he can.

Between the age of 16 and 19, or late adolescence, push factors increased across all four countries, although the main reason for dropouts remained one of those grouped under pull factors. Among the children discontinuing schooling between age 16 and 19, a push factor was cited by the largest number of children in Ethiopia (32.5%), followed by Peru (30.2%), India (23.8%), and Vietnam (17.1%).

In late adolescence, close to 30% of the boys in India and Peru cited opt-out reasons for leaving school. Crivello and Gaag (2016) mentioned that girls and boys alike considered a school-based education instrumental in securing their "bright futures." However, by age 19, there was a growing ambivalence regarding education, particularly for young men, and what was relevant for "real life" became an increasingly important question. Real life for young men meant increased pressures to earn money and to secure a living. Most of them had already left school, and even when they were still enrolled, their aspirations were increasingly oriented toward the world of work. Favara (2016) highlighted that the opportunity costs of staying in school diminished over time for boys, particularly when work and school schedules were incompatible. Woldehanna and Araya (2016) highlighted that only 58% of the children in Ethiopia were able to continue education at age 19, while the remaining children either were unable to continue schooling or had never been in school for various reasons.

Conclusion

We have seen that the pattern of children discontinuing education across adolescence varied in Ethiopia, India, Peru, and Vietnam. By age 12 or during early adolescence, the highest dropout rate was observed in India (11.1%), followed by Ethiopia and Vietnam, with Peru the lowest (0.9%). While the number of children dropping out rose considerably during middle adolescence across all the countries, the highest dropout rate was seen in Vietnam (23.1%), followed by India, Ethiopia, and Peru (7.3%). The same patterns continued in late adolescence, with

the highest percentage of children leaving school in Vietnam (54.4%), followed by India (50.9%), Vietnam (49.1%), and Ethiopia (40.9%).

The Young Lives unique panel data and rich qualitative case studies have provided insight into reasons that move beyond mere "supply" factors (which we categorized as push-out reasons) and continue to be the foci for interventions and programs that aim at retaining adolescents through secondary schooling. While more than one out of every two adolescents (57.8%) gave pull-out factors as the reason for leaving school across the four countries, 22.5% cited push-out factors, while another 19.7% decided to opt out of school for personal reasons. Multivariate regression analysis revealed that the children dropping out across all four countries shared common characteristics: belonging to the poorest households, those with mothers with no formal education, girls in India and boys in Ethiopia and Vietnam, and mothers with low educational aspirations for their children. It is interesting that regression showed that rural children did not show a significant difference in dropping out from urban children.

Undoubtedly, adolescent educational trajectories are molded by the social and cultural context in which they occur despite commonalities such as puberty and sociocognitive development. Thus, adolescents' experiences will vary across cultures and over history. Both adolescent boys and girls faced myriad challenges and pressures; for instance, girls experienced restriction on their mobility, and patriarchal gender norms limited their future prospects to that of wives and mothers. Boys also faced familial, societal, and peer pressures to earn money. Lack of resources and opportunities may profoundly shape the course of adolescent development by influencing the timing of key developmental transitions (Crockett, 1997).

The qualitative case studies clearly demonstrated the multiplicity of factors that interact to lead to children leaving school early. A multitude of factors interact to produce different educational outcomes for adolescents over time. Children face a multitude of potentially life-shifting experiences and changes, including whether to remain in, return to, or leave school (Crivello & Gaag, 2016). It is important that policymakers are cognizant how the same factors may influence children in different ways, and children's own agency must be recognized as affecting their decision to stay or leave school. Therefore, we can only address and curb adolescents early school leaving by examining adolescents' experience of schooling within larger stratification systems and structural inequalities that exist outside the school walls.

The analysis clearly showed that out-of-school factors or pull-out factors emerged as the greatest contributor toward children discontinuing education as they entered middle and late adolescence. The reasons include household dynamics and shocks; young children, particularly boys, becoming engaged into paid work to supplement family income; and a larger majority of girls putting in long hours related to domestic chores to support their families, at the cost of attending school. Early marriage was also seen as a major factor contributing to girls being pulled out of school. Given that the majority of children engaged in both paid and

unpaid work, as well as those who married early, were girls who belonged to the poorest terciles, it is necessary that the most disadvantaged families are provided sufficient social protection safety nets.

Because more than one out of every five dropout reasons were related to push-out factors, inequality in resource allocation, particularly to the most re-motely located schools, needs to be given priority. Capacity building of teachers and school personnel to identify children "at risk" of dropping out in order to provide them the necessary academic and psychosocial support would also support countering push-out factors. One of the key deterrents to continuation of education is the long distance related to travel to school and expense related particularly to secondary education that the poorest families can ill afford. This needs to be given the highest priority by policymakers, and ensuring provisions of free, publicly funded, quality primary and secondary education must be-come a global reality in the coming years. The Global Education Monitoring Report stated that US$39 billion will be needed to achieve this target in low- and middle-income countries (UNESCO, 2015). All countries must strive to ensure that schools provide a conducive and relevant, engaging learning envi-ronment that is violence free. There is also an urgent need for education sys-tems to evolve means to allow flexible pathways by which adolescents can gain both vocational skills and academic qualifications so that they are provided opportunities to ease transition to the labor market.

While opting out was the least cited reason for leaving school, it is important that we recognize that disengagement with schooling maybe the result of irrele-vant curriculum, lack of faith in schooling, poor role models, as well as expecta-tions from significant others. Watt and Roessingh (1994) stated that this may not necessarily be an active decision but rather a side effect of insufficient personal and educational support. Evidence of children's dissatisfaction is evident from their accounts of how they had to balance work and school from a very young age to financially support their families; this was further exacerbated by a school system that was rigid and not supportive.

The recent General Comment No. 20 on the rights of the child during adoles-cence (UNCRC, General Commentment No: 20: 2016) called for "guaranteeing the right to universal, quality and inclusive education and training as the single most important policy investment that States can make to ensure the immediate and long-term development of adolescents" (p. 17). Given that the quantitative as well as qualitative analysis have clearly shown that there may well be multiple reasons for students to discontinue education that moves beyond the in-school factors, we need to consider a multiprong effort by state, communities, and families to address structural, household, and individual barriers that impede smooth tran-sition of adolescents through secondary schooling. On the one hand, accessible second-chance schemes must be evolved to ensure that education systems provide adolescents easy and flexible options to pursue their education. On the other hand, communities need to provide adolescents support services that can provide those

at risk of dropping out with timely support and intervention while empowering families to support their children, particularly girls, to complete their education by challenging discriminatory gender norms and expectations as children enter middle and late adolescence. This would be one very concrete step toward meeting our obligation of meeting the 2030 Goals by realizing the potential of 17.3% of the world population who are adolescents.

References

Alexander, K. L., Entwisle, D. R., & Kabbani, N. (2001). The dropout process in life course perspective: Early risk factors at home and school. *Teachers College Record*, *103*, 760–822. doi:10.1111/0161-4681.00134

Bouchey, H. A., Shoulberg, E. K., Jodl, K. A., & Eccles, J. S. (2010). Longitudinal links between older sibling features and younger siblings' academic adjustment during early adolescence. *Journal of Educational Psychology*, *102*, 197–211. doi:10.1037/a0017487

Boyden, J., Porter, C., Zharkevich, I., & Heissler, K. (2016). *Balancing school and work with new opportunities: Changes in children's gendered time use in Ethiopia (2006–2013)* (Working Paper 161). Oxford, England: Young Lives.

Bronfenbrenner, U. (1999). Environments in developmental perspective: Theoretical and operational models. In S. L. Friedman & T. D. Wachs (Eds.), *Measuring environment across the life span: Emerging methods and concepts* (pp. 3–28). Washington, DC: American Psychological Association.

Crivello, G., & van der Gaag, N. (2016). *Between hope and a hard place: Boys and young men negotiating gender, poverty and social worth in Ethiopia* (Young Lives Working Paper 160). Oxford, England: University of Oxford. Retrieved from http://www.younglives.org.uk/sites/www.younglives.org.uk/files/YL-WP160-Boys-and-Young-Men-Negotiating-Gender-in-Ethiopia.pdf

Crockett, L. J. (1997). *Cultural, historical, and subcultural contexts of adolescence: Implications for health and development* (Faculty Publications, Department of Psychology, University of Nebraska–Lincoln, Paper 244). Retrieved from http://digitalcommons.unl.edu/psychfacpub/244

Crosnoe, R., & Johnson, M. K. (2011). Research on adolescence in the twenty-first century. *Annual Review of Sociology*, *37*, 439–460.

Duc, L. T., & Tam, T. N. M. (2012). *Why children in Viet Nam drop out of schools and what they do after that?* (Working Paper 102). Oxford, England: Young Lives, University of Oxford.

Dupéré, V., Leventhal, T., Crosnoe, E., Archambault, R., & Janosz, M. I. (2015). Stressors and Turning Points in High School and Dropout. *Review of Educational Research*, *85*(4), 591–629.

Espinoza, P., & Singh, A. (2016). *Teenage marriage, fertility and well-being: Panel evidence from India* (Working Paper 151). Oxford, England: Young Lives.

Favara, M. (2016). *Do dreams come true? Aspirations and educational attainments of Ethiopian boys and girls* (Young Lives Working Paper 146). Oxford, England: Young Lives.

Finn, J. (1989). Withdrawing from school. *Review of Educational Research*, *59*(2), 117–142.

Frost, M., & Rolleston, C. (2013). *Improving Education Quality, Equity and Access: Findings from the Young Lives School Survey (Round 1) in Ethiopia*. Working Paper 96. Oxford: Young Lives.

Galab, S., Reddy, P. P., & Singh, R. (2014). *Young lives survey design and sampling in India: Preliminary findings from the 2013 Young Lives survey (Round 4)* (Round 4 Factsheet). Oxford, England: Young Lives.

Graf, S. C. (2003). *Cross-cultural study of adolescent identity formation and autonomy within the context of parent-adolescent relationships*. Accessed from: http://search.proquest.com/docview/305327596?accountid=13042

Hang, N. T. T., & Huon, N. T. (2013). Understanding the reasons why some children leave school early in Viet Nam. *Vietnam Policy Brief*, 2, 3.

Jimerson, S., Egeland, B., Sroufe, L. A., & Carlson, B. (2000). A prospective longitudinal study of high school dropouts examining multiple predictors across development. *Journal of School Psychology*, *38*, 525–549.

Johnson, M. K., Crosnoe, R., & Elder, G. H. (2011). Insights on adolescence from a life course perspective. *Journal of Research on Adolescence*, *21*(1), 273–280. http://doi.org/10.1111/j.1532-7795.2010.00728.x

Jordan, W. J., Lara, J., & McPartland, J. M. (1994). *Exploring the complexity of early dropout causal structures*. Baltimore, MD: Center for Research on Effective Schooling for Disadvantaged Students, the John Hopkins University

Lan, P. T., & Jones, N. (2007). *Education for all in Vietnam: High enrolment, but problems of quality remain* (Young Lives Policy Brief 4). Oxford, England: University of Oxford.

Lehr, C. A., Johnson, D. R., Bremer, C. D., Casio, A., & Thompson, M. (2004). *Essential tools: Increasing rates of school completion: Moving from policy and research to practice*.Minneapolis, MN: University of Minnesota, Institute on Community Integration, National Center on Secondary Education and Transition. Retrieved from http://www.ncset.org/publications/essentialtools/dropout/dropout.pdf

Pankhurst, A., Tiumelissan, A., & Chuta, N. (2016). *The interplay between community, household and child level influences on trajectories to early marriage in Ethiopia: Evidence from Young Lives* (Working Paper 162). Oxford, England: Young Lives, University of Oxford.

Pells, K., Portela, M. J. O., & Revello, P. E. (2016). *Experiences of peer bullying among adolescents and associated effects on young adult outcomes: Longitudinal evidence from Ethiopia, India, Peru and Viet Nam* (Innocenti Discussion Paper 2016-03). Florence, Italy: UNICEF Office of Research—Innocenti.

Rumberger, R. W. (2011). *Dropping out: Why students drop out of high school and what can be done about it*. Cambridge, MA: Harvard University Press.

Rumberger, R., & Lim, S. (2008). *Why students drop out of school: A review of 25 years of research*. Retrieved from http://cdrp.ucsb.edu/dropouts/pubs_reports.htm

Sanchez, A., & Singh, A. (2016). *Assessing higher education in developing countries: Panel data analysis from India, Peru and Vietnam* (Young Lives Working Paper 150). Oxford, England: Young Lives.

Singh, R., & Bangay, C. (2014). Low fee private schooling in India—More questions than answers? Observations from the Young Lives longitudinal research in Andhra Pradesh. *International Journal of Educational Development*, *39*, 142–150.

Singh, R., & Sarkar, S. (2015). *Learning Environments in Andhra Pradesh, India: Children's 'Academic Self-Concept' and Mathematics Achievement*. Working Paper 137. Young Lives: University of Oxford.

Singh, R., & Vennam, U. (2016). *Factors Shaping Trajectories to Child and Early Marriage: Evidence from Young Lives in India*. Working Paper149. Young Lives: University of Oxford.

Stearns, E., & Glennie, E. J. (2006). 'When and Why Dropouts Leave High School'. *Youth and Society*, *38*(1), 29–57.

Steinberg, L., & Morris, A. S. (2001). Adolescent development. *Annual Review of Psychology*, *52*, 83–110.

Tafere, Y., & Pankhurst, A. (2015). *Can children in Ethiopian communities combine schooling with work*? (Working Paper 141). Oxford, England: Young Lives, University of Oxford.

Tiblier, V. J. (2007). *Academic performance, attendance and behvioral issues: Implications of early elementary education*. Dissertations. 1338. http://aquila.usm.edu/dissertations/1338.

UN Committee on the Rights of the Child (CRC). General comment No. 20 (2016) on the implementation of the rights of the child during adolescence, 6 December 2016, CRC/C/GC/20. Available at http://www.refworld.org/docid/589dad3d4.html

United Nations. (2015). *Transforming our world: The 2030 Agenda for Sustainable Development.* New York, NY: United Nations.

UNESCO (2015). *Education for all 2000–2015: achievements and challenges: education for all global monitoring report*. Paris: UN Educational, Scientific and Cultural Organization.

UNESCO Institute of Statistics (UIS) and Global Education Monitoring (GEM) Report. (2016). *Education for people and planet: Creating sustainable futures for all*. UNESCO. Retrieved from http://unesdoc.unesco.org/images/0024/002457/245752e.pdf. Accessed November 2016.

Watt, D., & Roessingh, H. (1994). Some you win, most you lose: Tracking ESL dropout in high school (1988–1993). *English Quarterly, 26*, 5–7.

Woldehanna, T., & Araya, M. (2016). *Educational inequalities among children and young people in Ethiopia* (Country Report). Oxford, England: Young Lives.

Winters, F. (2016). *Shaping aspirations and outcomes: Gender and adolescence in Young Lives* (Policy Paper 9). Oxford, England: Young Lives.

Young Lives. (2016). *Towards a better future? Hopes and fears from Young Lives.* Oxford, England: Young Lives, University of Oxford.

Poverty, Risk, and Resilience

THE CASE OF STREET-INVOLVED YOUTH

Silvia H. Koller, Juliana Prates Santana, and Marcela Raffaelli

Introduction

Among underprivileged groups, street youth—children and adolescents who work, play, wander, and sometimes sleep on city streets—have been portrayed as the embodiment of poverty in many countries. However, there is considerable debate about how to define and identify street youth (e.g., Hecht, 1998; Koller & Hutz, 2001; Thomas de Benitez, 2007). For example, researchers have described multiple groups of impoverished youth in different continents using the street as a space for survival and socialization (e.g., Connolly & Ennew, 1996; Hills et al., 2016; Raffaelli et al., 2013; Sharma & Verma, 2013). The United Nations in the 1980s described them as "any boy or girl . . . for whom the street (in the widest sense of the word, including unoccupied dwellings, wasteland, etc.) has become his or her habitual abode and/or source of livelihood; and who is inadequately protected, supervised, or directed by responsible adults" (UN Office of the High Commission for Human Rights [UNOHCHR], 2012a, p. 9). However, it is not an undisputed definition; the changing global economic and political situation has resulted in variations in the population of youth found in street settings. Regardless of the factors leading them to the street, these youngsters are at risk for a range of negative developmental outcomes and conceivably affected by the lack of positive youth development interventions (Lieten & Strehl, 2015a). Affirmative contextual realities, for example, as well as developmental assets in the presence of thriving behavior, such as school attendance and support, high educational and stable family background, health-seeking behaviors, community engagement, leadership opportunities, experiences, and supports may avoid migration to the streets (Schwartz et al., in press). So, positive youth development interventions may be related to promoting their inclusion, reducing risk behaviors, and increasing socially valued outcomes, such as prosocial behavior, leadership, and resilience (Petersen et al., 2017).

Compared with the general population, street youth are at a higher risk for violence, risk factors, and risk behaviors (Slesnick et al., 2009). In their study of street children in Egypt, Nada and Suliman (2010) reported various forms of violence and abuse of street children by older street members and the police. They also reported that over half of the young girls had been sexually abused. In their book about street children in Peru, Lieten and Strehl (2015b) emphasized the hazards of street life, such as bad working conditions, as well as violence, sexual exploitation, drug addiction, social and educational exclusion, and health problems. In Brazil, Cerqueira-Santos et al. (2004) investigated police officers' conceptions of street children and found out that they attributed negative values to and had prejudice against children, which certainly reflects on their professional activities and urge of protection toward this group.

Undoubtedly, there is little question that street-involved children and adolescents are in urgent need of assistance and intervention, which may be related to personal purposes and bonds to family, role models, and communities (Tozer et al., 2015). However, the empirical evidence collected to date does not allow firm conclusions to be drawn about the long-term impact of street life because (with a few exceptions) prior research has not been grounded in the literature that examined developmentally relevant factors or followed youth prospectively (Hecht, 1998; Panter-Brick, 2001).

This chapter aims to present a selective review that can be used to identify some contradictions about street life; once recognized, this knowledge may be used to inform interventions and social policy initiatives. We begin by defining street children and adolescents; examining evidence of vulnerability and resilience in research on the daily lives of street-involved youth; discussing methodological and ethical challenges to advancing understanding of this population; and examining how research with street-involved youth can be used to advance local and global practice and policy. Our aim is to present literature from around the globe, but our discussion is informed by—and draws on—our long-standing program of research and practice in Brazil.

Street Children and Adolescents: Who Are They?

A number of factors related to family disruption and lack of resources have been associated with young people's migration to the streets. Social scientists, practitioners, and policymakers working with street populations, starting in the 1980s, quickly identified multiple groups of youth found in street settings. These include children and adolescents who live with their families but work in street settings out of economic necessity; those who live on the streets with their homeless families; and young people who spend most of their time in street settings or programs for street youth and have sporadic family contact (e.g., Connolly & Ennew, 1996; Koller & Raffaelli, 2008; Verma et al., 2011).

A systematic review of 47 studies found that poverty was the most common reason youth reported for street involvement in all countries, but was more commonly cited as a reason among youth from developing as opposed to developed countries (Embleton et al., 2016). At the same time, the success of poverty reduction programs and social policies aimed at keeping children in school and out of work is reflected in some reduction of the numbers of impoverished children and adolescents going to the streets around the globe (United Nations, 1990, 2015).

Instead, young people may find themselves on the street for other reasons. For example, in many parts of sub-Saharan Africa, the growing presence of youth on the streets has been linked to the HIV/AIDS epidemic, which orphaned millions of children (South Africa; Hills et al., 2016). HIV/AIDS is also a problem in other contexts around the world when street children themselves are carriers of the disease or virus (Brazil: Inciardi & Surratt, 1998; Pinto et al., 1994; Sauvé, 2003). In other countries, conflict has resulted in growing numbers of children on city streets (Syria and Lebanon: Jabbar & Zaza, 2014; Rwanda: Betancourt et al., 2011; and Uganda: Bolton et al., 2007).

The diversity of youth found on the street makes it difficult to develop a uniform definition. In the English language literature, it is possible to find the following modifiers (among others) preceding "children" or "youth": street, street-involved, street-connected, homeless, runaway. These differences sometimes indicate research trends (Kim, 2014) and ideological positions. According to the United Nations Children's Fund (UNICEF; 2012), the terminology must recognize children as social actors whose lives are not circumscribed by the street. It is important to emphasize relationships and "street connections," paying attention not only to the street but also to the family, the institutions, and other places that the youth used to go. So, a "street-connected child (or adolescent) is understood as a child for whom the street is a central reference point—one which plays a significant role in his/her everyday life and identity" (UNICEF, 2012, p. 10). In Latin America, six criteria have been used to characterize street youth (e.g., Neiva-Silva & Koller, 2002a, 2002b; Raffaelli, Morais, & Koller, 2014; Rosemberg, 1996): (a) lack of stability of family ties; (b) activities on the street (e.g., begging); (c) physical appearance (e.g., cleanliness and condition of clothes); (d) time of day; (e) settings frequented; and (f) absence of a responsible adult. Paludo and Koller (2004) also suggested the period of the day as an important factor because a child would typically not be by himself or herself during the night on the streets. A wide variation has to be expected in these criteria both across youth and within the same youth over time, resulting in contradictory portrayals across studies conducted in different locations and time periods.

These contradictory labels and portrayals hamper efforts to develop effective policies and interventions for children around the world. In the next section, we review the literature on the daily lives of street-involved youth around the globe, focusing particularly on developmental risks and vulnerabilities and evidence of protective factors that may help youth adapt to challenges.

Daily Life on the Street: Evidence of Vulnerability and Resilience

Street youth are typically described as a population at high risk of negative developmental outcomes. Many street children engage in high levels of substance use and sexual risk-taking, are involved in deviant subsistence strategies, and have poor physical and mental health (for review, see Raffaelli et al., 2013; Sharma & Verma, 2013; Verma et al., 2011). At the same time, these youngsters are often described as resilient survivors who are "growing up well" within a larger context of poverty and deprivation (Aptekar, 1994; Ennew, 1994; Felsman, 1989; Malindi & Theron, 2010; Sauvé, 2003; van Breda, 2017). Indeed, street life may provide important developmental opportunities for impoverished youth because they have to search their own survival strategies and learn to deal with the challenges of street life (Panter-Brick, 2002; Panter-Brick et al., 1996).

Street life also offers social and emotional networking with other young people, who can become their business group, looking for means of survival and financial activities, with which they usually spend the day. They also build groups with friends, who they often call family, with whom they spend the night, seeking safety and warmth (Vega & Paludo, 2016). On the street, youth may also have access to social and institutional support, money-making opportunities, and an escape from home environments that may be characterized by dysfunction and violence (Alves et al., 2002; Hutz & Koller, 1997). Moreover, a subset of street-involved youth appear to be from families with good socioeconomic status, but due to their desire for freedom, they ran away from home (Oduro, 2012, p. 45; Paludo & Koller, 2005; Santos, 2002).

Contextual aspects of street youth's lives have been investigated by social scientists since the 1980s in different continents (for reviews, see Connolly & Ennew, 1996; Kayiranga & Mukashema, 2014; Koller & Hutz, 2001; Koller & Raffaelli, 2008; Raffaelli, 1999; Raffaelli & Larson, 1999; Rizzini, 1996; Sharma & Verma, 2013; Verma et al., 2011). Early studies focused on describing the population of youth found on the street, but—given evidence of elevated risk of a range of negative developmental outcomes in this population—the focus of inquiry shifted in the 1990s when research was conducted to identify and document the risks street-involved youngsters faced in their daily lives and the impact of street life on their well-being. For example, work conducted in Brazil indicated that many street youth faced physical danger in their daily lives (e.g., traffic accidents, violence); were involved in illicit subsistence activities (e.g., theft, survival sex); engaged in high levels of substance use and risky sexual behavior; and had poor physical and mental health (e.g., Campos et al., 1994; Inciardi & Surratt, 1998; Pinto et al., 1994; Raffaelli et al., 1993).

In a shelter-based study involving 25 male street youth (ages 13 to 19), boys who experienced high levels of childhood adversity and recent negative life events reported a greater number of physical health symptoms and lower levels of positive affect than boys who had experienced less past or current adversity (Raffaelli,

Koller, & de Morais, 2007). A large-scale study of over nine hundred 14- to 19-year-olds from impoverished neighborhoods revealed that greater exposure to risk factors in the domains of family (e.g., parental death, abuse); community (e.g., drug trafficking, violence); and economics (e.g., family unemployment, going hungry) was associated with psychological and behavioral maladjustment (Raffaelli, Koller, Cerqueira-Santos, & de Morais, 2007). A recent study of 250 Zambian street youth aged 14–24 years indicated that individual (e.g., coping), peer substance use, and family (e.g., parental monitoring) variables were stronger predictors of substance use than were community-level variables (Tyler et al., 2016).

Researchers have also uncovered evidence of positive adjustment among street-involved youth in primarily cross-sectional studies conducted around the globe. For example, an early Brazilian study revealed similar levels of depression among street youth and impoverished children living at home (DeSouza et al., 1995). In several studies comparing different groups of Nepali boys, homeless children living in cities were found to have better growth outcomes (Panter-Brick et al., 1996) and lower levels on biomarkers of risk and adversity (Worthman & Panter-Brick, 2008) than boys living in rural villages. In Bangladesh, the factors affecting resilience among street children were related to levels of family education, economic constraints, and history of previous domestic violence (Sayem & Kidd, 2013). The study evaluated a convenience sample of 366 male street children aged 14–17 years and found moderately low to low levels of resilience (54.1%), followed by low (29.0%) and moderately high to high resilience (16.9%). These findings have led some scholars to emphasize that street-involved youngsters may be experiencing orderly development within contexts characterized by poverty and deprivation (Aptekar, 1994; Ennew, 1994; Felsman, 1989; Sauvé, 2003; Sharma, & Verma, 2013). In this type of context, street life may provide developmental opportunities that are not otherwise available to impoverished youth; the street may offer a space where youngsters can seek social support (e.g., peer networks); money-making opportunities; institutions that provide shelter, food, and other amenities; and an escape from impoverished and sometimes violent home environments (Ennew, 1994; Hecht, 1998; Panter-Brick et al., 1996).

The broader literature on developmental risk and resilience has identified a range of factors contributing to positive adaptation, including individual resources (e.g., optimism about the future) and social connections (e.g., Luthar et al., 2000; Masten, 2001; Werner & Smith, 2001). The extant literature provides hints of how these factors might operate in the lives of street-involved youth. One study of Brazilian street youth indicated they viewed their future as indifferent, ambivalent, uncertain, or negative, but almost half of participants mentioned positive expectations toward work, family, personal goals, and material status and also related to a better world (Raffaelli & Koller, 2005). Research conducted in the United States has noted the importance of nonfamilial adults in the lives of at-risk youth (e.g., Werner & Smith, 2001), and scholars have proposed that street youth compensate for the lack of traditional sources of support by forming strong peer groups

(e.g., Ennew, 1994; Felsman, 1989). These resources may protect youth from the negative impact of poverty and street life. For example, in a study of over 4,700 impoverished 13- to 17-year-olds from seven Brazilian cities, risk exposure in three domains (community, economic, family) was associated with increased involvement in substance use, antisocial behavior, and sexual risk-taking (Raffaelli et al., 2012). However, protective factors (i.e., family support, school attachment, and self-efficacy) diminished that association, with schools emerging as a potent protective factor among younger teens. In a study of street-involved boys, those with higher ratings on "street smarts" (ability to obtain food, a place to sleep, clothing, protection, and a place to bathe/wash clothes) reported fewer physical health symptoms than those with lower scores (Raffaelli, Koller, & de Morais, 2007).

Evidence of vulnerability and resilience are present in many instances of street youth groups in different cultures. Our research team proposed a longitudinal mixed-method approach, based on the bioecological model (Bronfenbrenner, 1979), to study street youth lives; some preliminary findings may already be shared about the developmental impact of street life in youth.

Preliminary Findings From the Developmental Impact of Street Life Study

Recently, our team completed a mixed-method, longitudinal investigation of factors linked to adjustment of street-involved youth in three Brazilian capital cities. As we have discussed elsewhere (e.g., Raffaelli et al., 2013), the study was informed by three theoretical perspectives: Bronfenbrenner's bioecological model (e.g., Bronfenbrenner, 1979; Bronfenbrenner & Morris, 1998); Moos's (1992) street and coping framework; and resilience science (e.g., Garmezy & Masten, 1994).

Bronfenbrenner's model (1979; Bronfenbrenner & Morris, 1998) depicts development as the outgrowth of four interrelated dimensions: person, process, context, and time. *Person* refers to characteristics of the developing person (e.g., age, gender, temperament); *process* to the dynamics of interactions between the developing person and the environment; *time* to the longitudinal nature of development (for both the individual and in terms of history); and *context* to the physical and social environments in which the individual is embedded. Development is seen as the product of reciprocal interactions between the developing individual and different layers of the environment across time. Bioecological theory has been widely used to examine the impact of poverty and adversity in the United States (e.g., Luthar et al., 2000) and Brazil (e.g., Dell'Aglio et al., 2007; Koller, 2004a; Koller et al., 2016; Morais et al., 2010).

The bioecological model provides a way of conceptualizing development in context, but does not identify variables or delineate pathways of influence. Instead, each investigation must specify these domains based on its guiding theoretical perspective (Bronfenbrenner, 1979; Bronfenbrenner & Morris, 1998). Prior

research with street youth has emphasized the stressful aspects of street life (e.g., Unger et al., 1998), and research in the United States has shown that stressors are linked to decreased competence (defined as social, psychological, and behavioral adjustment; e.g., Compas et al., 1989; DuBois et al., 1992; Jackson & Warren, 2000). The literature on resilience focuses primarily on positive adaptation in the face of unfavorable circumstances (Betancourt et al., 2011; Luthar et al., 2000). Researchers who study the development of youngsters in situations of adversity (including poverty, maltreatment, and community violence) have noted that some youth may exhibit positive outcomes (e.g., Rutter et al., 1990; Werner & Smith, 2001), highlighting the value of examining indicators of competence as well as maladjustment. Preliminary studies conducted by members of our team allowed identification of risk and protective factors operating in the lives of street youth (e.g., Koller & Lisboa, 2007; Morais et al., 2012; Raffaelli, Koller, Cerqueira-Santos, & de Morais, 2007; Raffaelli, Koller, & de Morais, 2007). This work informed the selection of measures for the longitudinal study (Koller et al., 2011).

A total of 113 children and adolescents between the ages of 9 and 18 (M age = 14.18 years) were recruited in residential shelters (82%), open institutions providing services to street youth (14%), or on the street (4%) in three Brazilian capitals (Fortaleza, Porto Alegre, and Salvador). Reflecting the natural gender distribution of street youth, four fifths (80.5%) of respondents were adolescent boys. As a result of the intensive tracking protocol, sample retention was 72% ($n = 81$) at the 6-month follow-up (Time 2) and 62% ($n = 70$) at Time 3 (12-month follow-up). Attrition analyses indicated that youth lost to follow-up were similar to those who were retained on demographic characteristics and indicators of adjustment (Koller et al., 2011).

Analyses of the baseline data confirmed that, as a group, street youth are at elevated risk of negative developmental outcomes. For example, youth reported an average of 4.3 current physical health symptoms, with the most commonly endorsed symptoms related to poor living conditions and inadequate access to health care (e.g., headaches, cuts or scratches, coughs, dizzy spells). Around half of youth reported past year use of alcohol (53%), cigarettes (51%), and marijuana (49%); 32% used cocaine. Two thirds (66%) of the participants reported ever having sex, and among these youth, risk levels were high. For example, the average age of first intercourse was 12.15 years ($SD = 2.39$). The average number of sexual partners in the last 6 months was 6.75 ($SD = 11.24$), and two fifths (41%) of respondents had not used a condom at last sex. Despite these elevated levels of risk overall, there was considerable within-group variability. For example, physical symptom endorsement ranged from 0 to 12, and many youth saw themselves as healthier than their peers. A number of youth reported no or little substance use, and many were sexually abstinent or practiced safer sex. In terms of psychological well-being, participants reported generally positive levels of life satisfaction ($M = 3.20$ on a 5-point scale, where higher scores indicated higher life satisfaction). Moreover, positive affect outweighed negative affect (respective Ms = 3.48

and 2.83 on a 5-point scale, where higher scores indicated higher levels of affect; Koller et al., 2011).

Longitudinal analyses revealed associations between Time 1 predictors and Time 2 outcomes that are consistent with theoretical models of risk and protection. For example, higher levels of childhood adversity assessed at Time 1 were associated with a greater number of physical symptoms at Time 2 ($r = .27$, $p < .05$); higher ratings of subjective stress at Time 1 were associated with substance use at Time 2 ($r = .23$, $p < .05$). Higher ratings of satisfaction with one's social network correlated with life satisfaction 6 months later ($r = .15$, $p < .10$). Together with other recent work on street-involved populations, this study provides insight into the developmental impact of street life on impoverished youth. It also calls attention to methodological and ethical considerations that researchers who conduct research with this population confront (Koller et al., 2011).

Advancing Understanding of Street-Involved Youth: Methodological and Ethical Considerations

Much has been written over the years about the methodological challenges involved in conducting research with street-involved youth (e.g., Hutz & Koller, 1999; Koller & Raffaelli, 2008; Young & Barret, 2001). One major methodological challenge is that it is virtually impossible to obtain random samples of hidden and mobile populations like street youth (Cauce, 2000; Hecht, 1998; Whitbeck et al., 2001). As an alternative, researchers have developed approaches that allow identification of a sample that is representative of the target population (Duryea, 2000; Muhib et al., 2001). In our recent study (Koller et al., 2011), we used an adapted version of venue-based approaches used to conduct street-intercept surveys in the United States (e.g., Stueve et al., 2001) and Brazil (Campos et al., 1994). The procedure has three steps: Identification of sites where youth congregate; selection of recruitment venues; and ecological engagement (Koller et al., 2016). During the first step, potential recruitment venues were mapped using a variety of methods, such as consulting street outreach workers, shelter staff, and youth and conducting "windshield surveys" to determine where youth can be found (Muhib et al., 2001). Potential sites were visited at different days and times to evaluate the size and stability of the youth population. Once specific locations had been evaluated, team members integrated into selected settings following the procedures of the ecological engagement approach developed by the research team.

There is a recognized need for participatory and ecologically sensitive approaches in street youth research (e.g., Connolly & Ennew, 1996; Rizzini, 1996; Petrucka et al., 2014; van Beers, 1996). Our team (e.g., Cecconello & Koller, 2003; Eschiletti-Prati et al., 2008; Koller et al., 2016; Paludo & Koller, 2004) elaborated a methodology for street research called *inserção ecologica* ("ecological engagement" or "embeddedness"). This participatory approach is based on Bronfenbrenner's

ecological theory and provides a methodology for conducting ongoing research on development in context by explicating the four aspects of process, person, context, and time. As described by Bronfenbrenner, the proximal process is the basis of ecological engagement. Proximal processes encompass five aspects: (a) For development to occur, the person must be engaged in an activity; (b) activities should be progressively more complex; (c) to be effective, interactions should take place on a regular basis across extended periods of time; (d) there must be reciprocity in interpersonal relationships; and (e) for reciprocal interaction to occur, the objects and symbols present in the immediate context should stimulate the developing person's attention, exploration, manipulation, and imagination. The process of ecological engagement has to follow the same path and encompass these same five aspects. The ecological engagement approach has been successfully used in multiple studies our team has conducted with street youth, including investigations of health (Morais & Koller, 2004), developmental risk and resilience (Morais, 2009), future expectations (Neiva-Silva et al., 2010), and play (Cerqueira-Santos et al., 2004). This approach makes the distinction between researcher and helper explicit, facilitating role maintenance by project staff (Cecconello & Koller, 2003; Koller et al., 2016).

Researchers working with street-involved youth face another set of challenges related to collecting high-quality data. These include personal characteristics due to typical life experiences and habits. The majority of street children and adolescents have little experience with the formal education system; thus, assessments must be constructed accordingly. For example, youth may have limited reading proficiency and short attention spans, making it unlikely they will sit still for lengthy data collection sessions (Raffaelli, Koller, & de Morais, 2007). Besides personal characteristics, the street does not present an optimal environment for data collection due to lack of privacy and potential safety issues (Hutz & Koller, 1999). Moreover, youth might be under the influence of alcohol or other substances, making it difficult to collect valid data.

In recent decades, teams of researchers around the world have developed and evaluated quantitative measures suitable for use with different populations of street-involved youth (e.g., Raffaelli, Koller, & de Morais, 2007). Qualitative and ethnographic methods have been highly successful in describing the lived experiences of young people living on the street and are appearing as a trend in recent studies with this population (Dejman et al., 2015; Hecht, 1998; Hills et al., 2016; Uddin et al., 2014). Researchers have also developed approaches that allow the voices of children to be heard, such as visual methods (e.g., maps, photography, photo diaries; Bademci et al., 2015; Mizen & Ofosu-Kusi, 2007; Young & Barret, 2001).

Given the unique characteristics of street-involved youth, there is an urgent need for research that is sensitive to their situation and can capture the transitions and events they experience. As we have previously noted (Koller & Raffaelli, 2008), it is impossible to draw conclusions about the developmental impact of street life

because most research conducted to date has not followed youth prospectively (Hecht, 1998; Panter-Brick, 2001). Scholars have noted the importance of longitudinal research for gaining an accurate picture of development (e.g., Magnusson & Cairns, 1996; McCaskill et al., 1998; Tyler et al., 2000). Researchers face a number of challenges when conducting longitudinal research with street-involved youth, given their mobility and the dynamic nature of their lives. Overcoming these challenges represents an important direction for future research.

Researchers also face numerous ethical considerations when conducting research with street-involved youth (e.g., Koller et al., 2012). Specifics vary across countries, but some common issues are likely to exist. One major ethical consideration centers on the issue of obtaining informed consent for research participation. In many cases, street-involved youth do not have contact with a parent, so an alternative responsible adult (e.g., guardian or public representative) must be identified. For example, in Brazil parental consent is waived for studies involving street youth because youngsters typically have little meaningful contact with their family, family relationships may be characterized by conflict or abuse, and youth are responsible for their own survival. In these cases, the State Public Ministry is charged with a role comparable to that of public guardian, and a university's institutional review board must review research with youth. If recruitment occurs through a service agency (e.g., shelter), permission is also sought from a designated representative. In this way, adults responsible for youth protect the best interest of the participants.

In addition to obtaining consent from a responsible adult, researchers must ensure that youth do not feel coerced to participate. For example, the voluntary nature of the study must be emphasized, and the question of appropriate incentives should be carefully considered. In our work, we do not offer material incentives; instead, research staff are trained to provide information about free services or referrals to appropriate care agencies (see Koller et al., 2012, for an in-depth discussion of this issue). To ensure that youth feel comfortable participating in the study, issues of privacy must also be carefully considered. To the extent allowed by local law, researchers should assure participants that sensitive information (e.g., past physical or sexual abuse, stealing, use of alcohol and drugs, and sexual activity) will not be reported to authorities. In some contexts, not divulging information about criminal activity can constitute being an accomplice to crime; therefore, clear guidelines must be developed prior to data collection. Recommendations include the need for devising methods and guidelines that will allow the conduct of sound and ethical research (Hutz & Koller, 1999).

Research With Street-Involved Youth: Impact on Local and Global Practice and Policy

We consider that the ultimate goal of academic research must be to inform the development of interventions and policy aimed at improving the lives of

impoverished youth. Well-designed and -executed studies of the developmental impact of street life are needed to provide urgently needed information on which to base prevention programs and social policies to promote healthy development among street youth (Hecht, 1998; Koller & Hutz, 2001; Panter-Brick, 2001). As mentioned elsewhere, this view is in accord with Bronfenbrenner's assertion that "issues of social policy (serve) as points of departure for the identification of significant theoretical and scientific questions concerning the development of the human organism as a function of interaction with its enduring environment— both actual and potential" (Bronfenbrenner, 1974, p. 4). So, to understand a reality as it is, developmental researchers must have a commitment to social justice and application of results to the betterment of life quality of populations, especially when dealing with a vulnerable population.

In this section, examples of how research can have impacts at different levels in the ecology of street-involved adolescents are presented, considering the bioecological model proposed by Bronfenbrenner (1979) and understanding that global policies can be initiated at all levels of the context (micro-, meso-, exo-, and macrosystems) or at the individual level.

At the macrosystem level, there is a need for accurate information on the world's population of street-involved youth. According to UNICEF (2015, p. 11), "Only by counting the uncounted can we reach the unreached." The first major contribution of research related to poverty and vulnerable populations is to give visibility to them and their realities. Children and adolescents who are on the streets can be invisible to many. This is true in subjective terms, but especially in terms of official data. An urban census generally does not count the homeless and those living in inadequate housing. In 2015, the Consortium for Street Children (CSC, 2015) organized a conference to discuss the best strategies and methodologies to make these children's situation visible and to use research data as a way to improve their life conditions. In this report, the most used counting methodologies in the world with street-connected children and adolescents, as well as their strengths and weaknesses, are presented. They are capture–recapture, respondent-driving sampling, census, and observational headcounts. The authors argued that the most favored by CSC members are the last because it "accounts for the mobility of street-connected children's lives and provides actual figures, not estimates" (CSC, 2015, p. 4).

As discussed, the main cause of the involvement of children and adolescents with the street, especially in developing countries, is poverty (Embleton et al., 2016). This means that actions to prevent this involvement should involve poverty reduction strategies, such as cash transfer programs, feeding programs, and universal free primary and secondary education (Embleton et al., 2016). Globally, it is important to develop and strengthen social protection policies and child welfare systems. Income transfer programs that have articulation with school attendance can, for example, have the effect of reducing the presence of children in the streets, as is the case of the Bolsa Familia in Brazil (Soares et al., 2010).

At the exosystem level, a good example of the interaction between research and intervention was the work done by CIESPI (Center for Research and Policy on Childhood) in the construction of a public policy for street-involved children and adolescents in the city of Rio de Janeiro. The researchers collected qualitative and quantitative data from youth, then used the research findings to provide technical advice to the municipal council charged with protecting children's rights (Bush & Rizzini, 2011). This process resulted in an integrated public policy aimed at ensuring that street-involved youth had access to services and programs.

An example of how researchers can operate at the mesosystem level comes from our longitudinal study in Brazil (Koller et al., 2011). Through the process of ecological engagement (as described previously), the research team accompanied the participating adolescents over time. As a result, the researchers became part of participants' social networks, ultimately contributing to the web of protective services of the cities where the research was performed. The research team could be useful in mediating contacts between youth and various microsystems—for example, by referring participants to protective services, connecting them to assistance agencies, or even intervening in situations of rights violations.

When we speak about street-involved youth and local practice and policy, we must consider children's right of participation and children's free association and the collective exercise of the rights. According to Kimiagar and Hart (2017, p. 500), "Children's right to freely associate with other children has profound implications for children's sense of ownership of their rights and, hence, it is an important foundation for supporting the full range of children's rights." Child participation or youth protagonism has been defended as a central idea in work with children in a situation of vulnerability by institutions that advocate for children' rights. The project "Youth in Scene" (*Juventude em Cena*) is an example of encouraging the empowerment of children and adolescents in vulnerable situations in Brazil (Souza et al., 2016). It was founded by the Federal University of Rio Grande do Sul (Universidade Federal do Rio Grande do Sul), Brazil, and funded by the Brazilian Ministry of Education. The project works with adolescents to expand and improve their knowledge and to promote their own rights across four pillars of education: learning to know, learning to do, learning to live together, and learning to be (Delors, 1998). The main focus of the program is to raise awareness of human rights and to combat violations of rights, such as juvenile labor exploitation and violence. The project evaluation showed that adolescents achieved good knowledge of their rights and the rights of others (Souza, 2008). Children's participation seems not only desirable, but also a mandatory part of the process of social intervention. Panter-Brick (2002), when analyzing the health issue of children and adolescents in street situations, pointed out the need to listen to their voices.

In the history of children's rights in Brazil, the "National Movement of Street Children" (*Movimento Nacional dos Meninos e Meninas de Rua*, MNMMR) has a fundamental role in the implementation of the legislation. In 2012, the

UNOHCHR, through a unique cross-sector partnership with the CSC, Aviva, and UNICEF, produced a report on the reality of children working or living on the streets. This report identified some criteria that base good practices, divided in normative (safety, availability, accessibility, quality, and flexibility) and cross-cutting criteria as the basis of good practices for the best interest of children in street situations: nondiscrimination; participation; accountability on the part of courts and tribunals, which should respect street-connected children by listening to them and taking due account of their views and experiences; and sustainability (p. 16).

Conclusions

Children, adolescents, and youth are the first and the most affected by poverty. Street life is directly affected by political, social, and economic conditions. The presence of young members of a society on the streets works as a thermometer for communities and countries. An increase in their numbers implies social inequality and the worsening of economic and social indicators. It is a priority to be aware of the life statuses of these adolescents and implement policies to prevent migration to the streets.

Research and intervention about street youth should consider their role as competent social actors and therefore prioritize their participation and their voices. The best and perhaps only way to effectively guarantee the rights of adolescents on the streets is by listening to their needs and building solutions with them. However, prevention is a better long-term solution, which will involve working with families and communities before social and familial bonds weaken and youth leave home.

This chapter illustrated many advances that have been made in ethical and methodological terms for the production of knowledge about street-involved youth. Research with this population must be used to inform practices, programs, and be food for thought of all and any human beings in our cultures. It will advance the construction of complex developmental and social models to allow the understanding of many and different risk and protective factors related to the life trajectories of youth and foster their well-being and healthy development in the short, medium, and long terms.

References

Alves, P. B., Koller, S. H., Silva, A. S., Santos, C., Silva, M. S., Reppold, C., & Prade, L. T. (2002). Daily activities of street children. *Psicologia. Teoria e Pesquisa*, *18*, 305–313.
Aptekar, L. (1994). Street children in the developing world: A review of their condition. *Cross-Cultural Research*, *28*(3), 195–224.

Bademci, H. O., Karaday, E. F., & Zulueta, F. (2015). Attachment intervention through peer-based interaction: Working with Istanbul's street boys in a university setting. *Children and Youth Services Review*, *49*, 20–31. doi:10.1016/j.childyouth.2014.12.019

Betancourt, T. S., Meyers-Ohki, S., Stulac, S. N., Elizabeth Barrera, A., Mushashi, C., & Beardslee, W. R. (2011). Nothing can defeat combined hands (Abashize hamwe ntakibananira): Protective processes and resilience in Rwandan children and families affected by HIV/AIDS. *Social Science & Medicine*, *73*, 693–701.

Bolton, P., Bass, J., Betancourt, T., Speelman, L., Onyango, G., Clougherty, K. F., & Verdeli, H. (2007). Interventions for depression symptoms among adolescent survivors of war and displacement in northern Uganda: A randomized controlled trial. *The Journal of the American Medical Association*, *298*(5), 519–527. doi:10.1001/jama.298.5.519

Bronfenbrenner, U. (1974). Developmental research, public policy, and ecology of childhood. *Child Development*, *45*(1), 1–5.

Bronfenbrenner, U. (1979). *The ecology of human development.* Cambridge, MA: Harvard University Press.

Bronfenbrenner, U., & Morris, P. A. (1998). The ecology of developmental processes. In W. Damon (Ed Série) & R. M. Lerner (Ed., Volume), *Handbook of child psychology: Theoretical models of human development* (Vol. 1, pp. 993–1027). New York: John Wiley.

Bush, M., & Rizzini, I. (2011). *Closing the gap between rights and realities for children and youth in urban Brazil: Reflections on a Brazilian project to improve policies for street children.* Rio de Janeiro, Brazil: CIESPI/PUC-Rio; Geneva, Switzerland: OAK Foundation.

Campos, R., Raffaelli, M., Ude, W., Greco, M., Ruff, A., Rolf, J., Antunes, C. M., Halsey, N., & Greco, D. (1994). Social networks and daily activities of street youth in Belo Horizonte, Brazil. *Child Development*, *65*, 319–330.

Cauce, A. M. (2000). The characteristics and mental health of homeless adolescents: Age and gender differences. *Journal of Emotional and Behavioral Disorders*, *8*, 230–239.

Cecconello, A. M., & Koller, S. H. (2003). Inserção ecológica na comunidade: Uma proposta metodológica para o estudo de famílias em situação de risco (Ecological engagement in the community: A methodological proposal for the study of families at risk). *Psicologia: Reflexão e Crítica*, *16*(3), 515–524. doi:10.1590/S0102-79722003000300010

Cerqueira-Santos, E., Koller, S. H., Pilz, C., Dias, D. D., & Wagner, F (2004). Police officers' conceptions about street children: A study about prejudice. *Psico-USF*, *11*(2), 249–256.

Compas, B. E., Howell, D. C., Phares, V., Williams, R. A., & Giunta, C. T. (1989). Risk factors for emotional/behavioral problems in young adolescents: A prospective analysis of adolescent and parental stress and symptoms. *Journal of Consulting and Clinical Psychology*, *57*, 732–740.

Connolly, M., & Ennew, J. (1996). Introduction: Children out of place. *Childhood: A Global Journal of Child Research*, *3*, 131–145.

Consortium for Street Children (2015). *Consortium for Street Children Briefing Paper: Do I count if you count me?*. London, UK: Author.

Dejman, M., Vameghi, M., Roshanfekr, P., Dejman, F., Rafiey, H., Forouzan, A. S., . . . Johnson, R. M. (2015). Drug use among street children in Tehran, Iran: A qualitative study. *Public Health*, *3*, 279. doi:fpubh.2015.00279

Dell'Aglio, D. D., Cunnigham, W., Koller, S. H., Borges, V. C., & Leon, J. S. (2007). Youth well-being in Brazil: An index for cross-regional comparisons. *World Bank Policy Research Working Paper Series*, p. 4189.

Delors, J. (Ed.). (1998). *Educação: Um tesouro a descobrir. Relatório para a Unesco da Comissão Internacional sobre Educação para o século XXI* [Education: A treasure to discover. Report to Unesco of the International Commission on Education for the 21st Century]. São Paulo, Brazil: Cortez/Brasília: MEC/Unesco.

DeSouza, E., Koller, S. H., Hutz, C. S., & Forster, L. (1995). Preventing depression among Brazilian street children. *Interamerican Journal of Psychology*, *29*, 261–265.

DuBois, D. L., Felner, R. D., Brand, S. A., Adan, A. A., & Evans, E. G. (1992). A prospective study of life stress, social support, and adaptation in early adolescence. *Child Development*, *63*, 542–557.

Duryea, E. J. (2000). Meta-review of sampling dilemmas in health education research: Design issues and ethical precepts. *International Quarterly of Community Health Education*, *19*, 145–162.

Embleton, L., Lee, H., Gunn, J., Ayuku, D., & Braitstein, P. (2016). Causes of child and youth homelessness in developed and developing countries. *JAMA Pediatrics*, *170*(5), 435–444.

Ennew, J. (1994). Parentless friends: A cross-cultural examination of networks among street children and street youth. In F. Nestman & K. Hurrelman (Eds.), *Social networks and social support in childhood and adolescence* (pp. 409–426). London, England: de Gruyter.

Eschiletti-Prati, L. E., Couto, M. C. P. de P., Moura, A., Poletto, M., & Koller, S. H. (2008). Revisando a inserção ecológica: uma proposta de sistematização. *Psicologia: Reflexão e Crítica*, *21*(1), 160–169. https://dx.doi.org/10.1590/S0102-79722008000100020

Felsman, K. (1989). Risk and resiliency in childhood: The lives of street children. In T. Dugan & R. Coles (Eds.), *The child in our times: Studies in the development of resiliency* (pp. 56–80). New York, NY: Brunner/Mazel.

Garmezy, N., & Masten, A. (1994). Chronic adversities. In M. Rutter, E. Taylor, & L. Herson (Eds.), *Child and adolescent psychiatry* (pp. 191–207). Oxford, UK: Blackwell.

Hecht, T. (1998). *At home in the street: Street children of northeast Brazil*. New York, NY: Cambridge University Press.

Hills, F., Meyer-Weitz, A., & Asante, K. O. (2016). The lived experiences of street children in Durban, South Africa: Violence, substance use, and resilience. *International Journal of Qualitative Studies on Health and Well-being*, *11*. doi:10.3402/qhw.v11.30302

Hutz, C., & Koller, S. H. (1997). Questões sobre o desenvolvimento de crianças em situação de rua (Questions on the development of street children). *Estudos de Psicologia*, *2*, 175–197.

Hutz, C., & Koller, S. (1999). Methodological and ethical issues in research with street children. *New Directions for Child and Adolescent Development*, *85*, 59–70. doi:10.1002/cd.23219998507

Inciardi, J. A., & Surratt, H. L. (1998). Children in the streets of Brazil: Drug use, crime, violence, and HIV risks. *Substance Use & Misuse*, *33*, 1461–1480.

Jabbar, S. A., & Zaza, H. I. (2014). Impact of conflict in Syria on Syrian children at the Zaatari refugee camp in Jordan. *Early Child Development and Care*, *184*, 9–10. doi:10.1080/03004430.2014.916074

Jackson, Y., & Warren, J. S. (2000). Appraisal, social support, and life events: Predicting outcome behavior in school-age children. *Child Development*, *71*, 1441–1457.

Kayiranga, G., & Mukashema, I. (2014). Psychosocial factor of being street children in Rwanda. *Procedia—Social and Behavioral Sciences*, *140*, 522–527. doi:10.1016/j.sbspro.2014.04.464

Kim, S. (2014). A review of research on runaway and homeless youth: A comparison of trends between American and South Korean journals from 2001 to 2010. *Child & Adolescent Social Work Journal*, *31*(2), 107–118. doi:10.1007/s10560-013-0313-5

Kimiagar, B., & Hart, R. (2017). Children's free association and the collective exercise of their rights. In M. D. Ruck, M. Peterson-Badali, & M. Freeman (Eds.), *Handbook of children's rights: Global and multidisciplinary perspectives* (pp. 498–514). New York, NY: Routledge.

Koller, S. H., & Hutz, C. S. (2001). Street children. In N. J. Smelser & P. B. Baltes (Eds.), *International encyclopedia of social and behavioral sciences* (pp. 15157–15160). New York, NY: Elsevier. doi:10.1016/B0-08-043076-7/01817-9

Koller, S. H., & Lisboa, C. (2007). Brazilian approaches to understanding and building resilience in at-risk populations. *Child and Adolescent Psychiatric Clinics of North América*, *16*(2), 341–356.

Koller, S. H., Morais, N. A., & Paludo, S. S. (2016). *Inserção ecológica: um método de estudo do desenvolvimento humano* [Ecological engagement: A study method in human development]. São Paulo, Brazil: Pearson/CasaPsi.

Koller, S. H., & Raffaelli, M. (2008). Improving the lives of street youth of Latin America: Towards the construction of a new agenda for developmental research and practice. In Y. Ronin & C. W. Greenbaum (Eds.), *The case for the child: Towards a new agenda* (pp. 179–200). Antwerp, Belgium: Intersentia.

Koller, S. H., Raffaelli, M., & Carlo, G. (2012). Conducting research about sensitive subjects: The case of homeless youth. *Universitas Psychologica*, *11*, 11–65.

Koller, S. H., Raffaelli, M., Morais, N. A., & Santana, J. P. (2011). *Understanding street children to improve interventions* (Working Project). Jacobs Foundation.

Lieten, G. K., & Strehl, T. (2015a). Street child interventions and policies. In *Child street life: An inside view of hazards and expectations of street children in Peru* (pp. 45–53). Amsterdam, the Netherlands: Springer. 10.1007/978-3-319-11722-5_5

Lieten, G. K., & Strehl, T. (2015b). Street life. In *Child street life: An inside view of hazards and expectations of street children in Peru* (pp. 25–44). Amsterdam, the Netherlands: Springer. doi:10.1007/978-3-319-11722-5_4

Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development*, *71*, 543–562.

Magnusson, D., & Cairns, R. B. (1996). Developmental science: Toward a unified framework. In R. B. Cairns, G. H. Elder, Jr., & J. E. Costello (Eds.), *Developmental science* (pp. 7–30). Cambridge, UK: Cambridge University Press.

Malindi, M. J., & Theron, L. C. (2010). The hidden resilience of street youth. *South African Journal of Psychology*, *40*(3), 318–326. doi:10.1177/008124631004000310

Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, *56*, 227–238.

McCaskill, P. A., Toro, P. A., & Wolfe, S. M. (1998). Homeless and matched housed adolescents: A comparative study of psychopathology. *Journal of Clinical Child Psychology*, *27*, 306–319.

Mizen, P., & Ofosu-Kusi, Y. (2007). Researching with, not on: Using photography in researching street children in Accra, Ghana. In M. Smith (Ed.), *Studies in qualitative methodology* (pp. 57–81). West Yorkshire, England: Emerald.

Moos, R. H. (1992). Understanding individuals' life contexts: Implications for stress reduction and prevention. In Kessler, M., Goldston, S. E., & Joffe, J. M. (Eds.), *The present and future of prevention: In honor of George W. Albee* (pp. 196–213). Newbury Park, CA: Sage.

Morais, N. A. (2009). *Trajetórias de vida de crianças e adolescentes em situação de vulnerabilidade social: Entre o risco e a proteção* [Life trajectories of children and adolescents in situations of social vulnerability: Between risk and protection]. Unpublished doctoral thesis. Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil.

Morais, N. A., & Koller, S. H. (2004). Abordagem ecológica do desenvolvimento humano, psicologia positiva e resiliência: Ênfase na saúde. In S. H. Koller (Ed.), *Ecologia do desenvolvimento humano: Pesquisa e intervenção no Brasil* [Human ecological development: Research and intervention in Brazil]. São Paulo, Brazil: Casa do Psicólogo.

Morais, N. A., Koller, S. H., & Raffaelli, M. (2012). Rede de apoio, eventos estressores e mau ajustamento na vida de crianças e adolescentes em situação de vulnerabilidade social. *Universitas Psychologica*, *11*(3), 779–791. http://dx.doi.org/10.11144/779

Morais, N. A., Neiva-Silva, L., & Koller, S. H. (2010). *Endereço desconhecido: Crianças e adolescentes em situação de rua* [Address unknown: Children and adolescents in street environments]. São Paulo, Brazil: Casa do Psicólogo.

Muhib, F. B., Lin, L. S., Stueve, A., Miller, R. L., Ford, W. L., Johnson, U. D., & Smith, P. J. (2001). A venue-based method for sampling hard-to-reach populations. *Public Health Reports*, *116*, 216–222.

Nada, K. H., & Suliman, E. D. A. (2010). Violence, abuse, alcohol and drug use, and sexual behaviours in street children of Greater Cairo and Alexandria, Egypt. *AIDS*, *24*, S39–S44.

Neiva-Silva, L., & Koller, S. H. (2002a). Adolescentes em situação de rua. Em M. L. J. Contini, S. H. Koller & M. N. S. Barros (Orgs.), *Adolescência e psicologia: Concepções, práticas e reflexões críticas* (pp. 112–121). Brasília: Conselho Federal de Psicologia.

Neiva-Silva, L., & Koller, S. H. (2002b). A rua como contexto de desenvolvimento. Em E. R. Lordelo, A. M. A. Carvalho & S. H. Koller (Orgs.), Infância brasileira e contextos de desenvolvimento (pp. 202–230). São Paulo, SP: Casa do Psicólogo, Salvador, BA: Editora da Universidade Federal da Bahia.

Neiva-Silva, L., Marquardt, J. P., López, J. & Koller, S. H. (2010). Uso de drogas por crianças e adolescentes em situação de rua e a busca de intervenções efetivas [Drug use by street children and adolescents and the search for effective interventions]. In N. A. Morais, L. Neiva-Silva, and S. H. Koller (Eds.), *Endereço Desconhecido: crianças e adolescentes em situação de rua [Unknown Address: Street children and adolescents]* (pp. 35–61). São Paulo, Brazil: Casa do Psicólogo.

Oduro, G. Y. (2012). Children of the street: Sexual citizenship and the unprotected lives of Ghanaian street youth. *Comparative Education*, 48(1), 41–56.

Paludo, S., & Koller, S. H. (2004). Inserção ecológica no espaço da rua [Ecological engagement in street settings]. In S. H. Koller (Ed.), *Ecologia do desenvolvimento humano: Pesquisa e intervenção no Brasil* [Human ecological development: Research and intervention in Brazil] (pp. 219–244). São Paulo, Brazil: Casa do Psicólogo.

Paludo, S., & Koller, S. H. (2005). Quem são as crianças que estão nas ruas: vítimas ou vitimizadoras? [Who are the street children: Victims or perpetrators?]. *Interação em Psicologia*, 9(1), 65–76. doi:10.5380/psi.v9i1.3287

Panter-Brick, C. (2001). Street children: Cultural concerns. In N. J. Smelser & P. B. Baltes (Eds.), *International encyclopedia of the social and behavioral sciences* (pp. 15154–15157). New York, NY: Elsevier.

Panter-Brick, C. (2002). Street children, human rights, and public health: A critique and future directions. *Annual Review of Anthropology*, *31*, 147–171. doi:10.1146/annurev.anthro.31.040402.085359

Panter-Brick, C., Todd, A., & Baker, R. (1996). Growth status of homeless Nepali boys: Do they differ from rural and urban controls? *Social Science and Medicine*, *43*, 441–451.

Petersen, A., Koller, S. H., Motti-Stefanidi, F., & Verma, S. (2017). Global Equity and Justice Issues for Young People During the First Three Decades of Life. *Advances in Child Development and Behavior*, *51*, 289–320. doi:10.1016/bs.acdb.2016.05.006

Petrucka, P., Brooks, S., Smadu, G., McBeth, B., Bassendowski, S., Mackay, A., . . . Fudger, S. (2014). At street level: Learnings, voices, experiences, and lifestyles of street involved youth. *Nursing and Health*, *2*(2), 48–56. doi:10.13189/nh.2014.020204

Pinto, J. A., Ruff, A. J., Paiva, J. V., Antunes, C. M., Adams, I. K., Halsey, N. A., & Greco, D. B. (1994). HIV risk behavior and medical status of underprivileged youths in Belo Horizonte, Brazil. *Journal of Adolescent Health*, *15*, 179–185.

Raffaelli, M. (1999). Street youth in Latin America: A developmental review. *Interamerican Journal of Psychology*, *33*, 7–28.

Raffaelli, M., Campos, R., Payne-Merritt, A., Siqueira, E., Antunes, C. M., Parker, R., . . . & the Street Youth Study Group. (1993). Sexual practices and attitudes of street youth in Belo Horizonte, Brazil. *Social Science & Medicine*, *37*, 661–670.

Raffaelli, M., & Koller, S. H. (2005). Future expectations of Brasilian street youth. *Journal of Adolescence*, *28*(2), 249–262. doi:j.adolescence.2005.02.007

Raffaelli, M., Koller, S. H., & Cerqueira-Santos, E. (2012). Protective factors moderate between risk exposure and behavioral adjustment among low income Brazilian adolescents and young adults. *British Journal of Educational Psychology, 11*, 74–92.

Raffaelli, M., Koller, S. H., & Morais, N. A. (2013). Children at risk: The case of Latin American street youth. In A. Ben-Arich, F. Casas, I. Froner, & J. E. Korbin (Eds.), *Handbook of child well-being: Theories, methods and policies in global perspective* (pp. 2653–2668). Dordrecht, The Netherlands: Springer.

Raffaelli, M., Koller, S. H., Cerqueira-Santos, E., & de Morais, N. A. (2007). Developmental risks and psychosocial adjustment among low-income Brazilian youth. *Development and Psychopathology*, *19*, 565–584. doi:10.1017/S0954579407070277

Raffaelli, M., Koller, S. H., & Morais, N. A. (2007). Assessing the development of Brazilian street youth. *Vulnerable Children and Youth Studies*, *2*, 154–164. doi:10.1017/S0954579407070277

Raffaelli, M., Koller, S. H., & Morais, N. A. (2013). Children at risk: The case of Latin American street youth. In A. Ben-Arich, F. Casas, I. Froner, & J. E. Korbin (Eds.), *Handbook of child well-being: Theories, methods and policies in global perspective* (pp. 2653–2668). Dordrecht, the Netherlands: Springer.

Raffaelli, M., & Larson, R. (Eds.). (1999). *Homeless and working youth around the world: Exploring developmental issues. New Directions in Child Development*, 85 (W. Damon, Series Ed.). San Francisco, CA: Jossey-Bass.

Raffaelli, M., Koller, S. H., & Morais, N. A. (2007). Assessing the development of Brazilian street youth. *Vulnerable Children and Youth Studies*, *2*, 154–164. http://dx.doi.org/10.1080/17450120701403128

Raffaelli, M., Morais, N. A, & Koller, S. H. (2014). Children at risk: The case of Latin American street youth. In A. Ben-Arieh, I. Frønes, F. Casas, & J E. Korbin (Eds.), *Handbook of child well-being: Theory, indicators, measures and policies* (Vol. 5, pp. 2653–2668). Dordrecht, the Netherlands: Springer.

Rizzini, I. (1996). Street children: An excluded generation in Latin America. *Childhood: A Global Journal of Child Research*, *3*, 215–234.

Rosemberg, F. (1996). Estimativa sobre crianças e adolescentes em situação de rua: Procedimentos de uma pesquisa. *Psicologia: Reflexão e Crítica*, *9*, 21–58.

Rutter, M., Quinton, D., & Hill, J. (1990). Adult outcomes of institution-reared children: Males and females compared. In L. Robins & M. Rutter (Eds.), *Straight and devious pathways from childhood to adulthood* (pp. 135–157). New York: Cambridge University Press.

Santos, B. R. (2002). Ungovernable children: Runaways, homeless youths, and street children in New York and São Paulo (Order No. 3082163). Available from Retrieved from ProQuest Dissertations & Theses Global (304807229). http://search.proquest.com.ezp-prod1.hul.harvard.edu/docview/304807229?accountid=11311

Sauvé, S. (2003). Changing paradigms for working with street youth: The experience of Street Kids International. *Children, Youth, and Environments*, *13*(1), 314–333. Retrieved from http://www.jstor.org/stable/10.7721/chilyoutenvi.13.1.0314

Sayem, A. M., & Kidd, S. A. (2013). The levels and patterns of resilience among male street children in Dhaka City. *International Journal of Adolescent Medicine and Health*, *25*, 39–45. doi:10.1515/ijamh-2013-0005

Schwartz, K. D., Theron, L. C., & Scales, P. C. (2017). Seeking and finding positive youth development among Zulu youth in South African townships. *Child Development*, ahead of print, doi:10.1111/cdev.12869.

Sharma, D., & Verma, S. (2013). Street girls and their fight for survival across four developing countries. *Psychological Studies*, *58*, 365–373. doi:10.1007/s12646-013-0226-6

Slesnick, N., Dashora, P., Letcher, A., Erdem, G., & Serovich, J. (2009). A review of services and interventions for runaway and homeless youth: moving forward. *Children and Youth Services Review*, *31*(7), 732–742.

Soares, F. V., Ribas, R. P., & Osório, R. G. (2010). Evaluating the impact of Brazil's Bolsa Família. *Latin American Research Review*, *45*(2), 173–190.

Souza, A. P. L. (2008). *A visão de adolescentes de diferentes contextos a respeito de seus próprios direitos* [Views of diverse adolescents' about their own rights] (Unpublished master's thesis). Federal University of Rio Grande do Sul, RS, Brazil.

Souza, A. P. L., Dutra-Thomé, L., Schiró, E. D. B., Aquino-Morais, C., & Koller, S.H. (2016). Criando contextos ecológicos de desenvolvimento e direitos humanos para adolescentes [Creating ecological development contexts and human rights for adolescents]. In S. H. Koller, N. A. Morais, & S. S. Paludo (Eds.), *Inserção ecológica: Um método de estudo do desenvolvimento humano* [Ecological engagement: A methodology for the study of human development] (pp. 239–254). São Paulo, Brazil: casa do Psicólogo.

Stueve, A., O'Donnell, L. N., Duran, R., San Doval, A., & Blome, J. (2001). Time-space sampling in minority communities: Results with young Latino men who have sex with men. *American Journal of Public Health*, *91*, 922–926.

Thomas de Benitez, S. (2007). *State of the world's street children: Violence*. London, England: Consortium for Street Children.

Tozer, K., Tzemis, D., Amlani, A., Coser, L., Taylor, D., Van Borek, N., . . . Buxton, J. A. (2015). Reorienting risk to resilience: Street-involved youth perspectives on preventing the transition to injection drug use. *BMC Public Health*, *15*, 800. doi:10.1186/s12889-015-2153-z

Tyler, K. A., Handema, R., Schmitz, R. M., Phiri, F., Kuyper, K. S., & Wood, C. (2016). Multi-level risk and protective factors for substance use among Zambian street youth. *Substance Use & Misuse*, *51*(7), 922–931.

Tyler, K. A., Hoyt, D. R., & Whitbeck, L. B. (2000). The effects of early sexual abuse on later sexual victimization among female homeless and runaway adolescents. *Journal of Interpersonal Violence*, *15*, 235–250.

Uddin, M. J., Sarma, H., Wahed, T., Ali, M. W., Koehlmoos, T. P., Nahar, Q., & Azim, T. (2014). Vulnerability of Bangladeshi street-children to HIV/AIDS: A qualitative study. *BMC Public Health*, *14*, 1151. doi:10.1186/1471-2458-14-1151

Unger, J. B., Kipke, M. D., Simon, T. R., Johnson, C. J., Montgomery, S. B., & Iverson, E. (1998). Stress, coping, and social support among homeless youth. *Journal of Adolescent Research*, *13*, 134–157.

United Nations. (1990). *Convention on the rights of the child*. New York, NY: Author.

United Nations. (2015). *The Millennium Development Goals report 2015*. New York, NY: Author.

United Nations Children's Fund (UNICEF). (2012). *Protection and promotion of the rights of children working and/or living on the street*. New York, NY: United Nations.

UN Office of the High Commission for Human Rights. (2012a). *Protection and promotion of the rights of children working and/or living on the street*. Retrieved from http://www.ohchr.org/Documents/Issues/Children/Study/OHCHRBrochureStreetChildren.pdf

UN Office of the High Commissione of Humman Rights. (2012b). *Publication on the protection and promotion of the rights of children working and/or living on the street*. Geneva, Switzerland: United Nations, UNICEF, Consortium for Street Children, AVIVA.

van Beers, H. (1996). A plea for a child-centered approach in research with street children. *Childhood*, *3*, 195–201.

Van Breda, A. D. (2017). A comparison of youth resilience across seven South African sites. *Child & Family Social Work*, *22*(1), 226–235. doi:10.1111/cfs.12222

Vega, L. B. S., & Paludo, S. S. (2016). Exploração sexual de crianças e adolescents: a inserção ecológica como caminho de pesquisa [Sexual exploitation of children and adolescents: The ecological engagement as a way of research]. In S. H. Koller, N. A. Morais, & S. S. Paludo (Eds.), *Inserção ecológica: um método de estudo do desenvolvimento humano* [Ecological engagement: A study method in human development] (pp. 183–200). São Paulo, Brazil: Pearson/CasaPsi.

Verma, S., Sta. Maria, M., & Morojele, N. (2011). A cross-cultural view to the study of resilience among street children. *ISSBD Bulletin*, *59*(1), 11–14.

Werner, E. E., & Smith, R. S. (2001). *Journeys from childhood to midlife: Risk, resilience, and recovery.* Ithaca, NY: Cornell University Press.

Whitbeck, L. B., Hoyt, D. R., Cauce, A. M., & Paradise, M. (2001). Deviant behavior and victimization among homeless and runaway adolescents. *Journal of Interpersonal Violence*, *11*, 1175–1204.

Worthman, C. M., & Panter-Brick, C. (2008). Homeless street children in Nepal: Use of allostatic load to assess the burden of childhood adversity. *Development and Psychopathology*, *20*, 233–255. doi:10.1017/S0954579408000114

Young, L., & Barret, H. (2001). Adapting visual methods: Action research with Kampala street children. *Area*, *33.2*, 141–152.

Young, L., & Barret, H. (2001b). Issues of access and identity: Adapting research methods with Kampala street children. *Childhood: A Global Journal of Child Research*, *8*(3), 383–395.

Parent-Based Models of Adolescent Substance Use

A GLOBAL PERSPECTIVE

Andrea M. Hussong and Ruth K. Smith

Parent-Based Models of Adolescent Substance Use:
A Global Perspective

Substance use is among the leading risk factors associated with the global burden for disease, death, and disability, with tobacco and alcohol use ranked among the top three and drug use ranked at 19 (Lim et al., 2012). In high-income regions of the world, tobacco use ranks as the highest of these risk factors (in western Europe and high-income North America), whereas alcohol use ranks as the highest risk factor in more middle- and low-income regions (eastern Europe, regions of Latin America, and southern sub-Saharan Africa)—though both remain in the top five for most regions of the world. The long-standing role of substance use in global disease burden has spurred many worldwide initiatives focused on reducing alcohol, tobacco, and drug use (e.g., World Health Organization [WHO], 2010). In this chapter, we adopt a prevention perspective to address this issue and focus on youth outcomes. In particular, we review the epidemiology of adolescent substance use, examine the role of parents and family in the development of substance use, and describe family evidence-based programs with the potential for global impact on the development of substance-related problems in youth.

The Epidemiology of Adolescent Substance Use

Studies of adolescent substance use in the United States suggested that, although historical and cohort patterns of substance use vary with the introduction of new drugs as well as policies and laws (Chassin et al., 2016), the use of alcohol and drugs often follows a developmental pattern. Substance use most commonly begins in adolescence, escalates into young adulthood, and peaks between the ages 18 and 25 for most substances as well as related clinical disorders before desistance

begins, though there is significant variability in this pattern across individuals (Chassin et al., 2016). This same developmental trend is evident in many developed nations for which longitudinal epidemiological studies are available, including New Zealand (Boden et al., 2006); France (Melchior et al., 2008); and Canada (Leatherdale & Burkhalter, 2012; though see Pirkis et al., 2003, for a caution in making international comparisons for adolescent substance use).

Cross-national longitudinal data that map developmental trajectories of sub-stance use over the early life course are not widely available for low- and middle-income countries. However, data from the United Nations and Centers for Disease Control and Prevention (CDC) provide a worldwide snapshot of substance use in adolescents. One clear finding from these panel data are that alcohol, tobacco, and other drug use is a global phenomenon for youth, with many individuals initiating use during the teen years. Estimates from the WHO/CDC Global Youth Tobacco Surveys from 2000 to 2010 (as reanalyzed by the United Nations Children's Fund [UNICEF], 2012) indicate that, in the developing world, youth tobacco use is highest in Latin America and the Caribbean, with 26% of boys and 25% of girls aged 13–15 having used tobacco in the past month. Across the subset of 158 coun-tries surveyed, a rank ordering suggests that the next highest prevalence rates for boys and girls, respectively, were for West and Central Africa (22% and 15%); the Middle East and North Africa (21% and 10%); sub-Saharan Africa (19% and 13%); central and eastern Europe and the Commonwealth of Independent States (19% and 13%); South Asia (17% and 8%); eastern and southern Africa (17% and 12%); and East Asia and the Pacific (15% and 6%). Pulling across these regions, rates were higher for boys than for girls but were comparable for developing (18% and 10%, respectively) and the least developed countries (17% and 11%, respectively).

Country-level data from the WHO Global School-Based Student Health Survey (as reported by UNICEF, 2012) similarly reported notable discrepancies across developing nations in youth alcohol and drug use. However, in nearly half of the countries with data from their 2003–2011 surveys, approximately 25% of youth aged 13–15 reported drinking within the past month. Data reported from a randomly selected group of countries suggest that rates are as high as nearly 60% (for boys in Jamaica and Seychelles and girls in Seychelles) and as low as less than 5% (for youth in Malawi and Tajikistan). For drug use (which includes marijuana), rates ranged from around 30% (in Zambia and Namibia) to less than 1% (for youth in Senegal, Tajikistan, and Indonesia). In general, rates of use were higher in boys than in girls for alcohol (except in a few countries in Latin America and the Caribbean as well as sub-Saharan Africa) and drug use.

Of note, caution should be used when considering the prevalence of alcohol and drug use in countries with majority Muslim populations due to the heightened stigma brought on by religious principles that forbid use (Arfken & Ahmed, 2016). Traditional methods of assessing substance use rely on an assumption of truth in reporting, and this assumption may be less valid among Muslim populations. For example, although predominately Muslim countries have the lowest alcohol

consumption per capita in the world, they also have a higher portion of unre-corded alcohol consumed outside of official regulatory systems (WHO, 2014, as cited in Arfken & Ahmed, 2016). Although there are myriad plausible explanations for this discrepancy, there is reason to consider how stigma may contribute to prevalence rates.

Studies in predominantly Muslim countries using more targeted sampling (as opposed to large-scale surveys) and qualitative methods have yielded a different picture of substance use among college student and young adult samples. Findings have revealed much higher alcohol use rates (Ghandour et al., 2009), endorsement of beliefs that heavy–episodic drinking is normative in the years before getting married and starting families (Arfken et al., 2012), and reports of drinking in far-away, secluded areas in order to hide alcohol use from family and community members (Baron-Epel et al., 2015). Although these data were collected among older samples, this suggests that current substance use prevalence rates among Muslim youth may reflect underreporting, and risk levels may potentially be higher than the data indicate.

Available data also suggest that substance use in youth around the world nega-tively impacts healthy development. Notable among these negative health outcomes is the association of drug use with greater risk for HIV infection (UNICEF, 2012). As reported by a Joint United Nations report, HIV incidence in seven devel-oping countries (Armenia, Bangladesh, Georgia, Kazakhstan, Kyrgyzstan, the Philippines, and Tajikistan) increased by more than 25% due to use of injection drugs and unprotected sex among key risk populations; in countries assessed, this increase included an impact on adolescents (Joint UNAIDS, 2010). Other risks associated with substance use include poorer mental health outcomes and greater engagement in other behaviors that may carry additional risks for mor-tality and morbidity (Chang et al., 2005). Similar negative associations have been found between regular alcohol use by the International Child Mental Health Study Group, who showed that regular alcohol use was associated with lower physical, emotional, and school functioning in India, Indonesia, Nigeria, Serbia, Turkey, Bulgaria, and Croatia (Stevanovic et al., 2015). Thus, youth alcohol, tobacco, and drug use is a problem worthy of global attention due both to the high prevalence of these behaviors in many parts of the world and to the risks to health and well-being that these behaviors convey.

Parenting Models of Adolescent Substance Use

Prevention efforts have largely focused on school-based programs aimed at pro-viding adolescents with substance use education; however, these programs have been more successful at improving knowledge about substance use risk and less impactful at changing substance use behaviors (Steinberg, 2004, 2007). The diver-gent relationship between adolescent knowledge of substance use risk and their

high engagement in risky substance use relative to adults suggests alternative prevention efforts are needed to bridge this gap (e.g., Reyna & Farley, 2006; Steinberg, 2004). One such alternative is to harness the role that parents play in affecting adolescent substance use outcomes. Parents are a proximal influence in shaping adolescent behavior, with parenting factors specifically implicated in the development, maintenance, and prevention of adolescent substance use (Wills & Yaeger, 2003). Indeed, the most effective substance use prevention programming for adolescents includes parents as a core component, second only to more costly and intensive in-home parenting programs, and more effective than youth-only programs targeting self-esteem building, life training, or social skills training (Faggiano et al., 2005; Foxcroft et al., 2003).

Parenting models of adolescent substance use are largely derived from early work by Baumrind and colleagues that established an overarching framework for understanding the association between parenting behaviors and youth substance use (Baumrind, 1991). Baumrind identified the combination of parental warmth and control, termed *authoritative parenting*, as optimal for deterring substance use. Subsequent work has largely replicated Baumrind's findings, including studies showing the benefits of authoritative parenting across racial groups in the United States (Amato & Fowler, 2002; Pezzella et al., 2016). Studies over the last 50 years indicated that the combination of parental warmth and control may be most effective because it provides youth with a sense of security and self that are associated with the benefits that attachment theorists posit are linked with healthy socioemotional development (Ainsworth, 1973), as well as the healthy boundaries and consequences for risky behavior that behavioral and social control theorists (Hirschi, 1969) posit are linked with deterring antisocial behavior.

An alternative to this categorical approach to conceptualizing optimal parenting is the dimensional approach. As Jones and colleagues (2000) recognized, the dimensions of parenting are both broader than the two originally identified by Baumrind and more nuanced. Among those dimensions of parenting that are associated with lower risk for substance use are monitoring of youth behavior (either through active parental efforts or through positive communication that results in youth disclosure; Ary et al., 1999; Stattin & Kerr, 2000); autonomy granting (Gray & Steinberg, 1999); and alcohol-specific communication (i.e., providing clear rules, consequences, and messages about substance use; Reimuller et al., 2011), as well as parental social support, involvement (Simons-Morton & Chen, 2005), and warmth (Nash et al., 2005; Ryan et al., 2010, for a review; see Donovan, 2016, for a review). Conversely, low levels of general discipline and high family conflict have been associated with higher levels of adolescent substance use (see Ryan et al., 2010, for review).

Although similar studies in middle- and low-income countries are rare, there is growing evidence that parenting and family factors play a similar role in youth substance use globally. The International Child Mental Health Study Group, for example, showed parental substance use and features of family structure that

are often associated with poverty (i.e., single-parent homes and more siblings) predicted adolescent substance use in their seven-country study (India, Indonesia, Nigeria, Serbia, Turkey, Bulgaria, and Croatia; Atilola et al., 2014). Studies that focus specifically on parenting and adolescent substance use have also been conducted in single-country investigations.

Three examples of this literature all confirm the salience of optimal parenting as a protective factor against youth substance use. First, in a large sample of Brazilian high school students, adolescents who reported that their parents had authoritative styles had lower rates of tobacco use as compared to adolescents who reported that their parents had negligent or indulgent styles (Tondowski et al., 2015). Second, a representative sample of South African youth, aged 12–17, in Durban completed a survey to evaluate a family–interactionist perspective in predicting substance use. The family–interactionist model posits that a weak parent–child bond and inadequate parental control each contribute to the development of adolescent de- linquency and drug use. Brook et al. (2006) found drug use in these South African youth was associated with fewer parental rules and child-centered interactions as well as weaker adolescent identification with the parent. Third, Wang et al. (2013) showed that more parental control (as indexed by parents stipulating rules for when to be home) was significantly associated with less substance use in middle adolescence among Bahamian youth.

Prevention programs aimed at bolstering parenting skills to reduce risk for youth substance use have drawn on this literature to identify key targets for change. As reviewed next, the mechanisms through which these parenting behaviors are expected to affect this risk include reducing positive expectancies for substance use, decreasing exposure to substance-using peers, dampening motivation for involvement with substances, and increasing coping skills for addressing life stressors that can be linked with youth substance use. Many of the existing par- enting programs target youth risk behaviors broadly, rather than substance use specifically, and use a combination of cognitive behavioral and psychoeducational approaches to intervention.

Empirically validated family programs range from those that focus on uni- versal intervention, such as the Family Matters program (Bauman et al., 2001), to selected or indicated interventions that target at-risk or affected populations, such as the Strengthening Families Program (Kumpfer et al., 1996). A more com- prehensive program with a wide empirical basis is the Triple P parenting program originating from the work by Sanders in Australia (1999). The Triple P program includes a series of gated interventions designed to prevent, or mitigate the pro- gression of, behavioral, emotional, and developmental problems in children, with adaptations for adolescents available at certain levels of the intervention. Of these programs, perhaps the one with the strongest empirical base that has been tested among adolescents in a wide variety of countries, including those in the devel- oping world, is the Strengthening Families Program (United Nations Office of Drugs and Crime [UNODC], 2009a). As an example of these types of programs,

we highlight this program next as a way to describe the components of successful parenting programs that target youth substance use.

Family Evidence-Based Interventions for Adolescent Substance Use

Evidence-based interventions that incorporate parents demonstrate utility for effectively addressing adolescent substance use, likely because they address multiple levels of risk, including health promotion, prevention, early intervention, and treatment (Van Ryzin et al., 2015). The UNODC (2009a) published a compilation of evidence-based prevention programs that incorporate families and have the strongest empirical support. Common components of these programs included having individual parent and adolescent sessions with target-specific content, as well as sessions targeting family interactions. In general, across different programs, the parent sessions included teaching parents how to have developmentally appropriate and clear expectations for adolescents, increase positive behavior through the use of positive attention and rewards, foster warmth by being validating and attentive, provide family structure and organization, appropriately monitor adolescent behavior, model desired behaviors, and discipline consistently and effectively (UNODC, 2009a). Adolescent sessions generally included teaching effective communication skills, emotion identification and coping skills, identifying goals and planning for the future, problem-solving skills, and peer resistance skills. Last, these programs posit that a key aspect of making the programs effective is having a joint component where parents and adolescents are able to come together to gain practice with implementing new skills with one another.

Although empirical support indicates that these interventions yield significant public health benefit, they are largely underutilized, irrespective of their availability (Spoth & Redmond, 2000). Moreover, the vast amount of rigorous research trials and systematic reviews examining these parenting interventions have been primarily focused within high-income countries (Knerr et al., 2013). These interventions are increasingly being implemented in low- and middle-income countries; however, the dearth of reported studies using rigorous evaluation methods limits the conclusions that can be made pertaining to their effectiveness (Knerr et al., 2013).

The Strengthening Families Program is the primary parent-based intervention that has been implemented in low- and middle-income countries, including Chile, Costa Rica, El Salvador, Peru, the Russian Federation, Iran (Islamic Republic), Saudi Arabia, and Thailand. This program has shown the most empirical evidence for preventing adolescent substance use initiation and reducing use longitudinally in developed countries, with support from 8 independent randomized controlled trials, 10 randomized controlled trials, and over 100 quasi-experimental studies (see Foxcroft et al., 2003, for review; UNODC, 2009a). Notably, although the

Strengthening Families Program has accrued the most empirical support for adolescent substance use prevention, there are other prevention programs (see Table 14.1) with a substantial evidence base. These last programs are not considered in detail in the current chapter due to either being conducted with specific target groups that limit generalizability or having relatively less empirical support than the Strengthening Families Program. Unfortunately, conclusions regarding the effectiveness of cultural adaptations of the Strengthening Families Program in these countries cannot be determined, as program implementation in these countries has yet to be followed by rigorous evaluation using randomized controlled trials, the gold standard for program evaluation used by the UNODC. The lack of rigorous research examining the effectiveness of these programs in low- and middle-income countries points to a need for considering the barriers to implementation in less developed areas. One solution to this problem is the use of systematic cultural adaptation of these interventions, which may provide the preliminary evidence base necessary for larger scale dissemination in these areas of the world, in turn allowing for the use of randomized controlled trials to assess their effectiveness.

Despite the scarcity of program evaluation research in low- and middle-income countries, many of the studies conducted in high-income countries have been performed across varied income levels and cultural groups, providing support that these evidence-based interventions can be adapted for utilization among diverse populations (Kumpfer et al., 2008). Research has shown that minority families do not access these evidence-based interventions primarily due to lack of availability, perceived lack of cultural relevance, lack of resources, and diminished likelihood of seeking help outside of the family context stemming from reluctance and fear (Kumpfer et al., 2016). As such, carefully considered cultural adaptations may help reduce health disparities among diverse groups in developing parts of the world by mitigating these barriers to accessing care.

The UNODC published recommendations, based on research by experts in the study of family evidence-based interventions, that should be taken into consideration when adapting prevention programming for implementation among various cultural groups (Kumpfer et al., 2008). When making such adaptations, program implementers must consider how to achieve an optimal balance between maintaining fidelity to the original intervention while accounting for the cultural and socioeconomic environment of the target population (Mejia et al., 2017).

The UNODC recommendations for cultural adaptation (recently updated; Kumpfer et al., 2017) suggest that implementers should (a) determine the needs of the target population by assessing specific risk and protective factors; (b) select the best-fitting intervention and then select appropriate forms of these interventions depending on age, gender, ethnicity, and family risk level; (c) create a cultural adaptation team, which should in part consist of individuals piloting the program, as well as a subset of participating families; (d) translate the program into the most widely used or respected dialect; (e) staff the program with implementers from

TABLE 14.1 Family Skills Training Programs for Adolescent Substance Use Prevention

Family Skills Training Program	Distinguishing Features	Evidence
Multisystemic therapy	• Intensive family- and community-based treatment for juvenile offenders • Promotes change within the natural environment • Rigorous quality assurance protocol	• 12 RCTs • 4 independent RCTs • 2 quasi-experimental studies • 2 studies based on pre- and postintervention evaluation
Guiding Good Choices	• Seeks to strengthen and clarify parent expectations of adolescent behavior • Aims to enhance parent–adolescent relationship • Teaches skills for adolescents to avoid substance use	• 2 independent RCTs • 1 quasi-experimental study • 2 studies based on pre- and postintervention evaluation
Parenting Wisely (Cited as having the *potential* of reducing delinquent behavior and substance use.)	• Self-administered via the Internet • Teaches skills for enhancing the parent–adolescent relationship and decreasing conflict	• 1 independent RCT • 4 RCTs
Staying Connected With Your Teen (Thus far, empirical support has shown a decrease in adolescent favorable attitudes toward substance use but not decreases in substance use itself. However, the intervention was associated with decreased initiation in substance use.)	• Focuses on substance use among target adolescents, parents, and siblings • Identifies inconsistent parenting practices • Targets parent tolerance of substance use	• 1 independent RCT • 1 RCT
Family Matters	• Family directed • Addresses availability of substances within the home • Targets improving insight into peer and media influences on substance use	• 2 independent RCTs • 1 RCT
Multi-Dimensional Family Therapy	• Targets juvenile offenders and their families • Solutions-focused interventions aimed at seeking immediate environmental changes that may influence adolescent outcomes	• 4 independent RCTs • 12 RCTs • 2 quasi-experimental studies • 2 studies based on pre- and postintervention evaluation
Resilient Families	• Intervention provided within schools • Targets adolescent social relationships (including with parents)	• 1 RCT • 1 quasi-experimental study

RCT, randomized controlled trial.

Note: Listed in order of greatest to least empirical support. These studies were not examined in low- or middle- income countries. Program information gathered from the United Nations Office on Drugs and Crime Compilation of Evidence-Based Family Skills Training Programmes (2009a).

the target culture; (f) make gradual cultural adaptations as the program is being piloted; (g) evaluate the effectiveness of the culturally adapted intervention; and (h) implement wide-scale dissemination of the intervention once evidence accrues that the adapted program functions well for the target population. Literature shows that programs adapted to take into consideration the specific needs of families and the cultural values of a population have yielded greater recruitment, engagement, and retention of participants (e.g., Catalano et al., 1993; Kumpfer & Alvarado, 1995; Kumpfer et al., 2002, 2008).

Placing Family Evidence-Based Interventions Within a Multisectoral Perspective to Treatment and Global Intervention Efforts

In addition to adapting substance use prevention programs to meet the specific family and cultural needs of low- and middle-income countries, efforts should be made to ensure that prevention programming has a large-scale impact. Integrating substance use prevention into government policies using a multisectoral approach to program implementation can ensure that the varied needs of families, cultures, and populations on a whole are adequately met. Here, we propose a model for how interorganizational and interagency efforts might be used to coordinate substance use prevention across key government sectors. The family evidence-based prevention programs reviewed by the UNODC were given designations as being appropriate for addressing risk at different levels, categories termed universal, selective, and indicated in prevention research (Mrazek & Haggerty, 1994).

Universal programs target all families and are aimed at increasing protective factors that guard against substance use. Selective programs target families at higher risk for substance use by virtue of factors such as their socioeconomic status. Last, indicated programs target families who have been referred, screened, or diagnosed with risk factors associated with worse intervention outcomes and who require more intensive intervention (UNODC, 2009b). Universal programming efforts could benefit populations on a larger scale, whereas prevention efforts may need to be intensified or have longer durations depending on the target group. One prevention program, Triple P, was designated by the UNODC as addressing risk at each level. This program provides an example of how prevention programming may be implemented within a multisectoral framework, incorporating prevention efforts within the health, psychosocial, legal/justice, and security sectors.

HEALTH SECTOR

In an effort to detect adolescents who are showing early risk factors for developing substance use disorders, the health sector in low- and middle-income countries could concentrate efforts toward training a range of service providers who can

screen youth and connect them with necessary levels of care. For example, in the case of lower risk adolescents, health care professionals may deem it necessary to refer families to prevention programs within their communities or take it on themselves to implement evidence-based protocols should treatment within a primary care setting be deemed inappropriate. A similar approach has been taken with the Triple P program; one level of this program is designed specifically for use within primary care settings, offering a precedent for how the health sector might engage in such a process. This approach to screening can ensure that individuals and the communities at large receive the care that they need and help to allocate treatment resources more efficiently. Thus, the health sector could serve as a primary access point for getting families connected with prevention resources.

PSYCHOSOCIAL SECTOR

The psychosocial sector refers specifically to professionals who address the mental health and social well-being of a community, including psychologists, social workers, other community-based service providers, and members of the education system. Work within this sector could address adolescent substance use prevention both by providing ongoing training to treatment providers who will likely act as the early detectors of substance use risk factors and by providing another juncture where prevention efforts may take place. Research showed when parents are added to school- and community-based interventions they enhance intervention effectiveness (Borduin et al., 1995; Pentz, 1995; Webster-Stratton & Taylor, 2001). This suggests that schools and community centers could seek ways of using their infrastructure already in place in order to incorporate family-based interventions. For example, if schools or community programs have preexisting evidence-based substance use prevention programming, it may be most cost effective to adapt these programs to include the parents of adolescents. By taking this approach, efforts should be made to ensure that any adaptations to the evidenced-based prevention protocols do not reduce confidence in program effectiveness.

LEGAL/JUSTICE SECTOR

The legal/justice sector can participate in adolescent substance use prevention efforts by serving a screening and referral role, similar to that of the health sector. Professionals within the legal and justice system may provide adolescents and their parents who have been exposed to the criminal justice system with access to targeted resources, commensurate with their level of risk. There is empirical support for family skills training programs remediating adolescent delinquent behaviors, including substance abuse (UNODC, 2009a). Thus, court-ordered rehabilitation could serve to alter the trajectories of adolescents who have initiated substance abuse and other delinquent behaviors, and these prevention programs could circumvent adolescents' further involvement with the criminal justice system.

SECURITY SECTOR

Police, military, and other security officers have an obligation to monitor and regulate the distribution of illegal substances and the unlawful purchase of substances by minors. As such, those working within this sector can provide useful information for broad, community-level changes in substance use trends among youth, especially as new illicit substances become available and popularized. Communicating these trends with other sectors can allow for adaptation of prevention efforts that accommodate changes in substance use culture. For example, information about substance use trends can inform universal substance use prevention efforts geared toward addressing baseline substance use risk to which all adolescents are susceptible.

PRIVATE SECTOR

The private sector provides another juncture where prevention efforts can have a large-scale impact on youth substance use risk. As adolescents age, prevention efforts less proximal to the family environment become increasingly relevant for affecting substance use. Substance manufacturers, such as tobacco and alcohol companies, can play a role in youth substance use prevention by tailoring efforts (e.g., media campaigns) to discourage substance use by minors and advocate for the prevention and reduction of youth substance use (United States Department of Health and Human Services, 2016). Similarly, as adolescents begin entering the workforce, substance use prevention efforts centered in the workplace are another method by which prevention messages can be disseminated (Campello et al., 2014). The capability of the private sector to interface with and influence substance use emphasizes the value in a collaborative relationship between the private and public health sectors in better adolescent substance use trajectories.

In conclusion, the utility of government sectors working in tandem to promote adolescent substance use prevention is made clear by research demonstrating that the use of these family interventions is increased when recommended by mental health professionals or mandated by judges and child protective services (Goldstein & Brooks, 2012). Of note, difficulties arise when attempting multisectoral collaboration because of varied interpretations of what constitutes evidence worthy of informing decision-making (Armstrong et al., 2006). For example, outside of the health sector, conducting research or program evaluation is considered to be an amenity that is not easily accessible to other sectors due to resource and training constraints. In sectors that are less reliant on empirical support, more credence is often given to other forms of evidence, including the data garnered from special interest groups, judgment, experience, and expertise (Armstrong et al., 2006). As such, efforts must be made to bridge the divide that continues to exist between the academic research arena and the contexts in which practitioners are working. Doing so can facilitate needed crosstalk and consequently result in a multisectoral approach to adolescent substance use prevention being more effective.

Conclusions

In the current chapter, we identified family evidence-based interventions as a potential key component of prevention programs to address the global problem of youth substance abuse. Although existing programs supported by evidence from high-income countries provide a promising basis for developing effective prevention interventions in middle- and low-income countries, further study is needed to identify salient cultural adaptations necessary for program relevance and efficacy. Given the salient role of substance use in increasing risk for disease, disorder, and injury globally, such research is of clear public health significance.

References

Ainsworth, M. D. S. (1973). The development of infant-mother attachment. In B. Cardwell & H. Ricciuti (Eds.), *Review of child development research* (Vol. 3, pp. 1–94). Chicago, IL: University of Chicago Press.

Amato, P. R., & Fowler, F. (2002). Parenting practices, child adjustment, and family diversity. *Journal of Marriage and Family*, *64*(3), 703–716.

Arfken, C. L., & Ahmed, S. (2016). Ten years of substance use research in Muslim populations: Where do we go from here? *Journal of Muslim Mental Health*, *10*(1).

Arfken, C. L., Owens, D., & Said, M. (2012). Binge drinking among Arab/Chaldeans: An exploratory study. *Journal of Ethnicity in Substance Abuse*, *11*(4), 277–293.

Armstrong, R., Doyle, J., Lamb, C., & Waters, E. (2006). Multi-sectoral health promotion and public health: The role of evidence. *Journal of Public Health*, *28*(2), 168–172.

Ary, D. V., Duncan, T. E., Biglan, A., Metzler, C. W., Noell, J. W., & Smolkowski, K. (1999). Development of adolescent problem behavior. *Journal of Abnormal Child Psychology*, *27*(2), 141–150.

Atilola, O., Stevanovic, D., Balhara, Y. P., Avicenna, M., Kandemir, H., Knez, R., . . . Vostanis, P. (2014). Role of personal and family factors in alcohol and substance use among adolescents: An international study with focus on developing countries. *Journal of Psychiatric and Mental Health nursing*, *21*(7), 609–617.

Baron-Epel, O., Bord, S., Elias, W., Zarecki, C., Shiftan, Y., & Gesser-Edelsburg, A. (2015). Alcohol consumption among Arabs in Israel: A qualitative study. *Substance Use & Misuse*, *50*(2), 268–273.

Bauman, K. E., Foshee, V. A., Ennett, S. T., Hicks, K., & Pemberton, M. (2001). Family Matters: A family-directed program designed to prevent adolescent tobacco and alcohol use. *Health Promotion Practice*, *2*(1), 81–96.

Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. *The Journal of Early Adolescence*, *11*(1), 56–95.

Boden, J. M., Fergusson, D. M., & Horwood, L. J. (2006). Illicit drug use and dependence in a New Zealand birth cohort. *Australian and New Zealand Journal of Psychiatry*, *40*, 156–163.

Borduin, C. M., Mann, B. J., Cone, L. T., Henggeler, S. W., Fucci, B. R., Blaske, D. M., & Williams, R. A. (1995). Multisystemic treatment of serious juvenile offenders: Long-term

prevention of criminality and violence. *Journal of Consulting and Clinical Psychology*, *63*(4), 569.

Brook, J. S., Morojele, N. K., Pahl, K., & Brook, D. W. (2006). Predictors of drug use among South African adolescents. *Journal of Adolescent Health*, *38*(1), 26–34.

Campello, G., Sloboda, Z., Heikkil, H., & Brotherhood, A. (2014). International standards on drug use prevention: The future of drug use prevention world-wide. *International Journal of Prevention and Treatment of Substance Use Disorders*, *1*(2), 6–27.

Catalano, R. F., Hawkins, J. D., Krenz, C., Gillmore, M., Morrison, D., Wells, E., & Abbott, R. (1993). Using research to guide culturally appropriate drug abuse prevention. *Journal of Consulting and Clinical Psychology*, *61*(5), 804.

Chang, G., Sherritt, L., & Knight, J. R. (2005). Adolescent cigarette smoking and mental health symptoms. *Journal of Adolescent Health*, *36*(6), 517–522.

Chassin, L., Colder, C. R., Hussong, A. M., & Sher, K.J. (2016). Substance use and substance use disorder. In D. Cicchetti (Ed.), *Developmental psychopathology, Volume 3: Maladaptation and psychopathology* (pp. 833–897). Hoboken, NJ: Wiley. doi:10.1002/9781119125556.devpsy319

Donovan, J. E. (2016). Child and adolescent socialization into substance use. In H. E. Fitzgerald & L. I. Puttler (Eds.), *Developmental perspectives on alcohol and other addictions over the life course*. New York, NY: Oxford University Press.

Faggiano, F., Vigna-Taglianti, F. D., Versino, E., Zambon, A., Borraccino, A., & Lemma, P. (2005). School-based prevention for illicit drugs' use. *Cochrane Database Syst Rev*, (2), CD003020.

Foxcroft, D. R., Ireland, D., Lister-Sharp, D. J., Lowe, G., & Breen, R. (2003). Longer-term primary prevention for alcohol misuse in young people: a systematic review. *Addiction*, *98*(4), 397–411.

Ghandour, L. A., Karam, E. G., & Maalouf, W. E. (2009). Lifetime alcohol use, abuse and dependence among university students in Lebanon: Exploring the role of religiosity in different religious faiths. *Addiction*, *104*(6), 940–948.

Goldstein, S., & Brooks, R. B. (Eds.). (2012). *Handbook of resilience in children*. New York, NY: Springer Science & Business Media.

Gray, M. R., & Steinberg, L. (1999). Unpacking authoritative parenting: Reassessing a multidimensional construct. *Journal of Marriage and the Family*, *61*(3), 574–587.

Hirschi, T. (1969). *Causes of delinquency*. Berkeley, CA: University of California.

Joint United Nations Program on HIV/AIDS (UNAIDS). (2010). *Global report: UNAIDS report on the global AIDS epidemic 2010* (UNAIDS/10.11E | JC1958E). Geneva, Switzerland: Author, pp. 17, 61.

Jones, D. J., Forehand, R., & Beach, S. R. (2000). Maternal and paternal parenting during adolescence: Forecasting early adult psychosocial adjustment. *Adolescence*, *35*(139), 513–530.

Knerr, W., Gardner, F., & Cluver, L. (2013). Improving positive parenting skills and reducing harsh and abusive parenting in low-and middle-income countries: A systematic review. *Prevention Science*, *14*(4), 352–363.

Kumpfer, K. L., & Alvarado, R. (1995). Strengthening families to prevent drug use in multiethnic youth. In G. Botvin, S. Schinke, & M. Orlandi (Eds.), *Drug abuse prevention with multiethnic youth* (pp. 255–294). Newbury Park, CA: Sage.

Kumpfer, K. L., Alvarado, R., Smith, P., & Bellamy, N. (2002). Cultural sensitivity and adaptation in family-based prevention interventions. *Prevention Science*, *3*(3), 241–246.

Kumpfer, K. L., Magalhães, C., & Kanse, S. A. (2016). Impact of Family Structure, Functioning, Culture, and Family-Based Interventions on Children's Health. In M. R. Korin (Ed.), *Health Promotion for Children and Adolescents* (pp. 57–81). Boston, MA: Springer US.

Kumpfer, K., Magalhães, C., & Xie, J. (2017). Cultural adaptation and implementation of family evidence-based interventions with diverse populations. *Prevention Science*, *18*(6), 649–659.

Kumpfer, K. L., Molgaard, V., & Spoth, R. (1996). The Strengthening Families Program for the prevention of delinquency and drug use. In R. D. Peters & R. J. McMahon (Eds.), Preventing childhood disorders, substance abuse, and delinquency (pp. 241–267). Thousand Oaks, CA: Sage.

Kumpfer, K. L., Pinyuchon, M., de Melo, A. T., & Whiteside, H. O. (2008). Cultural adaptation process for international dissemination of the Strengthening Families Program. *Evaluation & the Health Professions*, *31*(2), 226–239.

Leatherdale, S. T., & Burkhalter, R. (2012). The substance use profile of Canadian youth: Exploring the prevalence of alcohol, drug and tobacco use by gender and grade. *Addictive Behaviors*, *37*(3), 318–322.

Lim, S., Vos, T., Flaxman, A., Danaei, G., Shibuya, K., Adair-Roahni, H., . . . Memish, Z. A. (2012). A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990–2010: A systematic analysis for the Global Burden of Disease study, 2010. *Lancet*, *380*, 2224–2260.

Mejia, A., Leijten, P., Lachman, J. M., & Parra-Cardona, J. R. (2017). Different strokes for different folks? Contrasting approaches to cultural adaptation of parenting interventions. *Prevention Science*, *18*(6), 630–639.

Melchior, M., Chastang, J. F., Goldberg, P., & Fombonne, E. (2008). High prevalence rates of tobacco, alcohol and drug use in adolescents and young adults in France: Results from the GAZEL Youth study. *Addictive Behaviors*, *33*(1), 122–133.

Mrazek, P. J., & Haggerty, R. J. (Eds.). (1994). *Reducing risks for mental disorders: Frontiers for preventive intervention research*. Washington, DC: National Academies Press.

Nash, S. G., McQueen, A., & Bray, J. H. (2005). Pathways to adolescent alcohol use: Family environment, peer influence, and parental expectations. *Journal of Adolescent Health*, *37*(1), 19–28.

Pentz, M. A. (1995). Prevention research in multiethnic communities: Developing community support and collaboration, and adapting research methods. In G. Botvin, S. Schinke, & M. Orlandi (Eds.), *Drug Abuse Prevention With Multiethnic Youth* (pp. 193–214). Newbury Park, CA: Sage.

Pezzella, F. S., Thornberry, T. P., & Smith, C. A. (2016). Race socialization and parenting styles: Links to delinquency for African American and white adolescents. *Youth Violance and Juvenile Justice*, *4*, 448–467.

Pirkis, J. E., Irwin, C. E., Brindis, C., Patton, G. C., & Sawyer, M. G. (2003). Adolescent substance use: Beware of international comparisons. *Journal of Adolescent Health*, *33*, 279–286.

Reimuller, A. N., Hussong, A. M., & Ennett, S. (2011). The influence of alcohol-specific communication on adolescent alcohol use and alcohol-related consequences. *Prevention Science*, *12*(4), 389–400. doi:10.1007/s11121-011-0227-4

Reyna, V. F., & Farley, F. (2006). Risk and rationality in adolescent decision making implications for theory, practice, and public policy. *Psychological Science in the Public Interest*, *7*(1), 1–44.

Ryan, S. M., Jorm, A. F., & Lubman, D. I. (2010). Parenting factors associated with reduced adolescent alcohol use: A systematic review of longitudinal studies. *Australia and New Zealand Journal of Psychiatry*, *44*(9), 774–783. doi:10.1080/00048674.2010.501759

Sanders, M. R. (1999). Triple P-Positive Parenting Program: Towards an empirically validated multilevel parenting and family support strategy for the prevention of behavior and emotional problems in children. *Clinical Child and Family Psychology Review*, *2*(2), 71–90.

Simons-Morton, B., & Chen, R. (2005). Latent growth curve analyses of parent influences on drinking progression among early adolescents. *Journal of Studies on Alcohol*, *66*(1), 5–13.

Spoth, R., & Redmond, C. (2000). Research on family engagement in preventive interventions: Toward improved use of scientific findings in primary prevention practice. *Journal of Primary Prevention*, *21*(2), 267–284.

Stattin, H., & Kerr, M. (2000). Parental monitoring: A reinterpretation. *Child Development*, *71*(4), 1072–1085.

Steinberg, L. (2004). Risk taking in adolescence: What changes, and why? *Annals of the New York Academy of Sciences*, *1021*(1), 51–58.

Steinberg, L. (2007). Risk taking in adolescence new perspectives from brain and behavioral science. *Current Directions in Psychological Science*, *16*(2), 55–59.

Stevanovic, D., Atilola, O., Balhara, Y. P. S., Avicenna, M., Kandemir, H., Vostanis, P., . . . Petrov, P. (2015). The relationships between alcohol/drug use and quality of life among adolescents: An international, cross-sectional study. *Journal of Child & Adolescent Substance Abuse*, *24*(4), 177–185.

Tondowski, C. S., Bedendo, A., Zuquetto, C., Locatelli, D. P., Opaleye, E. S., & Noto, A. R. (2015). Parenting styles as a tobacco-use protective factor among Brazilian adolescents. *Cadernos de saude publica*, *31*(12), 2514–2522.

United Nations Children's Fund (UNICEF). (2012, April). *Progress for children: A report card on adolescents*. New York, NY: Author.

United Nations Office on Drugs and Crime (UNODC). (2009a). *Compilation of evidence-based family skills training programmes*. Vienna, Austria: Author

United Nations Office on Drugs and Crime (UNODC). (2009b). *Guide to implementing family skills training programmes for drug abuse prevention.* Vienna, Austria: Author

United States Department of Health and Human Services. (2016). *Surgeon General's report on alcohol, drugs, and crime: Private sector, industry and commerce.* Retrieved from https://addiction.surgeongeneral.gov/vision-future/stakeholder-suggestions/private-sector

Van Ryzin, M. J., Kumpfer, K. L., Fosco, G. M., & Greenberg, M. T. (Eds.). (2015). *Family-based prevention programs for children and adolescents: Theory, research, and large-scale dissemination*. Hove, England: Psychology Press.

Wang, B., Stanton, B., Li, X., Cottrell, L., Deveaux, L., & Kaljee, L. (2013). The influence of parental monitoring and parent–adolescent communication on Bahamian adolescent risk involvement: A three-year longitudinal examination. *Social Science & Medicine*, *97*, 161–169.

Webster-Stratton, C., & Taylor, T. (2001). Nipping early risk factors in the bud: Preventing substance abuse, delinquency, and violence in adolescence through interventions targeted at young children (0–8 years). *Prevention Science*, *2*(3), 165–192.

Wills, T. A., & Yaeger, A. M. (2003). Family factors and adolescent substance use: Models and mechanisms. *Current Directions in Psychological Science*, *12*(6), 222–226.

World Health Organization (WHO). (2010). *Global strategy to reduce the harmful use of alcohol*. Geneva, Switzerland: Author.

World Health Organization (WHO). (2014). *Global status report on alcohol and health 2014*. Geneva, Switzerland: Author.

{ SECTION 4 }

Interventions and Policies

Making Strategic Investments in Adolescent Well-Being

Elena Camilletti and Prerna Banati

Context

Investing in young people is crucial to achieve development, uphold human rights, and maintain peace and security. Adolescence is a unique window of opportunity whereby countries can benefit from investing in their educated, healthy, and gainfully employed young people and achieve more sustainable and inclusive development. For instance, across the "Tiger" economies (South Korea, Taiwan, Hong Kong, and Singapore), the gains deriving from a young, educated, and employed population, such as higher fiscal revenues, are considered to have accounted for one third of the countries' growth in the period from the 1960s to the 1990s (Pereznieto & Harding, 2013). Many countries in developing regions, particularly in Africa, are experiencing demographic transitions from high to low fertility and mortality rates, which, by reducing child and maternal mortality, often result in a decline in the ratio of dependents to the working age population, before such ratio starts to rise again as the population ages. In addition to ensuring that human rights are fulfilled and upheld for adolescents, capitalizing on this shift in the age and population structure has the potential to drive welfare gains by boosting savings and government revenues due to a larger tax base and further investments in human capital, thus resulting in the so-called demographic dividend (Bloom et al., 2003; Kelley, 1996; Mason, 2001).

However, the benefits of investments in adolescents accrue not only to the current cohort. Investing in adolescents now not only can be beneficial to them, but also when they reach adulthood it can yield benefits for both themselves as adults and for the wider society, and it also can benefit their children, thus resulting in a "triple dividend." These life cycle and intergenerational gains suggest policymakers should capitalize on their countries' demographic transitions by tapping into the

potential of this complex relationship between economic and human development and the changing age and population structure (Sheehan et al., 2017; United Nations Population Fund [UNFPA], 2005).

Given the potential of this unique window of opportunity, adolescents are also of increasing interest to international agencies and donor partners, and development practitioners, who are concerned with how financing can be maximized to break cycles of intergenerational poverty, build capabilities, and promote social and economic development. However, for national governments in resource-constrained settings, working to secure the futures of young people invariably requires difficult trade-offs between development interventions, because gaps between current and desired levels of investments, and between costs and resources available to implement them, can be large.

Understanding the economic returns on public investments in adolescents thus presents one piece of the "development puzzle." Sound evidence is needed to support how interventions are rationalized, selected, implemented, and eventually scaled up in low- and middle-income countries. In formulating decisions on the types and extents of investments in adolescents, research and evidence on the impact of different interventions and policies represent important tools that can and should aid decision-makers. The economic appraisals of interventions like cost–benefit and cost-effectiveness analyses can bring an added value to evidence-based policymaking by offering a way to compare and consider costs and impacts of different (and in some cases alternative) interventions and can also serve to increase the efficiency of the use of public resources, support decisions regarding the upscaling of programs, and demonstrate how investments in adolescents can provide wider social benefits.

Allocation decisions made in the absence of evidence can, on the contrary, be subject to the dependence on previously made decisions and existing institutions or swayed by the particular preferences of donors, vested interests, or other subjective variables. A clear and transparent process of estimating the costs and impacts of interventions, in order to support an inclusive process of prioritization and resource allocation, is an important starting point in implementing national plans, policies, and interventions for adolescents. Such an appraisal must incorporate a number of factors, including the wide range of potential adolescent investments, the lag time in effects, and the likelihood that investments in one area affect investments and behavior in others (Knowles & Behrman, 2005).

When nested within wider policy efforts that consider the full set of rights of adolescents, economic appraisals are a powerful tool—albeit with methodological limitations—to support policymakers in sequencing interventions while ultimately moving toward the full realization of adolescents' rights. Adopting an overarching human rights–based approach to policymaking and programming is also particularly important given the methodological limitations that affect quantitative assessments of costs and beneficial outcomes of interventions, due to which only a limited number of such outcomes can be quantified, while others—such as

enhanced well-being, social cohesion, psychosocial benefits, and even political co-hesion and support—are difficult to measure, but still desirable to achieve.

Over recent decades, there have been some efforts to quantify some of the beneficial impacts of interventions for an array of adolescent outcomes. These efforts notwithstanding, the evidence base on the full, potential, wide range of interventions for adolescents in low- and middle-income countries is still scarce. Much analysis in this field has focused on selected policy sectors, such as educa-tion, interventions to reduce risky behaviors (Lantz et al., 2000), and sexual and reproductive health; on children more broadly than specifically on adolescents; and in a limited number of countries, often high income.

This chapter therefore reviews and discusses key literature on cost analyses to invest in *adolescents* (aged 10 to 19 years old[1]) in *low- and middle-income countries* and consider the importance of this evidence within a human rights–based dis-course. Peer-reviewed journal articles, including original studies, literature reviews and systematic reviews, and gray literature, were sourced from various databases and reference tracing. While this review is not exhaustive, it seeks to shed light on key quality studies on economic appraisals of investments in adolescents in six areas of interventions crucial for adolescents, to help inform priority setting in developing countries. It also suggests some evidence gaps to be filled to make informed decisions about designing and scaling up interventions for young people and trade-offs and synergies in selecting the optimal basket of interventions in a particular context. This chapter thus aims to

- summarize the key models used to calculate costs and benefits and returns, cost-effectiveness ratios, costs of inaction and of action of investing in adolescents;
- discuss key evidence on such analyses for selected sectors of interventions for adolescents in low- and middle-income countries;
- draw out the evidence and information gaps on investments for adolescents, as well as future priority areas for research; and
- stress the importance of nesting economic appraisals within a human rights–based approach to policymaking and programming for adolescents' well-being.

ASSESSING INVESTMENTS (AND LACK THEREOF): A REVIEW OF SELECTED METHODS

Investment strategies have been evaluated by employing different methodologies. Cost–benefit analyses have been one such method. By valuing benefits in mone-tary terms, these analyses yield outputs that permit comparisons with alternative investments in other sectors. Assuming the availability of rigorous and high-quality data on costs and effects of interventions and other assumptions, such as on dis-count rates and distortionary costs (those costs necessary to raise revenues to fund

the interventions), benefit–cost ratios can be calculated by identifying the time pattern of costs and effects over the life cycle from available estimates, translating the impacts into monetary terms, and estimating the ratio of the discounted[2] benefits to the discounted costs (Knowles & Behrman, 2006). The internal rate of return is then calculated as the discount rate that makes the discounted benefits equal to the discounted costs (Knowles & Behrman, 2006) and can be interpreted as the rate of return on an investment relative to its costs.

However, translating the effects in monetary terms can be methodologically challenging as well as politically and ethically sensitive. Further, data might not always be sufficient (and sufficiently rigorous) to do it, and individuals might place different values on different outcome measures (Dhaliwal et al., 2012; Knowles & Behrman, 2006).

Cost-effectiveness analyses are an alternative method consisting of ranking a set of related investments according to their cost per unit of "effectiveness" (Knowles & Behrman, 2006). These have been widely used to evaluate alternative investments within a given sector, for example, in health to calculate the cost per disability-adjusted life year (DALY), which expresses the number of cumulative years lost due to poor health, disabilities, or early death (Rees et al., 2012), per quality-adjusted life years (QALYs), or per life years saved or gained. While the last is a pure measure of mortality, the first two combine mortality with morbidity in single numerical units (Robberstad, 2005). However, also cost-effectiveness analyses have prompted criticisms. For instance, Knowles and Behrman (2006) argued that cost-effectiveness analyses have some shortcomings in relation to youth investments, first because they require a single effectiveness measure—which can be straightforward in the health sector but problematic in others, as many investments in young people involve different possible outcomes—and because they do not provide a basis for comparing youth investments to alternative investments in different sectors or population groups to achieve a certain policy objective.

Two additional methodologies are also widespread. The first is an analysis of the costs of inaction, which monetizes how much not preventing specific adolescent problems would cost at economic, individual, and societal levels, while the second costs the intervention(s) necessary to address specific issues affecting adolescents (Knowles & Behrman, 2006; McDaid et al., 2010; Republic of Uganda & UNICEF, 2016). While not yielding measures that consider both costs and (monetized) impacts of addressing adolescent issues, these methodologies are useful to point to the magnitude of problems affecting adolescents (by estimating the costs of inaction) or the investments required to address specific issues (as in estimates for the costs of action).

Across all these methodologies, the paucity of data that would be required to appropriately estimate all costs and potential impacts (particularly societal benefits) is arguably the most significant shortcoming hampering the estimation process (Knowles & Behrman, 2006). Quantitative assessments only

include some of the potential beneficial effects of an interventions, that is, those that can be easily and appropriately quantified and monetized. However, interventions can also yield other potential benefits that should be considered by policymakers when assessing whether to implement a certain intervention, or when deciding between two or more programs, against their policy objectives. Even if cost analyses show that a specific intervention is less cost-effective or yields a lower benefit–cost ratio than another, the former might be more socially desirable exactly for additional impacts and benefits that are not included in these economic analyses.

In addition to the previously mentioned and additional methodological limitations (see, i.e., Dhaliwal et al., 2012, and Knowles & Behrman, 2006), researchers and policymakers alike should also be mindful that interventions are context specific and so are their benefits and effectiveness (Dhaliwal et al., 2012; Horton et al., 2017; Knowles & Behrman, 2006). For instance, returns to schooling tend to be higher in contexts with rapid technological changes due to integration into global markets (Knowles & Behrman, 2006). Similarly, the economic evaluation of school-based interventions would vary depending on the quality of schooling (Horton et al., 2017). As these estimates are sensitive to the assumptions implied in the estimation process, high-quality data are needed to perform sensitivity analyses, which can help policymakers understand how programs' costs and impacts vary by changing the assumptions to more appropriately reflect their contexts (Dhaliwal et al., 2012; Knowles & Behrman, 2006).

Domains of Intervention

EDUCATION

Economists and policymakers have long been interested in the return on investments in education, as demonstrated by the considerable body of literature on the topic. The influential work by Becker and Mincer contributed to building the path toward understanding the role played by education as an investment in human capital on workers' earnings (Checchi, 2005). As mentioned, the private rate of return is the internal rate of return that equalizes the present discounted private costs (including opportunity and direct costs) with the discounted private after-tax gains, while the social rate of return adds the public costs of education on the cost side and any net positive social benefits and externalities to the discounted benefits on the benefits side (Checchi, 2005; Schultz, 1988). As such specification of private and social returns is cumbersome, requiring extensive data over an individual's lifetime as well as other data on social externalities, an alternative method is the *Mincerian equation*, through which it is possible to estimate the determinants of individual earnings by employing data from a representative sample of the working population (Checchi, 2005), thereby obtaining the private returns to education. When aggregated at a national level, this offers the possibility

to compare the level of a country's income growth with the resources committed to education (Psacharopoulos, 2006).

The well-established empirical literature on investments in education, such as in additional years of schooling, shows considerable returns in labor productivity and expected individual earnings, contributing to higher economic growth rates, and extra government revenues due to a larger tax base deriving from a higher contributory capacity of workers, and other social positive externalities (see, i.e., Rees et al., 2012; Mingat & Tan, 1996). Psacharopoulos and Patrinos (2004, p. 112) calculated the rates of return for various countries across the world for available data and estimated that, overall, the average (private and social) rate of return for an additional year of schooling (across countries and educational levels) is 10%. Using a matched data set on education and national accounts from 1950 to 2010 for 146 countries, Patrinos and Psacharopoulos (2011) estimated the (average) loss from illiteracy at about 4% to 12% of the countries' per capita income, and the (average) welfare or income loss at about one percentage point of the average country's growth rate had countries invested one percentage point more of their gross domestic product (GDP) on education. In addition, the authors found that one additional year of schooling was associated with a reduction of inequality by 1.4 points on the Gini inequality index (Patrinos & Psacharopoulos, 2011).

The returns on investments in education are not homogeneous but rather sensitive to the country's economic context and specific educational levels. Available evidence suggests that investments in lower education levels (primary and secondary) have higher returns for lower-income countries (see, i.e., Chaaban & Cunningham, 2011; Hanushek & Woessmann, 2008; Patrinos & Psacharopoulos, 2011). Psacharopoulos and Patrinos (2004) calculated that low-income countries had rates of return on investments in education equal to 21.3% and 15.7% in primary and secondary education, respectively, while middle-income countries exhibited slightly lower rates, at 18.8% and 12.9%, respectively, still overall suggesting the high potential to invest in education during childhood and adolescence. Psacharopoulos (2012) further estimated that in "failed states" (affected by wars and conflicts) returns on education are considerably higher than in other developing countries, in both private and social terms, across the three education levels (primary, secondary, and tertiary), for instance, at 21.4% and 17.1% for secondary education in failed states versus 15.6% and 11.6% for "nonfailed states," for private and social returns, respectively.

In addition, returns on educational investments tend to vary by gender. Empirical analyses have found higher returns on investments in secondary education for girls than for boys, at 18.4% versus 13.9%, a pattern that is maintained across educational levels (on average, at 9.8% for girls vs. 8.7% for boys) (Psacharopoulos & Patrinos, 2004). Investing in girls' education has been associated with positive effects at individual and household levels on their annual earnings, decreased fertility rate, and increased labor market participation, as well as on their children's well-being and human capital (Schultz, 2002; UNFPA, 2016; Rabbani, 2016; Plan

International, 2008). For instance, Zaman (2016b) estimated that the benefit–cost ratio of promoting girls' secondary education in Bangladesh is 6.4, given its impacts on increased wages of adolescent girls and of their nonstunted children, assuming a 5% GDP growth rate (the country's average growth rate over the last two decades) and a 5% discount rate. Torchenaud (2017) calculated that a scholarship program to disadvantaged rural adolescent girls in Haiti would have a benefit–cost ratio of 4.4, when considering the total costs and benefits of the 4-year program for the first recipient group at a 5% discount rate. Further, Schäferhoff et al. (2016) estimated that every dollar invested in female schooling in low- and lower middle-income countries would return US\$9.9 and US\$3.7, respectively, and US\$1.5 in upper middle-income countries, when considering both individual earnings and reductions in under-five and adult mortality. At the macro level, increases in enrollment and attendance in secondary schooling in general and specifically of girls were found to have positive effects on national GDP growth and per capita income growth (Belfield, 2008; Chaaban & Cunningham, 2011; Dollar & Gatti, 1999).

There is also ample evidence on the benefits of a range of educational policies to increase the quantity and quality of schooling and students' achievements and outcomes. In various low- and middle-income countries, programs that boost school enrollment and attendance, such as cash or in-kind transfers (i.e., conditional cash transfers, voucher programs to attend private schools, and food-for-education schemes), have been estimated to have high benefit–cost ratios (Knowles & Behrman, 2005, 2006; Orazem, 2012; Behrman et al., 2011). Sheehan et al. (2017) calculated, based on data for 72 low- and middle-income countries, that investments in secondary schooling—which included increasing secondary school attendance and completion, educating the increasing number of students, and improving educational quality[3]—had or would have a total cost of US\$22.6 per capita each year between 2015 and 2030, or 0.57% of the average countries' 2014 GDP, and a mean benefit–cost ratio of 11.8,[4] with a 3% discount rate.

The International Commission on Financing Global Education Opportunity (2016) calculated that total spending on education should rise from US\$1.2 trillion per year today to US\$3 trillion by 2030 in constant prices across all low- and middle-income countries. While this figure might seem unaffordable for some low- and middle-income countries, the evidence reviewed previously suggests that countries can only gain from investing in the education of their adolescents, given the dramatic benefits deriving from guaranteeing the right to the universality of education, at least at primary and secondary levels.

HEALTH INTERVENTIONS

A healthy population, including children and adolescents, is well established to have positive effects on a range of development outcomes, such as declines in mortality and morbidity, as well as economic measures such as GDP growth, productivity, and income (Rees et al., 2012; UNICEF, 2012). However, estimating the

rates of return on health interventions for adolescents is problematic, first and foremost because there is not always a straightforward measure that can appropriately capture the consequences of poor health for calculating the economic returns. We review and discuss key studies on cost analyses of adolescent health interventions, divided in six main categories: nutrition, smoking and alcohol consumption, sexual and reproductive health (SRH), HIV/AIDS, Human Papilloma Virus (HPV), and combined health interventions.

A first body of literature considers the importance of investing in nutrition interventions to reduce obesity and provide iron supplements, for instance through school-based programs or restrictions on advertising food to children, which were found to have considerable impact at relatively low cost (Cecchini et al., 2010; Knowles & Behrman, 2006; Meng et al., 2013). Second, studies of programs aiming to reduce smoking and alcohol consumption also showed promising results, with increasing tax for tobacco products, advertising alcohol bans, and reducing access to alcoholic beverages suggesting higher impact at lower cost compared to other types of interventions (Brown et al., 2013; Knowles & Behrman, 2006; Laxminarayan et al., 2006).

A third stream of evidence considers sexual and reproductive health, which has in fact attracted increasing attention not only of academia but also of policymakers and international actors, given the evidence of the positive impacts of decreased fertility rates and reduction of adolescent pregnancy on individual well-being, the economy, and society (see, i.e., Ashraf et al., 2013; Merrick, 2015). The evidence demonstrates the case for investing in adolescents' sexuality education and access to contraceptives, particularly to reduce adolescent childbearing and sexually transmitted infections. In fact, adolescent pregnancy has been estimated to be costly at individual and societal levels (World Bank, 2003) and as a share of countries' GDP: For instance, Chaaban and Cunningham (2011) calculated that it ranges from about 1% of GDP in Bangladesh and China to 26% and 27% in Nigeria and Malawi, respectively. While meeting the unmet need for family planning (we projected an additional cost of US$3.47 million annually to satisfy the unmet need of women 15 to 19 years old in Uganda; Greene & Merrick, 2015) and providing contraceptive services (on average around US$222 million for developing countries; Darroch et al., 2016) obviously imply some levels of spending, not investing in family planning causes considerable losses to the economy, and specific interventions have demonstrated cost-effectiveness or have yielded benefits many times higher than costs. For instance, Zaman (2016a) calculated a benefit–cost ratio ranging between 1.2 and 4.5 depending on the discount rates used for family planning interventions in Bangladesh. Estimates for Uganda suggest that for every dollar spent in family planning there is a $3 savings to the society (Futures Group, 2009, and Vlassoff et al., 2009, as cited in Greene & Merrick, 2015).

HIV/AIDS infections and related mortality have created significant costs at individual and national levels (World Bank, 2003). The literature examines cost analyses for different interventions, including providing preexposure prophylaxis

and HIV counseling and testing (Chiu et al., 2017); introducing (a potential) HIV vaccine (Moodley et al., 2016a, 2016b); diagnosis and treatment and condom promotion and distribution (Laxminarayan et al., 2006); as well as male circumcision (Fitzgerald et al., 2016; Kaufman et al., 2016). The evidence focuses on selected delivery methods, including school-based interventions and other peer education programs, such as sport-based interventions, with the former (school-based programs) yielding somewhat mixed results, as they were found to be cost-effective only in some cases, such as in South Africa (Moodley et al., 2016a, 2016b) and at a regional level in Africa and Southeast Asia (Hogan et al., 2005). Generally, the delivery is done in an integrated way with existing immunization and other services or during regular sessions, but not in others (as in the case of the school-based HIV/AIDS program in Honduras, for which Knowles & Behrman, 2006, estimated that even undiscounted benefits were lower than costs). Further, the studies reviewed often used different cost-effectiveness outcomes (HIV averted or QALYs, DALYs, or life years saved), which prevent full comparability of the findings. However, future research should seek to continue to fill this important gap to ensure that evidence-based measures are put in place, especially in countries with high HIV/AIDS infection rates.

Cost analyses on the human papilloma virus (HPV) vaccination provide strong evidence on the cost-effectiveness of this intervention for adolescent girls in Brazil (Novaes et al., 2015), Chile (Gomez et al., 2014), Honduras (Aguilar et al., 2015), and South Africa (Li et al., 2015). Studies at the international level confirmed country-specific estimates and supported the argument for investing in the introduction of the vaccine (Jit et al., 2014). Sheehan et al. (2017) estimated that the benefits of introducing the vaccination were 17 times the costs (average benefit–cost ratio, based on data across 75 low-, lower middle-, and upper middle-income countries). While evidence points toward cost increases following the scaling-up of the vaccination, which Korenromp et al. (2017) estimated at US$3.26 billion over 2016–2021 for 117 low- and middle-income countries (to achieve the World Health Organization's (WHO's) Global Strategy on Sexually Transmitted Infections), evidence from Uganda, Peru, and Viet Nam (Levin et al., 2013) also suggests that regardless of the vaccine delivery method, delivery costs are lowered when the vaccination program is effectively integrated into existing health services.

Combined health interventions can prove to be crucial to optimize resources and achieve greater impact *if* implemented in an efficient way. Sheehan et al. (2017) estimated that introducing physical, mental, and sexual adolescent health interventions—including maternal, newborn, and reproductive health; HIV/AIDS; malaria; nutrition; and noncommunicable disease program—yields benefits 10.2 times the costs across low-, lower middle-, and upper middle-income countries. Further, Laxminarayan et al. (2006) showed that implementing a school-based health and nutrition intervention package is cost-effective at US$37 per DALY. Other studies have demonstrated that it is affordable for low- and middle-income countries to provide a range of adolescent health services or programs, with costs

at around US$1 per adolescent (data for 74 developing countries referring to the year 2011, increasing to US$4.70 in 2015; Deogan et al., 2012; and Temin & Levine, 2009, data for the implementation of a nine-component package during 2011–2015 consisting in youth-friendly health service, iron supplemention, HPV vaccination, reducing harmful traditional practices, male engagement, obesity reduction, edutainment programs, safe spaces, comprehensive sexuality education). Given the importance of combined interventions that simultaneously and holistically tackle intersecting problems, further research and evidence can offer opportunities to understand how to capitalize on synergies and optimize resources in adolescents' interventions.

VIOLENCE AGAINST CHILDREN AND ADOLESCENTS

Violence against children and women takes various forms, including physical, emotional, and sexual forms, and is a violation of any human rights, first and foremost those of the United Nations Convention on the Rights of the Child. Available estimates suggest it has dramatic costs, both at the individual (physical, psychological, and emotional) level and at the societal and public levels. In Cambodia, the economic losses due to physical and emotional violence and sexual abuse against children accounted for over 1% of the country's GDP in 2013 (Fang, 2015). In China, Fang et al. (2015a) estimated that the costs of child maltreatment ranged from 0.39% of per capita GDP for sexual abuse, 0.47% for emotional abuse, to 0.84% for physical abuse. In the East Asia and Pacific region, the overall health and economic costs of child physical abuse, sexual abuse, emotional abuse, neglect, and witnessing parental violence amounted to 1.88% of the region's GDP (in constant 2000 US dollars) (Fang et al., 2015b). Moreover, engagement by adolescents and young adults in violence, such as crime, also has individual and social costs, such as forgone productivity associated with incarceration and premature death (Cunningham et al., 2008; World Bank, 2003).

CHILD MARRIAGE

Child marriage also violates many human rights frameworks, and evidence demonstrates its negative impacts on a range of individual well-being outcomes and as a cost to the economy and the society. Rabi (2014) calculated that the cost of inaction (measured as the national economic loss in terms of potential cash flow from the labor market that could have been generated if adolescent girls had delayed their marriage until the age of 18) toward child and adolescent marriages in Nepal represented 3.87% of the country's GDP. Preliminary evidence from a research program led by the International Center for Research on Women and the World Bank on the economic impacts of child marriage across the world shows considerable gains from eradicating child marriage. For example, Niger could save more than US$25 billion from eliminating child marriages (through reduced

population growth, increased education for girls, and budget savings for the provision of education) between 2014 and 2030, annual rates of population growth could be reduced by a third of a percentage point or more each year (assuming no additional births to adolescents), and the total fertility rate would be reduced by about 10% at the time of the latest Demographic and Health Survey (DHS) (2013) (Fatusi, 2016; Wodon et al., 2015). Estimates for over a dozen countries suggested that eradicating child marriage could reduce the number of births by 0.9 to 1.5 over their lifetime (Wodon et al., 2015). Preliminary estimates for 108 countries showed that the reduction in population growth (assuming no additional births to adolescents) could be up to 1.8%, or about 120 million people, by 2030 (Wodon et al., 2015). In Niger, the benefit that would accrue from lower population growth was estimated at an increase in gross national income (GNI) at 0.4% (data from 2015), and up to 5.7% in 2030. The implicit value of these benefits in terms of GNI could amount to US$19 billion in purchasing power parity between 2014 and 2030, and the benefits would accrue mainly to the poor (Wodon et al., 2015).

Moreover, eliminating child marriage would yield increased earnings for women, especially through higher educational attainment. Preliminary estimates for Niger suggest this could reach US$6 billion in purchasing power parity between 2014 and 2030 (as a share of household consumption), while estimates based on wage regressions and simulations for six countries ranged from quarter to half a percent of the earnings base in Zambia and the Democratic Republic of Congo, to 1.7% in Niger and Ethiopia (Wodon et al., 2015). Finally, ending child marriage would also generate savings because of the smaller population to be served (by the state through public resources), thereby reducing the cost of achieving certain policy objectives. For instance, Wodon et al. (2015) calculated that reaching universal secondary education would cost about 6% less between now and 2030. Using UNESCO's (United Nations Educational, Scientific, and Cultural Organization's) estimated cost for Niger to achieve this target, the researchers found that ending child marriage could generate savings of US$1.8 billion from today to 2030.

In addition to the enormous benefits from eliminating child marriage, there is evidence that specific interventions have high benefit–cost ratios. Sheehan et al. (2017) estimated that programs to reduce child marriage, both directly (e.g., through group learning programs on life skills) and indirectly through measures to increase school attendance, at a cost of US$3.8 per capita each year, showed benefits that were almost six times the costs, given also their impact on increasing school attendance and completion, with particularly high effects in low-income countries.

CHILD LABOR

Eliminating child labor and preventing children from starting to work earlier than the nationally defined minimum age for employment has enormous costs, including the opportunity cost of children spending time and earning money in

employment instead of investing in their human capital, and the actual costs of implementing policies such as free universal primary and lower secondary education and transfers to alleviate household deprivation that often influence the decisions behind child labor. However, available evidence shows that the benefits are incredibly high across all regions in the world: The International Labor Organization (ILO; 2003) estimated a benefit–cost ratio of 6.7 at the global level, equivalent to an internal rate of return of over 43%.

Kassouf et al. (2005) in Brazil estimated the costs of providing education to all children in lieu of work, additional costs to alter attitudes and practices, and the opportunity cost of eliminating this work (i.e., the value of children's labor) at around US$7 billion, while the economic gains from the elimination of child labor, and a more educated and healthier population, amounted to US$35 billion (both costs and benefits are in purchasing power parity). In Kenya, Manda et al. (2005) estimated that providing universal primary and lower secondary schooling (for 6- to 14-year-old children) would cost around US$1.2 and US$1.6 billion, respectively, but to eliminate child labor, income transfers and noneducational investments are also needed. However, even under conservative assumptions, the benefits, estimated at US$83.4 billion, would outweigh the costs.

Matz (2003) estimated the additional annual costs worldwide (discounted to present value) of eliminating child labor at about US$47 billion, of which US$35 billion would provide universal primary and secondary education of at least minimum quality, and US$12 billion would be for demand-side investments to achieve universal school attendance. The benefits of universal schooling up to the age of 14 (which include increased GDP associated with additional years of average schooling) would be US$154 billion annually, under conservative assumptions (Matz, 2003).

MULTISECTORAL PROGRAMMING AND COSTING

In this section, we review two bodies of evidence. First, we were interested in knowing the combined costs of different issues affecting adolescents (costs of inaction). This review has revealed that intersecting problems affecting adolescents cost significant shares of countries' GDPs. For instance, Chaaban (2008) estimated that youth exclusion, such as joblessness, early school dropout, and adolescent pregnancy, amounted to 7.2% and 17.2% of Jordan's and Egypt's GDPs, respectively. Cunningham et al. (2008) found that similar youth exclusion problems cost around 2% of annual GDP on average across Latin American and Caribbean countries. The combined effects of risky youth behaviors, including violence, substance abuse, sexually transmitted infections, and early pregnancy, lower the GDP by over 1% annually in Latin American and Caribbean countries (Cunningham et al., 2008).

The second stream of evidence relates to cost analyses of intervention packages rather than single interventions. In their cost analyses for investments in

adolescents in low- and middle-income countries, Sheehan et al. (2017) offered the combined discounted total costs to 2030 for interventions (a) in physical, mental, and sexual health; (b) in the reduction of road accidents; and (c) for intimate partner violence, which in total amounted to US$414.8 billion, or US$27.7 billion per year until 2030, which equals US$5.20 per capita each year across the population of these countries, or 0.13% of their 2014 GDP. When including interventions to boost secondary schooling (in both quantity and quality) and programs to eliminate child marriage, the total discounted costs to 2030 amounted to only 0.15% of the global GDP. Horton et al. (2017) derived a cost for an essential package of both health and behavioral interventions for adolescents in low- and middle-income countries: offering adolescent-friendly health services amounted to only US$4.70 per adolescent aged 10–19; running a national media campaign and implementing policy efforts to support a healthy lifestyle program would cost even less at US$1.16 per adolescent aged 10–19; and a school-based education program on topics such as sexual and reproductive health, smoking, alcohol and illicit drugs, and mental health issues would require around US$9 per adolescent aged 14–16, excluding the costs of teachers' time.

This review suggests two considerations. On one hand, given the suggestive evidence that when implemented appropriately and managed effectively, combined interventions can reap synergies across sectors and potentially deliver greater benefits by optimizing resources than they can when implemented as stand-alone programs, more data and research on costs and benefits of such intervention packages for adolescents in low- and middle-income countries are needed to inform priority setting. Second, because of the compounded costs of different issues affecting adolescents and the complexity of adolescents' problems, more attention should be devoted to these intersecting issues and to their costs at individual (adolescent) but also at macro and national levels.

Discussion of the Findings and Concluding Remarks

This chapter reviewed the key available evidence on economic valuations of interventions and investments in adolescents' well-being. The review has centered on key areas of intervention, and findings showed that problems and issues affecting adolescents in low- and middle-income countries cause considerable costs to themselves, to public revenues, and to the wider society. The chapter also reviewed estimates of rates of return and cost-effectiveness of specific interventions. As this review is not a systematic one, we do not draw generalizable findings. However, the available literature suggests that interventions to increase school enrollment and school attendance, provide family planning and access to contraceptives and sexual and reproductive health information, reduce the risk of HIV/AIDS, and tackle smoking and alcohol consumption can be cost-effective or yield considerable rates of return. Specifically, the high benefit–cost ratios and

cost-effectiveness ratios for interventions in adolescents reinvigorate the support for investing in this neglected age group (Sheehan et al., 2017). However, data and evidence are still scant, and cost–benefit and cost-effectiveness analyses are mostly limited to single interventions in few countries.

Future research should thus capitalize on the importance of recording detailed cost and impact data that permit calculating cost-effectiveness ratios and rates of return on investments in adolescents. Such data and economic valuations should be disaggregated as much as possible by contextual factors. Gender is an important dynamic, and investments in adolescent girls demonstrate considerable gains at the individual and societal levels. Further, analysis should be expanded beyond the health and education sectors to consider the range of potential investments in adolescents. More research and evidence are needed on specific educational policies; interventions to reduce child marriage, child labor, and violence and crime; and other intersectoral interventions to address issues affecting adolescents and offer them opportunities to thrive and develop their potential. An important field in need of further research is multisectoral programming, as combined interventions that simultaneously and holistically tackle intersecting problems can offer opportunities for synergies and the optimization of resources, thus providing promising strategies for development and the realization of adolescents' human rights.

This review has also pointed out how interventions vary across countries and regions, as do their costs and impacts (benefits or effectiveness). In seeking to initiate a dialogue on the need to consider the economic valuations of interventions for adolescents across contexts and across sectorial interventions, this exercise has shed light on the issue of comparability across contexts to aid policymaking. Thus, policymakers in developing countries can learn lessons from other contexts and contextualize interventions given their countries' preferences and priorities. However, the diversity and variability of the findings across countries and regions highlight the imperative for policymakers (and researchers) to bear in mind the context specificity of interventions because a rate of return on an investment in one country will not necessarily be the same in another setting.

Despite the still-limited evidence on costs and benefits and cost-effectiveness of investments in adolescents in low- and middle-income countries, this review has aimed at showing the potential to consider such economic valuations in policymaking, especially in the context of developing countries where the need to prioritize interventions and allocate resources efficiently and effectively is strongest. More data on detailed costs and impacts of interventions and policies are needed to optimize available resources and achieve the most impact in investments in adolescents and to monitor the progress in sustainable development.

Ultimately, economic valuations are an important first step in the policy- and decision-making arsenal. However, investment decisions should also be made on additional grounds. As Brousselle et al. (2016) argued and as we argued at the beginning of this chapter, there can be public policies, programs,

or interventions that show lower returns compared to others, but that should still be funded based on common ethical concerns and societal values. In this regard, when considering the design and implementation of interventions, concerns on distribution and equity grounds—such as those to reduce inequalities and address the marginalization of specific groups within the adolescent population—should be balanced against efficiency considerations. Conducting economic appraisals, such as cost–benefit and cost-effectiveness analyses, of interventions to invest in adolescents within a wider framework based on human rights guiding the policymaking or programming process can support a more effective, efficient, and impactful development model and contribute to greater well-being and human development.

Notes

1. As defining adolescence is difficult and context specific, this chapter considers it the age range of 10 to 19 years. However, if specific studies adopt different ranges, it retains the studies' original definitions.

2. Benefits and costs are discounted to the present or to a certain age when the investment is thought to start to accrue the gains (e.g., when adolescents turn 18 years old) in order to reflect the lagged nature of investments (the time period between the moment the investment is made and when gains will start to accrue) and the value of the future income/monetary outcomes. The present discounted value of benefits will generally be lower or equal to the future value, given the (positive) interest rates that make money today "worth more" than money tomorrow, as investments "today" can yield further revenues in the future.

3. The estimate costs included the cost of reducing child marriage by improving the infrastructure of existing schools, ensuring schools are at reach, and providing financial support. See the child marriage section for additional details on this study.

4. Note that the benefits included in the estimates consider the improvements in the quality of employment (increased incentives to create formal rather than informal jobs) and increased work productivity.

References

Aguilar, I. B. M., Mendoza, L. O., Garcia, O., Diaz, I., Figueroa, J., Duarte, R. M., . . . Janusz, C. B. (2015). Cost-effectiveness analysis of the introduction of the human papillomavirus vaccine in Honduras. *Vaccine*, *33*(S1):A167–A173.

Ashraf, Q. H., Weil, D. N., & Wilde, J. (2013). The effect of fertility on economic growth. *Population and Development Review*, *39*(1), 97–130.

Behrman, J. R., Parker, S. W., . . . Todd, P. E. (2011). Do conditional cash transfers for schooling generate lasting benefits? A five-year follow-up of PROGRESA/Oportunidades. *Journal of Human Resources*, *46*(1), 203–236.

Belfield, C. (2008). The cost of early school-leaving and school failure. Retrieved from http://web.worldbank.org/archive/website01404/WEB/IMAGES/BELFIELD.PDF

Bloom, D., Canning, D., & Sevilla, J. (2003). *The demographic dividend: A new perspective on the economic consequences of population change*. Santa Monica, CA: Rand.

Brousselle, A., Benmarhnia, T., & Benhadj, L. (2016). What are the benefits and risks of using return on investment to defend public health programs? *Preventive Medicine Reports*, *3*, 135–138.

Brown, H. S., Stigler, M., Perry, C., Dhavan, P., Arora, M., & Reddy K. S. (2013). The cost-effectiveness of a school-based smoking prevention program in India. *Health Promotion International*, *28*(2), 178–186. Available at: https://academic.oup.com/heapro/article-lookup/doi/10.1093/heapro/dar095

Chaaban, J. (2008, May). *The costs of youth exclusion in the Middle East* (Middle East Youth Initiative Working Paper No. 7). Washington DC: Wolfensohn Center for Development, Brookings Institution, and Dubai: Dubai School of Government.

Chaaban, J., & Cunningham, W. (2011). *Measuring the economic gain of investing in girls: The girl effect dividend* (World Bank Policy Research Working Paper 5753). Washington, DC: World Bank.

Cecchini, M., Sassi, F., Lauer, J. A., Lee, Y. Y., Guajardo-Barron, V., & Chisholm, D. (2010). Tackling of unhealthy diets, physical inactivity, and obesity: Health effects and cost-effectiveness. *The Lancet*, *376*(9754), 1775–1784. Available at: http://dx.doi.org/10.1016/S0140-6736(10)61514-0

Checchi, D. (2005). *The economics of education: Human capital, family background and inequality*. Cambridge, England: Cambridge University Press.

Chiu, C., Johnson, L. F., Jamieson, L., Larson, B. A., & Meyer-Rath, G. (2017). Designing an optimal HIV programme for South Africa: Does the optimal package change when diminishing returns are considered? *BMC Public Health*, *17*(1), 143.

Cunningham, W., McGinnis, L., Verdu, R. G., Tesliuc, C., & Verner, D. (2008). *Youth at risk in Latin America and the Caribbean: Understanding the causes, realizing the potential* (Directions in Development; Human Development). Washington, DC: World Bank.

Darroch, J. E., Woog, V., Bankole, A., & Ashford, L. S. (2016). ADDING IT UP: Costs and Benefits of Meeting the Contraceptive Needs of Adolescents. May 2016. New York: Guttmacher Institute.

Deogan, C., Ferguson, J., & Stenberg, K. (2012). Resource needs for adolescent friendly health services: Estimates for 74 low- and middle-income countries. *PLoS One*, *7*(12), e51420.

Dhaliwal, I., Duflo, E., Glennerster, R., & Tulloch, C. (2012). Comparative cost-effectiveness analysis to inform policy in developing countries. In P. Glewwe (Ed.), *Education policy in developing countries* (pp. 285–338). Chicago, IL: University of Chicago Press.

Dollar, D., & Gatti, R. (1999). *Gender inequality income and growth: Are good times good for women?* (Policy Research Report on Gender and Development, Working Paper No. 1). Washington, DC: World Bank.

Fang, X., Fry, D. A., Ji, K., Finkelhor, D., Chen, J., Lannen, P., & Dunne, M. P. (2015a). The burden of child maltreatment in China: A systematic review. *Bulletin of the World Health Organization*, *93*(3), 176c–185c.

Fang, X., Fry, D. A., Brown, D. S., Mercy, J. A., Dunne, M. P., Butchart, A. R., . . . Swales, D. M. (2015b). The burden of child maltreatment in the East Asia and Pacific region. *Child Abuse & Neglect*, *42*, 146–162.

Fang, X. (2015). The Economic Burden of the Health Consequences of Violence Against Children in Cambodia, Ministry of Women's Affairs, UNICEF Cambodia, Phnom Penh, 2015.

Fatusi, A. O. (2016). Young people's sexual and reproductive health interventions in developing countries: Making the investments count. *Journal of Adolescent Health*, *59*(3), S1–S3.

Fitzgerald, L., Benzerga, W., Mirira, M., Adamu, T., Shissler, T., Bitchong, R., . . . Maziya, V. (2016). Scaling up early infant male circumcision: Lessons from the kingdom of Swaziland. *Global Health: Science and Practice*, *4*(Suppl. 1), S76–S86.

Gomez, J. A., Lepetic, A., & Demarteau, N. (2014). Health economic analysis of human papillomavirus vaccines in women of Chile: Perspective of the health care payer using a Markov model. *BMC Public Health*, *14*, 1222.

Greene, M., & Merrick, T. (2015, August). *The case for investing in research to increase access to and use of contraception among adolescents*. Seattle, Washington: Alliance for Reproductive, Maternal, and Newborn Health.

Hanushek, E. A. E., & Woessmann, L. (2008). The role of cognitive skills in economic development. *Journal of Economic Literature*, *46*(3), 607–668.

Hogan, D. R., Baltussen, R., Hayashi, C., Lauer, J. A., & Salomon, J. A. (2005). Cost effectiveness analysis of strategies to combat HIV/AIDS in developing countries. *BMJ*, *331*(7530), 1431–1437.

Horton, S., Waldfogel, J., De la Cruz Toledo, E., Santelli, J., & Waldfogel, J. (2017). Identifying an essential package for adolescent health: Economic analysis. In Bundy, D. A. P., de Silva, N., Horton, S., Jamison, D. T., Patton, G. C., (Eds.), *Disease control priorities* (3rd ed.), Volume 8, *Child and adolescent health and development*. Washington, DC: World Bank.

International Commission on Financing Global Education Opportunity. (2016). *Investing in education for a changing world.* New York, NY: Author.

International Labor Organization (ILO). (2003). *Investing in every child: An economic study of the costs and benefits of eliminating child labour.* Geneva, Switzerland: ILO-IPEC.

Jit, M., Brisson, M., Portnoy, A., & Hutubessy, R. (2014). Cost-effectiveness of female human papillomavirus vaccination in 179 countries: A PRIME modelling study. *The Lancet Global Health*, *2*(7), e406–e414.

Kassouf, A. L., Dorman, P., & de Almeida, A. N. (2005). Costs and benefits of eliminating child labour in Brazil. *Economia Aplicada*, *9*(3), 343–368.

Kaufman, Z. A., DeCelles, J., Bhauti, K., Hershow, R. B., Weiss, H. A., Chaibva, C., . . . Ross, D. A. (2016). A sport-based intervention to increase uptake of voluntary medical male circumcision among adolescent male students: Results from the MCUTS 2 cluster-randomized trial in Bulawayo, Zimbabwe. *Journal of Acquired Immune Deficiency Syndromes*, *72*(Suppl. 4), 297–303.

Kelley, A. C., & Schmidt, R. M. (1996). *Saving, dependency and development. Journal of Population Economics*, *9*(4), 365–386.

Knowles, J. C., & Behrman, J. R. (2005, January). *The economic returns to investing in youth in developing countries: a review of the literature* (Health, Nutrition and Population Discussion Paper). Washington, DC: World Bank.

Knowles, J. C., & Behrman, J. R. (2006). Assessing the economic returns to investing in youth in development countries. Chapter 11, pp. 424–490, in C. B. Lloyd, J. R. Behrman, N. P. Stromquist, & B. Cohen (Eds.), *The changing transitions to adulthood in developing countries: Selected studies.* Washington, DC: National Academies Press.

Korenromp, E. L., Wi, T., Resch, S., Stover, J., & Broutet, N. (2017). Costing of national STI program implementation for the global STI control strategy for the health sector, 2016–2021. *PloS One*, *12*(1), e0170773.

Lantz, P. M., Jacobson, P. D., Warner, K. E., Wasserman, J., Pollack, H. A., Berson, J., & Ahlstrom, A. (2000). Investing in youth tobacco control: A review of smoking prevention and control strategies. *Tobacco Control*, *9*(1), 47–63.

Laxminarayan, R., Chow, J., & Shahid-Salles, S. A. (2006). Intervention cost-effectiveness: Overview of main messages. Chapter 2, pp. 35–86 in Jamison, D. T., Breman, J. G., Measham, A. R., Alleyne, G., Claeson, M., Evans, D. B., . . . Musgrove, P. (Eds.), *Disease control priorities in developing countries*. Second edition. New York and Washington DC: Oxford University Press and The World Bank.

Levin, C. E., Van Minh, H., Odaga, J., Rout, S. S., Ngoc, D. N., Menezes, L., . . . LaMontagne, D. S. (2013). Delivery cost of human papillomavirus vaccination of young adolescent girls in Peru, Uganda and Viet Nam. *Bulletin of the World Health Organization*, *91*, 585–592.

Li, X., Stander, M. P., Van Kriekinge, G., & Demarteau, N. (2015). Cost-effectiveness analysis of human papillomavirus vaccination in South Africa accounting for human immunodeficiency virus prevalence. *BMC Infectious Diseases*, *15*, 566.

Manda, D. K., Kimalu, P. K., Nafuka, N. N., Kimani, D. N., Nyaga, R. K., Mutua, J. M., . . . Kimenyi, M. S. (2005). *Costs and benefits of eliminating child labour in Kenya* (KIPPRA Working Paper No. 10). Geneva, Switzerland: ILO-IPEC and Kenya Institute for Public Policy Research and Analysis.

Mason, A. (2001). *Population change and economic development in East Asia: Challenges met, opportunities seized*. Stanford, CA: Stanford University Press.

Matz, P. (2003). *Costs and benefits of education to replace child labour* (research paper in conjunction with the ILO-IPEC Study on the Costs and Benefits of the Elimination of Child Labour). Geneva, Switzerland: ILO/IPEC.

McDaid, D., Park, A. L., Knapp, M., Losert, C., & Kilian, R. (2010). Making the case for investing in child and adolescent mental health: How can economics help? *The International Journal of Mental Health Promotion*, *12*(4), 37–44.

Meng, L., Xu, H., Liu, A., van Raaij, J., Bemelmans, W., Hu, X., Zhang, Q., Du, S., Fang, H., Ma, J., Xu, G., Li, Y., Guo, H., Du, L., & Ma, G. (2013). The costs and cost-effectiveness of a school-based comprehensive intervention study on childhood obesity in China. *PloS one*, *8*(10), e77971. Available at: http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=3800134&tool=pmcentrez&rendertype=abstract

Merrick, T. W. (2015). *Making the case for investing in adolescent reproductive health: A review of evidence and PopPov research contributions*. Washington, DC: Population and Poverty Research Initiative and Population Reference Bureau, 2015.

Mingat, A., & Tan, J. (1996). The full social returns to education: Estimates based on countries' economic growth performance. Human capital development and operations policy working paper no. HCD 73. Washington, DC: World Bank.

Moodley, N., Gray, G., & Bertram, M. (2016a). The case for adolescent HIV vaccination in South Africa: A cost-effectiveness analysis. *Medicine*, *95*(4), e2528.

Moodley, N., Gray, G., & Bertram, M. (2016b). Projected economic evaluation of the national implementation of a hypothetical HIV vaccination program among adolescents in South Africa, 2012. *BMC Public Health*, *16*, 330.

Novaes, H. M. D., de Soárez, P. C., Silva, G. A., Ayres, A., Itria, A., Rama, C. H., . . . Resch, S. (2015). Cost-effectiveness analysis of introducing universal human papillomavirus vaccination of girls aged 11 years into the National Immunization Program in Brazil. *Vaccine*, *33*(S1), A135–A142.

Orazem, P. F. (2012). *Education: The case for improving school quality and student health as a development strategy* (Challenge paper, Copenhagen Consensus 2012).

Patrinos, H., & Psacharopoulos, G. (2011). Education past, present and future global challenges. *Policy Research Working Paper No. 5616*, March 2011.

Pereznieto, P., & Harding, J. H. (2013). *Investing in Youth in International Development Policy: Making the case*. ODI, May 2013. London, UK.

Plan International. (2008). *Paying the price: The economic cost of failing to educate girls. Children in Focus*. Working: UK.

Psacharopoulos, G. (2006). The value of investment in education: Theory, evidence and policy. *Journal of Education Finance*, *32*(2), 113–136.

Psacharopoulos, G. (2012, April). *Copenhagen Consensus 2012 perspective paper: Education*. Copenhagen Consensus Center.

Psacharopoulos, G., & Patrinos, H. A. (2004). Return to investment in education: A further update. *Education Economics*, *12*(2), 111–134.

Rabbani, A. (2016). Girl's secondary schooling: costs and benefits of providing girls with greater nutrition and labor market outcomes. Bangladesh Nutrition Priorities, Copenhagen Consensus Centre, 2016.

Rabi, A. (2014). *Cost of inaction: Child and adolescent marriage in Nepal* (UNICEF Nepal Working Paper Series No. WP/2014/001). Kathmandu, Nepal: UNICEF.

Rees, N., Chai, J., & Anthony, D. (2012, June). *Right in principle and in practice: A review of the social and economic returns to investing in children* (Social and Economic Policy Working Paper). New York, NY: UNICEF.

Republic of Uganda & UNICEF. (2016, November). *Social protection investment case*. Kampala, Uganda: Ministry of Gender, Labour and Social Development.

Robberstad, B. (2005). QALY vs. DALY vs. LYs gained: What are the difference, and what difference do they make for health care priority setting? *Norsk Epidemiologi*, *15*(2), 183–191.

Schäferhoff, M., Evans, D., Burnett, N., Komaromi, P., Kraus, J., Levin, A., . . . Jamison, D. T. (2016). *Estimating the economic returns of education from a health perspective*. Oslo, Norway: Norwegian Agency for Development Cooperation.

Schultz, P. T. (1988). Education investments and returns. In H. Chenery & T. N. Srinivasan (Eds.), *Handbook of development economics* (Vol. 1, pp. 543–630). New York, NY: North-Holland.

Schultz, P. T. (2002). Why governments should invest more to educate girls. *World Development*, *30*(2), 207–225.

Sheehan, P., Sweeny, K., Rasmussen, B., Wils, A., Friedman, H. S., Mahon, J., . . . Laski, L. (2017). Building the foundations for sustainable development: A case for global investment in the capabilities of adolescents. *The Lancet*, *390*(10104), 1792–1806. doi:10.1016/S0140-6736(17)30872-3

Temin, M., & Levine, R. (2009). *Start with a girl: A new agenda for global health. A Girls Count Report on Adolescent Girls*. Washington, DC: Center for Global Development.

Torchenaud, M. (2017). *Cost-benefit analysis: Improving girl's retention in school* (Haïti Priorise). Copenhagen, Denmark: Copenhagen Consensus Center.

United Nations Children's Fund (UNICEF). (2012). *A brief review of the social and economic returns to investing in children*. New York, NY: Author.

United Nations Population Fund (UNFPA). (2005). *The case for investing in young people as part of a national poverty reduction strategy* (Reference Notes on Population and Poverty Reduction, paper commissioned by the United Nations Population Fund, New York). New York, NY: Author.

United Nations Population Fund (UNFPA). (2016). *The state of world population 2016: How our future depends on a girl at this decisive age*. New York, NY: Author.

Wodon, Q., Petroni, S., Male, C., Onagoruwa, A., Savadogo, A., Edmeades, J., . . . Neetu, J. (2015, November). Economic impacts of child marriage: Preliminary findings from analyses of existing data. pp. 1–8. Washington, DC: International Center for Research on Women, World Bank.

World Bank. (2003, May). *Caribbean youth development: Issues and policy directions. A World Bank Country study*. Washington, DC: World Bank.

Zaman, A. (2016a). *Benefits and costs of sexual and reproductive health for Bangladesh* (Bangladesh Priorities). Copenhagen, Denmark: Copenhagen Consensus Center.

Zaman, A. (2016b). *Promotion of girls' education, delayed age at first birth, and children's nutritional status in Bangladesh* (Bangladesh Priorities) Copenhagen, Denmark: Copenhagen Consensus Center.

Social Protection, Adolescent Well-Being, and Development in Low- and Middle-Income Countries

Suman Verma

Effective social protection policies are crucial to realizing children's and adolescents' rights, ensuring their well-being, breaking the cycle of poverty and vulnerability, and helping them realize their full developmental potential. According to the International Labor Organization (ILO), in 2012 almost 73% of the world's population—about 5.2 billion people—did not enjoy access to comprehensive social protection. Many live in poverty, which is the case for half the population of low- and middle-income countries (LMICs; ILO, 2014). This widespread lack of social protection coverage is associated with high and persistent levels of poverty and economic insecurity in some parts of the world (World Bank, 2014), increasing levels of inequality (United Nations Development Program [UNDP], 2013), and insufficient investments in human capital and human capabilities (ILO, 2014).

The premise of the chapter is that social protection for the poorest is both a human right, enshrined in international covenants such as the UN Convention on the Rights of the Child (CRC), and the Universal Declaration of Human Rights (UNDHR). The CRC (United Nations, 1990) proclaims that "A child temporarily or permanently deprived of his or her family environment, or in whose own interest cannot be allowed to remain in that environment shall be entitled to special protection and assistance provided by the State" (Article 20), and "State parties shall recognize for every child the right to benefit from social security, including social insurance, and shall take the necessary measures to achieve the full realization of this right in accordance with national law" (Article 26). The CRC also defines the age of the child as 0 to 18 years, which overlaps with the age of adolescence (10 to 18 years). Therefore, in this chapter, though the focus is on the adolescent age group, the two terms are sometimes used interchangeably, more due to nonavailability of age-related disaggregated data. The United Nations Children's Fund (UNICEF; 2008a) defines social protection as a "set of transfers and services

that help individuals and households confront risk and adversity (including emergencies), and ensure a minimum standard of dignity and well-being throughout the lifecycle," (p. 2) and child protection as "preventing and responding to violence, exploitation and abuse" (p. vi). The risk of experiencing such forms of harm increases for children and adolescents whose families are poor, who are excluded from services due to stigma and discrimination, or who have lost the protection and care of their parents.

In recent years, many LMICs have significantly extended their social security coverage—to ensure at least basic protections—while also continuing to develop their social protection systems. For instance, the gradual extension of social security coverage in countries like Brazil, Ghana, India, Mexico, Mozambique, South Africa, and Thailand has had a significant impact on the well-being of the population; in conjunction with positive labor market and employment policies, this has contributed to economic, developmental, and socially inclusive growth. However, in the aftermath of the global economic crisis, a number of governments have reduced public spending in areas (including social security systems), resulting in limits on the coverage or level of benefits (International Monetary Fund [IMF], 2013). The combination of food and fuel price increases followed by the global economic slowdown, jobless recovery, and now cutbacks in public expenditure have taken a toll on families in LMICs (ILO, 2014).

According to ILO estimates from 2014, public expenditure on social protection benefits designed specifically to meet the needs of children and adolescents amounts to 0.4% of total gross domestic product (GDP) worldwide, or 7.4% of total social protection expenditure (excluding health expenditure). However, there is wide variation across regions. Whereas countries in Western Europe spend on average 2.2% of their GDP on child and family benefits, less than 1% of GDP is allocated to child and family benefits in all other regions. For example, despite the recent extension of cash transfer programs, public expenditure on child and adolescent benefits in Latin America and the Caribbean is just 0.7% of GDP, or 6.5% of public social protection expenditure (excluding health expenditure); this level is similar to that seen in North America, the Middle East, and Central and Eastern Europe. Meanwhile, in Asia, the Pacific, and Africa, on average 0.2% of GDP is allocated to child and family benefits. Underinvestment in the social protection needs of children is particularly critical in low-income countries, which, on average, allocate less than 0.1% of their GDP to child and family benefits. This signifies an underinvestment in children and adolescents, which is likely to have negative effects on the future productivity of these countries' workforce—and their future economic and social development prospects (ILO, 2014).

Despite the progress made in the achievement of the Millennium Development Goals (MDGs) in reducing child deaths, getting children and adolescents into school and lifting millions out of poverty, much of the world's youth continue to live in poverty. This deprives them of their basic rights and needs for holistic development of their potentials. The consequences of poverty

are long lasting on children. Even short periods of food deprivation can be detrimental to children's long-term development. Malnourished children and adolescents lag behind their peers in physical development and cognitive capacity; they are more vulnerable to life-threatening diseases; they suffer from poor academic achievement; and, ultimately, they are less likely to be productive adults. Early life poverty therefore threatens not only the individual but also is likely to be passed to future generations, entrenching and exacerbating inequality in society (ILO, 2014; Minujin & Nandy, 2012; Ortiz et al., 2012). The life chances of poor and excluded adolescents are often shaped by inequities (UNICEF, 2014).

In the form of 17 Sustainable Development Goals (SDGs) and 169 associated targets, the 2030 Agenda for Sustainable Development recognizes the critical importance of promoting equity and child protection and development. According to the *State of the World's Children* 2016 report, to meet the 2030 Agenda, the pace of progress in the next 15 years will have to outpace that of the MDG period. If the trends continue, by 2030 an estimated 167 million children (the great majority in sub-Saharan Africa) will continue to live in extreme poverty. Additionally, an estimated 3.6 million will die from mostly preventable causes, and more than 60 million will remain outside the education system. The challenges of reaching the most disadvantaged children, adolescents, and their families with essential services and protection are considerable, but with effective equity-focused policy, planning, and public spending, these trends can be changed to meet the 2030 Agenda (UNICEF, 2016).

The broad objective of this chapter is to examine social protection for adolescents in LMICs in the context of gross violations of their basic rights. More specifically, I focus on the prevalence, consequences, and costs of violations of young people's protection rights in LMICs; I consider the role of social protection programs in ensuring enhanced opportunities for development and well-being among young people in this region; and I review the impact of social protection programs on developmental outcomes on young people, such as health, education, abuse, care, and labor force participation. I conclude by suggesting the need in LMICs for expansion of integrated social protection policies and programs for adolescents and families in need—if the 2030 Agenda is to be realized.

Adolescent Risk, Vulnerability, and Protection Violations in LMICs

A large number of adolescents worldwide are subjected to violence, exploitation, abuse, and neglect in different settings, including their homes, schools, communities, and work environments. As a result, their physical and mental health, education, and overall quality of life are negatively affected. The consequences are often intergenerational: Those who experience violence in their early years are

more likely to become a violent adult (Pereznieto et al., 2014). This cycle has a long-term impact on a family's economic well-being.

Marcus (2014) highlighted some of the key processes and factors at the macro, meso, and micro levels that contribute to child protection violations. Economic deprivation can exacerbate the risk of an adolescent's protection rights being violated in the context of key structural, political, and individual factors. As these factors interact, they compound the risk of protection violations. These include the role of social and cultural norms, which operate at all levels to influence what is understood as abusive treatment of children and adolescents, and how individuals, communities, and the state should respond to different protection violations. Shocks and stresses—such as environmental disasters and degradation, economic shocks, and conflict—exacerbate poverty and increase the likelihood of responses that put young people at even greater risk. Conflict and insecurity can also put adolescents at risk of protection violations more directly through nor-malization of physical and sexual violence or through death or displacement of parents and caretakers. Conflict and physical insecurity can also lead parents to decide that their daughters will be best protected from sexual or physical violence in the community or from combatants through marriage and can thus underpin child marriage (Boyden et al., 2012; World Vision, 2013).

In given cultural contexts, economic pressures can increase adolescents' risk of protection violations. For instance, they can reduce the resources available for protective and responsive services (such as health, education, social work, and the criminal justice system), and they can increase the likelihood of individuals and households undertaking livelihood strategies that increase adolescents' exposure to risk (such as sending them to work or marrying off a daughter to bring cash into the household). Sometimes, adolescents themselves also undertake survival strategies that can put them at risk of abuse (such as working in occupations where they may be prey to abuse by the employers (Marcus, 2014).

We must also consider broader aspects of poverty that affect adolescent's risk of protection violations. Although there is much evidence of adolescents resisting proposed marriages and sexual advances (Russon, 2000; van Blerk, 2008), their parents and caretakers may face economic, emotional, and social pressures that override their resistance (Naker, 2005). Adolescents from poor families are often doubly powerless: They are constrained by economic dependence on employers, landlords, or patrons for their own and families' survival and thus may be under pressure to say nothing about abuse (Bower, 2003; Marcus, 2014).

In LMICs, school-aged children are vulnerable to shocks because a common coping strategy among the poor is to reduce investments in children's education. In Ethiopia, for example, households that had half of their plot area damaged by drought were two percentage points less likely to send their child to school. In addition, harvest failure has asymmetric effects for girls and boys. Households that experienced a production shock are less likely to send girls to primary school, and these girls are less likely to complete primary schooling. This suggests that when

vulnerable households are forced to make trade-offs in educational investments, they choose to protect their schooling investments in their sons (World Bank, 2005). Such trends have serious implications for educational achievements of children making a transition into adolescence, especially girls.

In the following sections, I examine the prevalence and developmental consequences of various types of violence on adolescents, such as early marriage; physical, psychological, and sexual abuse; sibling care and orphanhood; child labor; and conflicts with armed forces or groups.

Early marriage. Demographic and Health Survey (DHS) and Multiple Indicator Cluster Survey (MICS) data from 78 LMICs for 2000–2011 indicated that 16% of 20- to 24-year-old women in the richest quintile were married by age 18; this is compared to 54% in the poorest quintile (United Nations Fund for Population Activities [UNFPA], 2012). Reasons for early marriage of adolescent girls can be both economic and cultural. Evidence from Nepal, southern Africa, and Bangladesh suggests that girls are married at an early age to reduce household expenses; bring the bride's price or a son-in-law's labor into the household; and reduce the dowry, which generally increases with age and education (Amin & Huq, 2008; Evans & Mayer, 2012; Otoo-Oyortey & Pobi, 2002). However, where cultural and social norms favor adolescent or child marriage, a significant proportion of girls even in the highest quintile marry before age 18 (Marcus, 2014). Girls, particularly those facing poverty or violence, sometimes view marriage as a way of improving their situation. Because marriage is a key rite of passage, older adolescents can be keen to make the transition to adulthood signified by marriage (Beegle & Krutikova, 2007; Boyden et al., 2012; Evans & Mayer, 2012).

Physical, psychological, and sexual abuse. Adolescents can be subjected to different forms of violence, including corporal punishment at home and school; violence in the community (such as gang violence); and recruitment into armed conflict. Evidence suggests that cultural acceptance of corporal punishment is the key factor underlying this form of violence against young people (Cabral & Speek-Warnery, 2005; UNICEF, 2010), and data from studies in Organization for Economic Cooperation and Development (OECD) countries and some aggregate evidence from LMICs suggest that adolescents from poor families are at greater risk of severe corporal punishment from their parents/caretakers than adolescents from high socioeconomic groups (World Health Organization [WHO] & ISPCAN, 2006). The 2010 UNICEF analysis of MICS data from 30 countries found a relationship between poverty and frequency or severity of corporal punishment in less than half the countries studied. Ten of the 13 countries were middle-income (six from Central and Eastern Europe and the Caucasus and three from Latin America); in most cases, the differences were relatively small but statistically significant (around five percentage points). Overall prevalence of corporal punishment was relatively high in these countries (more than 60%), which undermines the argument that socioeconomic differences in the use of corporal punishment sharpen as countries become wealthier (Marcus, 2014).

On the contrary, some studies conducted in Africa concluded that, because corporal punishment is so widespread (with over 75% of children and adolescents reporting having experienced it in most studies), there is little socioeconomic differentiation, although girls are generally treated less severely than boys (Clacherty et al., 2004, 2005).

Furthermore, adolescents from poor socioeconomic backgrounds are frequently exposed to a wider range of contexts in which violence may occur, both in the community and in workplace settings. Incidents of violence are more prevalent in poor urban areas, where young people risk being caught in crossfire and witnessing serious violence. A study in low-income townships in South Africa found that 48% of 8- to 13-year-olds had witnessed a murder (Shields et al., 2008). In such settings, adolescents' mobility and opportunities to socialize are severely restricted by violence in the community (Pinheiro, 2006).

Poor adolescent boys and young men are at the greatest risk of both perpetrating and being victims of violent crime: They have the highest homicide rate of all population groups worldwide, and inequalities in experiences of crime between rich and poor are striking (Marcus, 2014; Small Arms Survey [SAS], 2006). In Cape Town, South Africa, male homicide rates in the townships exceed 200 per 100,000; in wealthier areas, they are four times lower (Pinheiro, 2006). In the past decade, South Africa has emerged as the world's least economically equal society (World Bank, 2015), with persisting racial divides (UNDP, 2014).

Adolescents and youth are hard hit: HIV infection rates in young African females are rising (Dellar et al., 2015), as are violent deaths in young males (Mathews et al., 2013), and sexual violence remains among the highest in the world (UN Women, 2012). The relative lack of linkages between poverty and sexual abuse is evident from a number of qualitative and mixed-methods studies in LMICs that reported no significant differences among socioeconomic groups (Cabral & Speek-Warnery, 2005; Deb & Modak, 2010; UNICEF, 2011). Studies of school-based sexual abuse and exploitation have not found any systematic relationship between a student's economic background and the risk of abuse (Clacherty et al., 2005; Leach et al., 2003; Plan International, 2006). However, due to fragile safety nets in the community, adolescents from poor families are at a higher risk of being exposed to a wide range of situations in which both physical and sexual abuse can take place, such as domestic work (Human Rights Watch [HRW], 2006). Most studies suggested that poverty is an important factor leading adolescents to leave home and live among peers "on the street," where the risks of physical and sexual abuse are further elevated (Lalor, 1999; Verma, 1999).

The UNICEF (2008a) report on Eastern and Southern Africa (ESA) highlighted several distinct risks faced by adolescents, including the risk of becoming orphans due to parental death and engagement in risky sexual behaviors that increase the likelihood of HIV infection (especially among girls), early pregnancy, abuse, and exploitation—these are often linked to losing one or both

parents. Many adolescents are functionally illiterate because of poor-quality schooling, dropout, and infrequent attendance and as a result have not acquired the basic competencies for work and healthy living. This in turn lessens their employability and increases the likelihood of becoming trapped in exploitative work. Though girls are at greater risk of sexual abuse and exploitation, the risk for boys is also significant, though it attracts much less academic, policy, or programmatic attention. In studies undertaken in sub-Saharan Africa in the context of research or programs on reducing vulnerability to HIV and AIDS, 10% to 25% of boys and up to one third of girls reported experiencing sexual violence (Marcus, 2013). Financial needs often drive adolescents, especially girls, into commercial sex work or into transactional sexual relationships (Betancourt et al., 2012; Luke & Kurz, 2002). A study disaggregated by socioeconomic group from Maputo, Mozambique, found that poor adolescent girls were 10 times more likely than their middle-class counterparts to engage in transactional sex (Marcus, 2014).

Finally, adolescents with disabilities are at significantly higher risk of both physical and sexual abuse, owing to their additional powerlessness, ingrained negative attitudes toward disabilities, and the stresses of caring for children with severe disabilities with little support (Jones et al., 2012). Adolescents with disabilities encounter different forms of exclusion and are affected by them to varying degrees, depending on the type of disability they have, where they live, and the culture or class to which they belong. The *State of the World's Children* report (UNICEF, 2013) highlighted that gender is a crucial factor: Girls with disability are less likely to obtain education, receive vocational training, or find employment than are boys with disability or girls without disability. Furthermore, discrimination based on disability has manifested itself in marginalization from resources and decision-making. Few LMICs have reliable information on the number of children and adolescents with disabilities, type of disability, or how these disabilities affect their lives. Children and adolescents thus excluded are unknown to, and therefore cut off from, public services to which they are entitled. These deprivations, for example, can have lasting effects—by limiting access to gainful employment or participation in civic affairs later in life.

Sibling care and orphanhood. Children need a safe and protective environment that facilitates their healthy overall development. In low-income families where both parents are working, children are at a greater risk of being left unsupervised due to lack of resources (Heymann, 2006). This lack of oversight is associated with worse educational and behavioral outcomes (Giashuddin et al., 2009; Ruiz-Casares, 2009), an increased risk of sexual abuse (Ballet et al., 2011; Heymann, 2006), and an increased risk of accidental injury. In many such situations, adolescents assume the responsibility of sibling care and household chores at the expense of schooling. A small subset of children and adolescents— about 4% in sub-Saharan Africa—are forced to become the main caretakers of sick or elderly relatives and are therefore net providers—not the recipients of care (Evans & Mayer, 2012).

Orphanhood complicates the already-risky future that many poor children face as they enter adolescence. Increased economic and emotional strain, common among the orphaned and vulnerable, may increase the likelihood of these children engaging in risky behavior, including sex for food or shelter and using drugs and alcohol. One study of young orphaned and vulnerable adolescents aged 15 to 18 in Zimbabwe found that they were more likely than their nonorphaned peers to be HIV positive (3% vs. 0%). They were also more likely to have experienced pregnancy and common symptoms of sexually transmitted infections, to have no secondary education, and to have initiated sex and be married at a young age (UNICEF, 2008b). Another review of studies concluded that an orphan's risk of inadequate care and poorer education and health outcomes was higher than for nonorphans; orphans were also at greater risk of physical and sexual abuse (Marcus, 2013). Girls whose mothers have died were at greatest risk of dropping out of school or mistreatment (Baaroy& Webb, 2008), whereas paternal death increased poor girls' likelihood of early marriage (Beegle & Krutikova, 2007).

Last, poverty increases the risk of children entering institutional care. A study conducted in Sri Lanka found that close to half the children and adolescents in institutional care are there because of poor economic conditions of their families (Bilson & Cox, 2007). The number of children and adolescents in residential care in Thailand rose following the economic crisis of the late 1990s (Harper et al., 2012).

Exploitative child labor. The latest estimates on child labor presented in the ILO (2015) report indicated that 168 million children (5–17 years) worldwide are in child labor, accounting for almost 11% of the child population as a whole. The largest absolute number of children is found in the Asia and the Pacific region, but sub-Saharan Africa continues to be the region with the highest incidence of children, with more than one in five children in child labor. Children and adolescents work in dangerous sectors, such as mining, construction, agriculture, or on the streets. The worst forms of child labor result in child enslavement, family separation, exposure to serious hazards and illnesses, and isolation—often from a very early age, leading to adverse effects on the child's health, exposure to additional violence, and reduced income-earning potential (Pereznieto et al., 2014). In Bangladesh, for example, hazardous work accounts for 56% of employment among 10- to 14-year-olds and 57% among 15- to 17-year-olds (Understanding Children's Work [UCW], 2011). In ESA, child labor rates among those aged 5–14 are usually over 20%, and in some cases, such as Ethiopia, go up to 45% for boys (UNICEF, 2008a). Most are unpaid family workers helping with domestic tasks or agricultural work, but many adolescents work outside the home, and the key area of concern is work that is exploitative, abusive, or physically harmful and that takes children out of school.

Child soldiers and association with armed groups. The economic costs of adolescents associated with armed forces or groups are manifold and complex.

Between 250,000 and 300,000 children and adolescents are currently associated with armed forces (United Nations, 2000), and more are actively being recruited or abducted and forced to fight wars (Pearn, 2003). The care and use of modern small arms is simple enough that most school-aged children can use and maintain them. Adolescents are forced to take part by a combination of direct physical abuse, threats, and drugs (Albertyn et al., 2003). Adolescents who do manage to escape from these armed military groups often have long-term psychological problems (Barbara, 2008).

The Role of Social Protection in Ensuring an Adolescent's Optimum Development and Well-Being

The future of adolescents is compromised when they are deprived of a decent standard of living and access to quality health services, education, and care. Experiences of social exclusion, exploitation and neglect, and early entry into the workforce result in negative outcomes on their overall development and their future life chances. Poverty affects not only the well-being and aspirations of adolescents, but also their communities, societies, and economies in which they live (ILO, 2013).

Child and family benefits—in cash and in kind—play an important role in addressing children's and adolescent's needs, particularly for marginalized groups (Sanfilippo et al., 2012; United Nations Educational, Scientific, and Cultural Organization [UNESCO], 2014). Evidence from different LMICs shows that social protection benefits result in improvements in the nutritional status of children (Save the Children, 2012; UNICEF, 2012). Cash transfer programs have also contributed to a significant increase in the utilization of health services (Attanasio et al., 2005), significant increases in children's enrollment and attendance at school in LMICs, as well as marginal improvements in other education outcomes, such as additional years of schooling and impact on wages (Baird et al., 2013; Fiszbein & Schady, 2009; ILO, 2013).

Child and family benefits, together with other forms of measures and services, are also an important means of responding to the special needs of children with disabilities (UNICEF, 2013), homeless and vulnerable children, children affected by violence and abuse, and other disadvantaged children (Barrientos et al., 2013; Save the Children, 2012). Through these various channels, social protection benefits contribute to enhancing child well-being—and their ability to seize economic and social opportunities in later life.

The first policy action outlined in the SDGs is the implementation of national social protection systems. Cluver et al. (2016) in their study assessed whether a social protection provision can affect 17 indicators of five key health-related SDG goals among adolescents in South Africa. They conducted a longitudinal survey of adolescents (10–18 years) between 2009 and 2012. Census areas were randomly

selected in two urban and two rural health districts in two South African provinces, including all homes with a resident adolescent. Household receipt of social protection in the form of "cash" (economic provision) and "care" (psychosocial support) social protection and health-related indicators within five SDG goals were assessed. Gender-disaggregated analyses included multivariate logistic regression, testing for interactions between social protection and sociodemographic covariates, and marginal effects models. Social protection was associated with significant adolescent risk reductions in 12 of 17 gender-disaggregated SDG indicators, spanning SDG 2 (hunger); SDG 3 (AIDS, tuberculosis, mental health, and substance abuse); SDG 4 (educational access); SDG 5 (sexual exploitation, sexual and reproductive health); and SDG 16 (violence perpetration). For 6 of 17 indicators, combined cash plus care showed enhanced risk reduction effects. Two interactions showed that effects of care varied by poverty level for boys' hunger and girls' school dropout. For tuberculosis and for boys' sexual exploitation and girls' mental health and violence perpetration, no effects were found, and the authors suggested that more targeted or creative means will be needed to reach adolescents on these challenging burdens. National social protection systems are not a panacea, but findings suggested that they have multiple and synergistic positive associations with adolescent health outcomes.

Strengthening income security is therefore a key element of policies that aim at reducing and preventing child poverty, breaking the intergenerational transmission of poverty and facilitating childhood access to nutrition, care, education and health services. The ILO's Social Protection Floors Recommendation, 2012 (No. 202), explicitly recognizes income security for children and adolescents as one of the basic social security guarantees constituting a national social protection floor (based on an integrated approach that addresses the multiple dimensions of child well-being). The notion of income security is not limited to a sufficient level of cash income, but instead encompasses income in kind, such as nutrition and access to services, and the broad range of resources that is necessary to secure a decent standard of living and life in dignity for all children and adolescents (ILO, 2014).

Social services (such as education and health care) are essential in ensuring income security, as these reduce families' spending needs and can facilitate parents' availability to engage in paid employment (ILO, 2013). Measures to facilitate access to health, education, and care services, combined with measures to improve the availability and quality of those services, are necessary to ensure that children and adolescents may realize their full developmental potential.

The need for a broad social protection approach to realizing children's and adolescents' rights is also reflected in the *World Report on Child Labor* (ILO, 2013), which highlights the need for a comprehensive and systemic view, considering the full range of social protection instruments, including those that ensure income security for working-age adults (e.g., unemployment protection, maternity benefits, disability benefits) and older persons (e.g., old-age pensions). Social

health protection occupies a key role in protecting households from health-related poverty risks that are closely associated with the incidence of child labor. Child-sensitive measures aimed at reducing and preventing child labor should therefore form part of an approach that sets out not only to strengthen national social se-curity systems but also to ensure effective coordination with other related policy areas, including employment, wages, and broader social policies (ILO, 2014).

Social Protection Programs for Adolescents in LMICs

Child and family benefits include various types of social protection benefits or combinations thereof. Some countries provide universal child benefits that cover all children and adolescents, independently of the employment or income status of their parents; these benefits are usually financed by general taxation. Many coun-tries in Latin America and the Caribbean combine employment-related benefits anchored in legislation, thereby covering a substantial proportion of children and families. However, this is not the case in large parts of Africa, Asia, and the Pacific. Here, noncontributory programs are either not fully developed or remain at the pilot stage with limited geographical coverage. The extent to which countries are able to make provision for child and family protection is linked to different priorities and traditions and to the economic capacities available in the countries/regions. While universal provision of child benefits is prevalent particularly in Europe and North America, coverage elsewhere tends to be more limited, usually to children and adolescents of those employed in the formal economy or those in poor families (ILO, 2014). More efforts are needed to anchor programs in legisla-tion in order to establish a clear definition of eligibility criteria and benefits and a more stable basis for the implementation of these programs, especially with regard to financial sustainability and institutional capacities.

Although universal or near-universal coverage is a reality in many OECD coun-tries, and in many LMICs the introduction of new child and family benefit programs and the reform of existing ones have improved coverage to some extent, large gaps nevertheless remain (ILO, 2014). The most prominent new development is the emergence of noncontributory cash transfer programs in many LMICs. Some con-ditional cash transfer programs require that families ensure their children's school attendance and participate in health programs. In Argentina, the 2009 universal child allowance extended coverage to families of unemployed people and those in the informal economy who were previously uncovered (Bertranou & Maurizio, 2012). Mongolia also reintroduced its child allowance, covering almost 99.6% of all children and adolescents in 2012. The South African Child Support Grant covers more than half of all children under the age of 18 and has had a significant im-pact on children's nutrition, physical development, and education (Department of Social Development, South Africa [DSD], SASSA & UNICEF South Africa, 2012; Patel et al., 2013). In Colombia, a 2011 law raised benefit levels and mandated access

to the *Mas Familias en Accion* (More Families in Action) program as a right; the number of beneficiaries increased from 2.1 million to 2.6 million as a result (Alviar Garcia, 2013).

In many LMICs, only a small minority of children, adolescents, and their families receive child benefits. Where specific programs do exist, they tend to focus on workers in the formal economy or selected categories of disadvantaged children. For example, Indonesia's *Kesejahteraan Sosial Anak* (Child Social Welfare) program provides conditional cash benefits for several categories of vulnerable children, including abandoned children, street children, young offenders, and children with disabilities. However, due to challenges in identifying "eligible children," many remain outside the program's reach (ILO, 2012). Many general assistance programs also benefit children and adolescents living in vulnerable households, such as the *Programa Subsidio de Alimentos* (Food Subsidy Program) cash transfer program in Mozambique, whose total budget allocation more than doubled from 0.16% to 0.35% of GDP between 2008 and 2013 (Cunha et al., 2013). In some African countries, new pilot programs cover only certain districts, such as the Livelihood Empowerment Against Poverty program in Ghana and similar schemes in Kenya and Malawi (Garcia & Moore, 2012; ILO, 2014; Monchuk, 2014).

Recent developments also demonstrate that cash transfers alone cannot offer income security for all children, adolescents, and their families. More attention is needed to the formulation and application of integrated approaches that ensure effective coordination between different policy areas addressing children's needs, including health, education, development, and protection. In addition, connection with employment policies is of critical importance (UNESCO, 2014; UNICEF & ILO, 2013). The OECD has developed a sophisticated monitoring system—using a set of indicators and focused research studies—to analyze the availability of child and family benefits and other family-oriented policies and their outcomes (OECD, 2014). Strengthening such national monitoring capabilities should be a priority in many LMICs (ILO, 2014).

Antipoverty transfer programs have a variety of effects that enhance adolescent well-being and development. In LMICs, there is diversity in the objectives, design, and implementation of social transfers, though they share the overall objectives of reducing poverty and fostering economic and social inclusion. Barrientos et al. (2014) reviewed evidence from LMICs on the impact of social transfers on children, particularly on health, nutrition, and education. They covered 79 impact-evaluation studies covering 45 transfer programs in 28 countries from Latin America, Africa, and Asia. Their analyses revealed that due to social transfer programs there is reduction of child labor, particularly in programs aiming to improve school attendance. These programs facilitate parental care through an improvement in household resources, which reduces separation; but, in other cases, they facilitate labor migration of adults and adolescents. Child-focused programs with schooling conditions reduce the incidence of early marriage among

adolescents. This effect is stronger where financial incentives are designed to maximize school retention.

Another impact evaluation study demonstrated a decline in child labor when social transfers specifically target child labor and child schooling, which limits children's capacity to work outside the home (de Hoop & Rosati, 2012). The effects are stronger where extracurricular activities are included. However, there are significant gender differences in favor of boys (Behrman et al., 2011). Reasons given were higher labor work participation rates among boys when compared to girls. As for girls, some evidence was found of a reduction in the time spent on household chores, as with, for example, Malawi's Social Cash Transfer (Covarrubias et al., 2012).

Several evaluation studies on the impact of social transfer on child marriage reported improvement in school attendance and a decline in dropout rates. The transition from primary to secondary school is often associated with an increase in dropout rates, especially for girls (Attanasio et al., 2010; Borkum, 2012). To address this, some programs provide transfer levels graded to retain children in school. This is intended to provide financial incentives to keep children in the household and, especially for girls, for them to continue attending school. Such programs show reduced dropout rates and higher retention effects for girls than for boys (Barrientos et al., 2014).

Marcus (2014) reported findings from a review focused on analyzing the contribution of antipoverty programs to increasing the effectiveness of child and adolescent protection activities in LMICs. The examination focused on the impact on early marriage; physical or sexual violence; and inadequate care—both with and without antipoverty components. Among the efforts were awareness-raising programs for youth and adults, life skills programs for adolescents/youth, child protection strengthening activities, and accident prevention programs. Countries represented were Pakistan, Mexico, Bangladesh, India, Jordan, Uganda, Brazil, Guatemala, Jamaica, Malawi, and Kenya. Three conclusions were drawn: Cash transfers and good-quality skill-training programs help reduce early marriage rates; skills training and microfinance help adolescent girls avoid exploitation through transactional sex; and, given opportunities and support, young people can develop alternatives to involvement in gang-related violence. Economic strengthening activities are common in programs promoting better care of children, but in one case they alleviated pressure on households caring for orphans (Marcus, 2014).

Where cultural norms and accepted social practices are the key factor underlying a particular violation, education awareness-raising programs often have the most important role to play (Fayyad et al., 2010; UNICEF, 2009). For example, when power imbalances are most critical (e.g., between adult men and adolescent girls or between girls and their parents), life skills programs can effectively give adolescents the knowledge and confidence to negotiate over their futures and relationships (Center for Development and Population Activities [CEDPA], 2001; Kabir et al., 2007). This is particularly true when the efforts involve

communication with community influencers (e.g., religious leaders) and whoever else has the power to make decisions about a young person's future (e.g., parents and grandparents) (Kabir et al., 2007; Pedersen et al., 2008).

Because children and adolescents experience poverty in multifaceted ways, it is crucial not only to provide equitable services—including health care and quality education—but also to make sure that marginalized groups have access to these services. Social protection mechanisms are an effective approach that can reduce vulnerability to poverty and deprivation, strengthen families' capacity to care for their children, and overcome barriers to accessing essential services. Cash transfers can work as a safety net to keep the poorest, most vulnerable households out of destitution in all settings, including humanitarian emergencies. At the same time, they offer families a buffer out of poverty by boosting incomes, increasing school attendance, improving nutrition, encouraging the use of health services, and providing job opportunities. Results from many LMICs demonstrate direct impacts, such as increased income and consumption, increased access to goods and services, greater social inclusion, and reduced household stress (UNICEF, 2016). As some of the programs discussed in this section show, cash transfers address multiple deprivations and help children and adolescents gain access to services that are crucial to their well-being and development.

Expanding Integrated Social Protection Policies for Adolescents in LMICs and the Way Forward

There are important linkages between social transfers and adolescent protection risks and outcomes. As evident from the previous sections, adolescent protection violations are neither inevitable nor insurmountable. A comprehensive social protection system should address both income poverty and social vulnerability and include protective, preventive, promotive, and transformative components. With adolescent-centered policies and investments, governments can help adolescents—particularly those in marginalized groups—realize their rights to a fulfilling and productive life. Aggressive social protection intervention that is sensitive to the special circumstances of these groups and second-chance education, coupled with on-the-job experience and work-related skills training for adolescents, are examples of such interventions needed in LMICs.

There is a growing but still-limited body of evidence from LMICs on effective programs to prevent the different forms of violence against children and adolescents. Some of this evidence, however, suggests that, in particular for vulnerable girls living in situations of poverty, combined interventions that provide life skills training (with a particular focus on sexual education alongside measures to strengthen their economic capabilities) are an effective way to prevent sexual abuse (Pereznieto et al., 2014). Further, according to the ILO (2013), investments in education and social protection appear particularly relevant to the decline of child

labor. Therefore, in LMICs, attention must now focus on developing integrated child and adolescent protection systems that comprise the set of laws, policies, regulations, and services needed across all social sectors—particularly social welfare, education, health, security, and justice—to support prevention and response to violence, abuse, and exploitation (UNICEF, 2008b). This implies building high-quality welfare services, strengthening data collection and information management systems, developing service models and referral pathways, and ensuring adequate financing (Wulczyn et al., 2010). Transnational coordination is essential to promote safe cross-border adolescent migration and address issues such as child trafficking (Barrientos et al., 2014).

Given the importance of the second decade to lifelong health and well-being, the SDGs represent opportunities for improving the health of our high-risk populations. The Cluver et al. (2016) study provided evidence on components and combinations of social protection. Cash support had independent risk reduction effects for 10 SDG indicators, and care support had independent risk reduction effects for 8 SDG indicators. However, for many SDG health-related targets, strong additive effects were shown of combining cash plus care—with cumulative risk reduction effects shown on six SDG indicators. Thus, these findings demonstrated the potential of social protection to contribute to multiple aspects of the SDG agenda. They highlighted the value of providing "care" as well as "cash," suggesting the importance of resource allocation to psychosocial care in a time of global cuts and reliance on nongovernmental organization and soft providers.

The nations signing the 2030 Agenda have made a commitment to address child poverty in all its dimensions. Given this commitment, they need updated data on children and adolescents in poverty settings to monitor progress, identify gaps, and frame policies and programs in the interest of making sure that vulnerable children and adolescents are not left behind. However, the number of countries that report child poverty figures is limited. More than one third of countries are not measuring child poverty; approximately half of the other two thirds are not measuring routinely (UNICEF, 2016). All countries need to document regularly, using both monetary and multidimensional measures, the number of children living in poverty. These data can be adapted and applied to each country's economic and social context, informing the development of national approaches to poverty reduction in general—and child poverty in particular.

We need much more in-depth primary research on different forms of violence against children and adolescents in LMICs. In-depth studies will continue to enrich the evidence base in this area and can lead to more robust advocacy efforts by bringing compelling economic arguments to policymakers. Developmental scientists have a key role to play by stepping up research in LMICs on solutions that are need based, data driven, and context specific. They can further provide expertise on how social protection measures can be effectively linked to system strengthening, ongoing monitoring, and

assessment of adolescent protection programs that have a maximum impact in preventing such violations and responding when they do occur. This will inform government planning and budgeting. We need a strong developmental science–policy–societal progress interface that will contribute to achieving the 2030 Agenda and the SDGs for equitable social protection for all children and adolescents worldwide.

References

Albertyn, R., Bickler, S. W., van As, A. B., Millar, A. J., & Rode, H. (2003). The effects of war on children in Africa. *Pediatrics Surgery International*, *19*, 227–232.

Alviar García, H. (2013). Social policy and the new development state: The case of Colombia. In D. M. Trubek, H. A. Garcia, D. R. Coutinho, & A. Santos (Eds.), *Law and the new developmental state: The Brazilian experience in Latin American context.* Cambridge, England: Cambridge University Press.

Amin, S., & Huq, L. (2008). *Marriage considerations in sending girls to school in Bangladesh: Some qualitative evidence* (Working Paper 12). New York, NY: Population Council.

Attanasio, O. P., Battistin, E., Fitzsimons, E., Mesnard, A., & Vera-Hernández, M. (2005). *How effective are conditional cash transfers? Evidence from Colombia* (Briefing Note No. 54). London, England: Institute for Fiscal Studies. Retrieved from http://www.ifs.org.uk/bns/bn54.pdf. Accessed November 10, 2016.

Attanasio, O. P., Fitzsimons, E., Gomez, A., Gutiérrez, M. I., Meghir, C., &Mesnard, A. (2010). Children's schooling and work in the presence of a conditional cash transfer program in rural Colombia. *Economic Development and Cultural Change, 58*(2), 181–210.

Baaroy, J., & Webb, D. (2008). Who are the most vulnerable? Disaggregating orphan categories and identifying child outcome status in Tanzania. *Vulnerable Children and Youth Studies, 3*(2), 92–101.

Baird, S., Ferreira, F. H. G., Özler, B., &Woolcock, M. (2013). *Relative effectiveness of conditional and unconditional cash transfers for schooling outcomes in developing countries: A systematic review*. Oslo, Norway: Campbell Collaboration. Retrieved from https://www.campbellcollaboration.org/library/effectiveness-of-cash-transfers-for-schooling-outcomes.html. Accessed January 2, 2017.

Ballet, J., Sirven, N. Bhukuth, A., & Rousseau S. (2011). Vulnerability to violence of girls of the street in Mauritania. *Children and Youth Services Review*, *33*, 7.

Barbara, J. S. (2008). The impact of war on children. In B. S. Levy & V. W. Sidel (Eds.), *War and public health* (2nd ed., pp. 179–192). Oxford, England: Oxford University Press.

Barrientos, A., Byrne, J., Pena, P., & Villa, J. (2014). Social transfers and child protection in the South. *Children and Youth Services Review*, *47*, 105–112.

Barrientos, A., Byrne, J., Villa, J. M., & Pena, P. (2013). *Social transfers and child protection* (Office of Research Working Paper). New York, NY: UNICEF. Retrieved from http://www.unicef-irc.org/publications/691. Accessed on December 3, 2016.

Beegle, K., & Krutikova, S. (2007). *Adult mortality and children's transition into marriage* (Policy Research Working Paper 4139). Washington, DC: World Bank.

Behrman, J. R., Gallardo-Garcia, J., Parker, S. W., Todd, P. E., & Velez-Grajales, V. (2011). *Are conditional cash transfers effective in urban areas? Evidence from Mexico* (PIERWorking Paper Archive No. 11-024). Philadelphia, PA: Penn Institute for Economic Research, Department of Economics, University of Pennsylvania.

Bertranou, F., & Maurizio, R. (2012). Semi-conditional cash transfers in the form of family allowances for children and adolescents in the informal economy in Argentina. *International Social Security Review*, *65*(1), 53–72.

Betancourt, T., Williams, T., Kellner, S. E., Gebre-Medhin, J., Hann, K., &Kayiteshonga, Y. (2012). Interrelatedness of child health, protection and well-being: An application of the SAFE model in Rwanda. *Social Science & Medicine*, *74*, 1504–1511.

Bilson, A., & Cox, P. (2007). Caring about poverty: Alternatives to institutional care for children in poverty. *Journal of Children & Poverty*, *13*(1), 37–55.

Borkum, E. (2012). Can eliminating school fees in poor districts boost enrollment? Evidence from South Africa. *Economic Development and Cultural Change*, *60*(2), 359–398.

Bower, C. (2003). The relationship between child abuse and poverty. *Agenda*, *56*, 84–87.

Boyden, J., Pankhurst, A., &Tafere, Y. (2012). Child protection and harmful traditional practices: Female early marriage and genital modification in Ethiopia. *Development in Practice*, *22*(4), 510–522.

Cabral, C., & Speek-Warnery, V. (2005). *Voices of children: Experiences with violence*. Washington, DC: UNICEF–Georgetown.

Center for Development and Population Activities (CEDPA). (2001). *Adolescent girls in India choose a better future: An impact assessment*. Washington, DC: Author.

Clacherty, G., Donald, D., & Clacherty, A. (2004). *What South African children say about corporal punishment: "I want her to talk with me when I make a mistake."* Pretoria, South Africa: Save the Children Sweden, Regional Office for Southern Africa.

Clacherty, G., Donald, D., & Clacherty, A. (2005). *Zambian children's experience of corporal and humiliating punishment: A quantitative and qualitative survey. Summary Report*.Pretoria, South Africa: Save the Children Sweden, Regional Office for Southern Africa.

Cluver, L. D., Orkin, F. M., Meinck, F., Boyes, M. E., Yakubovich, A. R., & Sherr, L. (2016). Can social protection improve sustainable development goals for adolescent health? *PLoS One*, *11*(10), e0164808. doi:10.1371/journal.pone.0164808

Covarrubias, K., Davis, B., & Winters, P. (2012). From protection to production: Productive impacts of the Malawi Social Cash Transfer scheme. *Journal of Development Effectiveness*, *4*(1), 50–77.

Cunha, N., Pellerano, L., Mueller, J., Lledo, V., Xiao, Y., & Gitton, P. (2013). *Towards a Mozambican social protection floor. Consolidating a comprehensive social protection system in Mozambique: Analysis of policy alternatives and costs* (Extension of Social Security ESS Paper No. 41). Geneva, Switzerland: ILO.

Deb, S., &Modak, S. (2010). Prevalence of violence against children in families in Tripura and its relationship with socio-economic factors. *Injury & Violence*, *2*(1), 5–18.

de Hoop, J., & Rosati, F. (2012). *What have we learned from a decade of child labour impact evaluations?* Geneva, Switzerland: ILO.

Dellar, R. C., Dlamini, S., & Karim, Q. A. (2015). Adolescent girls and young women: Key populations for HIV epidemic control. *Journal of the International AIDS Society*, *18*(2, Suppl. 1), 19408. doi:10.7448/IAS.18.2.19408

Department of Social Development, South Africa (DSD); SASSA (South African Social Security Agency); UNICEF South Africa. (2012). *The South African Child Support Grant impact assessment: Evidence from a survey of children, adolescents and their households* (Pretoria). Retrieved from http://www.unicef.org/southafrica/SAF_resources_csg2012s.pdf. Accessed December 20, 2016.

Evans, R., & Mayer, R. (2012). Global priorities against local context: Protecting Bhutanese refugee children in Nepal. *Development in Practice*, *22*(4), 523–535.

Fayyad, J., Farah, L., Cassir, Y., Salamoun, M., & Karam, E. (2010). Dissemination of an evidence-based intervention to parents of children with behavioral problems in a developing country. *European Child & Adolescent Psychiatry*, *19*(8), 629–636.

Fiszbein, A., & Schady, N. (2009). *Conditional cash transfers: Reducing present and future poverty.* Washington, DC: World Bank. Retrieved from https://openknowledge.worldbank.org/handle/10986/2597. Accessed December 2, 2016.

García, M., & Moore, C. M. T. (2012). *The cash dividend: The rise of cash transfer programs in sub-Saharan Africa.* Washington, DC: World Bank. Retrieved from https://openknowledge.worldbank.org/handle/10986/2246. Accessed December 12, 2016.

Giashuddin, S., Rahman, A., Rahman, F., Mashreky, S. R., Chowdhury, S. M., Linnan, M., & Shafinaz, S. (2009). Socioeconomic inequality in child injury in Bangladesh—Implication for developing countries. *International Journal for Equity in Health*, *8*(7), 8.

Harper, C., Jones, N., Mendoza, R., Stewart, D., & Strand, E. (Eds.). (2012). *Children in crisis: Seeking child-sensitive policy responses.* Basingstoke, England: Palgrave Macmillan

Heymann, J. (2006). *Forgotten families: Ending the growing crisis confronting children and working parents in the global economy*. Oxford, England: OUP.

Human Rights Watch (HRW). (2006). *Swept under the rug abuses against domestic workers around the world.* New York, NY: Author.

International Labor Organization (ILO). (2012). *Social protection assessment based national dialogue: Towards a nationally defined social protection floor in Indonesia* (Jakarta). Retrieved from http://www.ilo.org/jakarta/whatwedo/publications/WCMS_195572/lang--en/index.htm. Accessed on December 12, 2016.

International Labor Organization (ILO). (2013). *World report on child labour: Economic vulnerability, social protection and the fight against child labour* (Geneva). Retrieved from http://www.ilo.org/ipec/Informationresources/WCMS_178184/lang--en/index.htm. Accessed December 12, 2016.

International Labor Organization (ILO). (2014). *World social protection report 2014/15: Building economic recovery, inclusive development and social justice.* Geneva, Switzerland: ILO.

International Labor Organization (ILO). (2015). *World report on child labor 2015.* Retrieved from www.ilo.org/ipecinfo/product/download.do?type=document&id=26977. Accessed March 25, 2017.

International Monetary Fund (IMF). (2013). *World economic outlook October 2013: Transitions and tensions* (Washington, DC). Retrieved from http://www.imf.org/external/pubs/ft/weo/2013/02/. Accessed December 20, 2016.

Jones, L., Bellis, M., Wood, S., Hughes, K., McCoy, E., Eckley, L., . . . Officer, A. (2012). Prevalence and risk of violence against children with disabilities: A systematic review and meta-analysis of observational studies. *Lancet*, *380*(9845), 899–907.

Kabir, M., Afroze, R., & Aldeen, M. (2007). *Impact assessment of adolescent development programme (ADP) of BRAC*. Dhaka, Bangladesh: Research and Evaluation Division, BRAC.

Lalor, K. (1999). Street children: A comparative perspective. *Child Abuse and Neglect*, *23*(8), 759–770.

Leach, F., Fiscian, V., Kadzamira, E., Lemani, E., & Machakanja, P. (2003). *An investigative study of the abuse of girls in African schools.* London, England: DFID.

Luke, N., & Kurz, K. (2002). *Cross-generational and transactional sexual relations in Sub-Saharan Africa: Prevalence of behavior and implications for negotiating safer sexual practices*. Washington, DC: International Center for Research on Women.

Marcus, R. (2013). *The relationship between poverty and violations of children's right to protection in low- and middle-income countries: A review of the evidence.* London, England: ODI.

Marcus, R. (2014). *Child protection violations and poverty in low- and middle-income countries: Background note.* London, England: ODI.

Mathews, S., Abrahams, N., Jewkes, R., Martin, L. J., & Lombard, C. (2013). The epidemiology of chilid homicides in South Africa. *Bulletin World Health Organization*, *91*(8), 562–568. doi:10.2471/BLT.12.117036.pmid:23940403

Minujin, A., & Nandy, S. (Eds.). (2012). *Global child poverty and well-being: Measurement, concepts, policy and action.* Bristol, England: Policy Press.

Monchuk, V. (2014). *Reducing poverty and investing in people: The new role of safety nets in Africa.* Washington, DC: World Bank. Retrieved from https://openknowledge.worldbank.org/handle/10986/16256. Accessed December 12, 2016.

Naker, D. (2005). *Violence against children: The voices of Ugandan children and adults*. Kampala, Uganda: Raising Voices, Save the Children in Uganda.

Organization for Economic Cooperation and Development (OECD). (2014). *OECD Family Databa*se (Paris). Retrieved from www.oecd.org/social/family/database. Accessed November 24, 2016.

Ortiz, I., Moreira Daniels, L., & Engilbertsdóttir, S. (2012). *Child poverty and inequality: New perspectives.* New York, NY: UNICEF. Retrieved from http://www.unicef.org/socialpolicy/index_62108.html. Accessed December 12, 2016.

Otoo-Oyortey, N., & Pobi, S. (2002). *Early marriage and poverty—Exploring links for policy and programme development.* London, England: Forum on Marriage and the Rights of Women and Girls.

Patel, L., Hochfeld, T., & Moodley, J. (2013). Gender and child sensitive social protection in South Africa. *Development Southern Africa*, *30*(1), 69–83.

Pearn, J. (2003). Children and war. *Journal of Paediatric Child Health*, *39*, 166–172.

Pedersen, K. H., Mukred, A., & Qaid, E. (2008). *Evaluation of "Integrated Action on Poverty and Early Marriage" Programme in Yemen*. Oxford, England: Oxfam GB.

Pereznieto, P., Montes, A., Routier, S., & Langston, L. (2014). The cost and economic impact of violence against children. Retrieved from https://www.childfund.org/uploadedFiles/public_site/media/ODI%20Report%20%20The%20cost%20and%20

economic%20impact%20of%20violence%20against%20children.pdf. Accessed on December 3, 2016.

Pinheiro, P. S. (2006). *World report on violence against children*. New York, NY: United Nations.

Plan International. (2006). *Suffering to succeed? Violence and abuse in schools in Togo*. Woking, England: Plan International.

Ruiz-Casares, M. (2009). Unintentional childhood injuries in Sub-Saharan Africa: An overview of risk and protective factors. *Journal of Health Care for the Poor and Underserved*, *20*, 17.

Russon, C. (2000). *Evaluation of the Sara Communication Initiative: Final summary*. Nairobi, Kenya: UNICEF ESARO.

Sanfilippo, M., de Neubourg, C., & Martorano, B. (2012). *The impact of social protection on children: A review of the literature* (UNICEF Office of Research Working Paper). New York, NY: UNICEF. Retrieved from http://www.unicef-irc.org/publications/666. Accessed November 2, 2016.

Save the Children. (2012). A *chance to grow: How social protection can tackle child malnutrition and promote economic opportunities* (London). Retrieved from https://everyone. savethechildren.net/sites/everyone.savethechildren.net/files/wp-content/uploads/A-Chance-to-Grow-Asia-low-res.pdf. Accessed November 12, 2016.

Shields, N., Nadasen, K., & Piece, L. (2008). The effects of community violence on children in Cape Town, South Africa. *Child Abuse & Neglect*, *32*, 589-601.

Small Arms Survey (SAS). (2006). Few options but the gun: Angry young men. In *SAS Small Arms Survey 2006: Unfinished Business*. New York, NY: OUP.

Understanding Children's Work (UCW). (2011). Understanding Children's Work in Bangladesh, Country Report. Rome: UCW. Retrieved from www.ucw-project.org/.../ Bangladesh_child_labour_report20111125_094656.pdf. Accessed on December 16, 2016.

United Nations (1990). Convention on the rights of the child. Retrieved from http://www. ohchr.org/EN/ProfessionalInterest/Pages/CRC.aspx. Accessed February 8, 2017.

United Nations. (2000). *Child soldiers: Vital statistics life on the front line* (UN cyber school bus briefing). New York, NY: Author.

United Nations Children's Fund (UNICEF). (2008a). *Social protection in eastern and southern Africa: A framework and strategy for UNICEF*. Retrieved from https://www. unicef.org/socialpolicy/files/Social_Protection_Strategy(1).pdf. Accessed March 22, 2017.

United Nations Children's Fund (UNICEF). (2008b). *UNICEF child protection strategy* (Executive Board, annual session 2008). New York, NY: Author.

United Nations Children's Fund (UNICEF). (2009). *Evaluation of "My future is my choice."* New York, NY: Author.

United Nations Children's Fund (UNICEF). (2010). *Child disciplinary practices at home: Evidence from a range of low- and middle-income countries*. New York, NY: Author.

United Nations Children's Fund (UNICEF). (2011). *Violence against children in Tanzania: Findings from a national survey 2009*. Dares Salaam, Tanzania: Government of Tanzania.

United Nations Children's Fund (UNICEF). (2012). *Integrated social protection systems: Enhancing equity for children* (New York). Retrieved from https://www.unicef.org/

socialprotection/framework/files/UNICEF_SPSFramework_whole_doc.pdf. Accessed December 2, 2016.

United Nations Children's Fund (UNICEF). (2013). *The state of the world's children 2013: Children with disabilities* (New York). Retrieved from http://www.unicef.org/sowc2013/. Accessed November 12, 2016.

United Nations Children's Fund (UNICEF). (2014). *The state of the world's children 2014 in numbers: Every child counts*. New York, NY: Author. retrieved from http://www.unicef.org/publications/index_71829.html. Accessed November 2, 2016.

United Nations Children's Fund (UNICEF). (2016). The state of the world's children 2016. Retrieved from https://www.unicef.org/sowc2016/. Accessed November 2, 2016.

United Nations Children's Fund (UNICEF) & International Labor Organization (ILO). (2013). *Supporting workers with family responsibilities: Connecting child development and the decent work agenda* (New York and Geneva). Retrieved from http://www.ilo.org/travail/areasofwork/work-and-family/WCMS_217181/lang--en/index.htm. Accessed November 2, 2016.

United Nations Development Program (UNDP). (2013). *Humanity divided: Confronting inequality in developing countries* (New York). Retrieved from http://www.undp.org/content/dam/undp/library/Poverty%20Reduction/Inclusive%20development/Humanity%20Divided/HumanityDivided_Full-Report.pdf. Accessed December 20, 2016.

United Nations Development Program (UNDP). (2014). *Human Development Report 2014: Sustaining human progress, reducing vulnerabilities and building resilience*. New York, NY: Author.

United Nations Educational, Scientific, and Cultural Organization (UNESCO). (2014). *Teaching and learning: Achieving quality for all. Education for All global monitoring report2013/14* (Paris). Retrieved from http://unesdoc.unesco.org/images/0022/002256/225660e.pdf. Accessed December 20, 2016.

United Nations Fund for Population Activities (UNFPA). (2012). *Marrying too young: End child marriage*. New York, NY: UNFPA.

UN Women. (2012). *Violence against women prevalence data: Surveys by country*. New York, NY: Author.

Van Blerk, L. (2008). Poverty, migration and sex work: Youth transitions in Ethiopia. *Area*, *40*(2), 245–253.

Verma, S. (1999). Socialization for survival: Developmental issues among working street children in India. In M. Raffaelli & R. Larson (Eds.), *Developmental issues among homeless and working street youth*. San Francisco, CA: Jossey-Bass.

World Bank. (2005). *Ethiopia—Risk and vulnerability assessment*. Washington, DC: World Bank. Retrieved from http://documents.worldbank.org/curated/en/562701468030238686/Ethiopia-Risk-and-vulnerability-assessment. Accessed March 25, 2017.

World Bank. (2014). *World Development Report 2014: Risk and opportunity—Managing risk for development* (Washington, DC). Retrieved from http://go.worldbank.org/OSAT4FHFP0. Accessed December 10, 2016.

World Bank. (2015). *World development indicators: Distribution of income or consumption*. Washington, DC: Author.

World Health Organization (WHO) & ISPCAN (International Society for the Prevention of Child Abuse and Neglect) (2006). *Preventing child maltreatment. A guide to taking action and generating evidence*. Geneva, Switzerland: WHO.

World Vision UK. (2013). *Untying the knot: Exploring early marriage in fragile states*. Milton Keynes, England: Author.

Wulczyn, F., Daro, D., Fluke, J., Feldman, S., Glodek, C., & Lifanda, K. (2010). *Adapting a systems approach to child protection: Key concepts and considerations*. New York, NY: UNICEF.

Mental Health Challenges and Interventions for Adolescents

THE FIRST 1,000 WEEKS

Lorraine Sherr

Adolescent Mental Health

Both adolescent research and mental health research have been poorly served by funding, support, and provision. When these two are combined—adolescent mental health—a real challenge emerges. There is now an incontrovertible evidence base on the importance of early child development (Lu et al., 2016) and how early provision and achievement can play a key role in determining lifelong health and achievement. But, why stop there? The evidence for early child intervention does not necessarily preclude adolescent provision and need. In the absence of ECD of quality or interventions at the ECD stage—is it too late? Is it possible there is a continuum of developmental gain or that early deprivation can be redeemed? Adolescence is clearly the time—the "not-too-late" time. Adolescence is the vital final preparation for adulthood and should not be overlooked. The first 1,000 days have become a focus for policy and provision—turning the spotlight on early child development. But, what if we adjusted that to the first 1,000 *weeks*? That would directly incorporate all of adolescence—up to age 18—and perhaps be a more appropriate focus for input. It seems shortsighted to pit one developmental era against another when the totality of childhood experience contributes not only to the future of the individual but also to the quality of the individual's present.

There is important justification for focusing on adolescence as many mental health problems first emerge during this time. Furthermore, behaviors adopted in adolescence may have important effects on determining onward exposure to risks, and future pathways may be set in place by decisions and actions at this time. This includes commencement of health-injurious behaviors such as smoking, alcohol imbibing, and drug use. Sexual debut and risk may have lifelong consequences, especially if such behaviors result in exposure to sexually transmitted infections,

unstable relationships, or teenage pregnancy. On the positive side, adolescence presents an exciting opportunity. Prevention may be well placed. Adaptive behaviors are also an option, and resilience and behavior change as well as decision-making and negotiation skills are assets in this life course time.

This chapter examines mental health—both negative and positive—in adolescents. The range of mental health considerations is wide and includes factors that affect mood, thinking, and behavior—from everyday worries to more serious and long-term conditions. The chapter also explores ways to maximize input at the adolescence stage in the life course—by prevention, provision, and intervention. Although global adolescence is addressed, the specific needs of adolescents in low- and middle-income settings are highlighted. Mental health encompasses both negative and positive mental health. It includes defined or diagnosed mental health conditions as well as emotional reactions to life circumstances.

What Is Entailed in Adolescent Mental Health?

Adolescence is a time of emerging mental health problems that either first emerge at this time or are first identified and responded to. This determines a considerable burden on adolescent populations and may continue into adult life (Kessler et al., 2007), with long-term support needs. There is good evidence that much adult mental health disorder commences in adolescence (Jones, 2013). There is also good evidence that adolescent mental health is a factor in development, adjustment, attainment, and ultimate adult mental health. Global estimates suggest that as many as 10%–20% of adolescents will experience mental health problems (Kieling et al., 2011). In high-resource settings, diagnosis and access to care allow for the collation of prevalence data for various adolescent mental health problems. However, these figures probably represent gross underestimates or at best a minimal picture. The absence of detailed information for many low- and middle-income settings combined with poor provision and recognition may indicate a hidden burden of mental health in such settings.

Although adolescence is a time of relatively low mortality, the major risks of death are often connected with mental health issues. Indeed, the rates of mental health issues are startlingly high (Belfer, 2008), with authors reporting rates as high as 20% of children and adolescents globally affected and one in two (50%) of all adult mental health disorders recording an adolescent onset. The World Health Organization (WHO; 2016) report listed the major causes of adolescent death as "road injury, HIV, suicide, lower respiratory infections and interpersonal violence." There are clear mental health overlays to some of these.

Road injury covers the entire gamut of road traffic accidents, but underneath these statistics are the possibility of adolescent driving behavior and addictive or substance abuse behavior (e.g., alcohol or drugs) often associated with an elevated number of road traffic accidents. Adolescent road use behavior and adolescent

presence in areas of a high amount of traffic accidents may contribute to their chances of involvement and harm.

HIV infection in adolescents can be specifically affected by mental health. Mental health issues can elevate the chances of infection in the first place and also play a role in determining the adjustment to disease and thereby the outcome. Those with heightened mental health problems are more likely to be infected with HIV. Those with HIV are more likely to experience mental health problems—related to diagnosis, treatment, and life in the presence of HIV. Even in the presence of treatment, mental health can affect adherence to treatment and reduce treatment efficacy.

Suicide places a disproportionate burden on adolescents—compounded by the higher rate in those with a preexisting mental health diagnosis. A recent study in South Africa with a sample of 3,515 adolescents showed past-month suicidality rates were 3.2% of adolescents attempting, 5.8% planning, and 7.2% reporting suicidal ideation (Cluver et al., 2015). Furthermore, this longitudinal study showed how baseline mental health was an important factor in follow-up suicidal behaviors and how exposure to accumulated stressors enhanced such problems.

Violence is also an adolescent challenge with high mental health cost and long-term suffering. Both anxiety and depression were noted as contributing to the top five causes of years lost to disability in young adolescents globally, with similar findings for low-, middle-, and high-income reports. Depression is recorded with a global prevalence of 3% in children, and this doubles in adolescent years to 6% (Costello et al., 2006).

Adolescent mental health can affect quality of life (Jonsson et al., 2016). In this review of 41 studies, various mental health diagnoses for adolescents affected quality of life. They found that attention deficit disorder, autism spectrum disorder, and motor and intellectual disabilities were consistently associated with a negative effect on quality of life.

POSITIVE MENTAL HEALTH SHOULD NOT BE OVERLOOKED

Not all adolescents suffer from mental health problems. Not all adolescents respond to trauma with reduced quality of life or increased problems. Among adolescents, there are competencies, resilience, as well as coping and adaptation. There is a tendency for research to count, document, and describe negative mental health with more enthusiasm and rigor than positive mental health. Yet, the emerging data do show the importance of understanding and promoting growth, resilience, and positive outcomes.

There is evidence that mental health promotion interventions in both high and low- and middle-income country (LMIC) settings can be effective (Barry et al., 2013). This review looked at adolescents in schools surrounded at times by armed conflict. These studies provide strong evidence for positive effects on well-being— be it emotional, behavioral, self-esteem, or active coping. However, this review

cautioned about the importance of disaggregating data by gender and age and of ensuring that programs were of high quality if they were to be effective. Overall, the data suggest that multiple components and complex interventions are the most effective.

What Predicts Adolescent Mental Health?
Proximal and Distal Factors

To understand the range and extent of mental health problems in adolescents, there has been considerable work exploring the predictors and correlates of mental health problems. Such insight can direct prevention and interventions and go some way to understand causal mechanisms and links.

DRIVERS OF ADOLESCENT MENTAL HEALTH PROBLEMS

As many mental health problems first emerge or are identified in adolescence, there are numerous potential drivers (Das et al., 2016). Development under adversity has been investigated, with the ramifications of poverty, disaster, war, abuse, poor nutrition, inadequate housing, violence, and poor parenting some examples. The consequence for adolescent mental health are severe. Both genetic and environmental theories exist to explain the etiology of adolescent mental health problems. Stressors in the environment, quality and quantity of parenting and care, and a diverse range of experiential situations have been explored as potential drivers, either in prompting the problems in the first place or exacerbating them.

DEVELOPMENT UNDER ADVERSITY

Children who have experienced some form of trauma—or indeed multiple forms of trauma—may be particularly susceptible to mental health reactions. The toxic stress concept has elucidated how constant exposure to multiple stressors eventually can take a toll on adolescents (Shonkoff et al., 2012). A recent review on trauma and post-traumatic stress disorder showed that prevention interventions may be effective (Gillies et al., 2016). The type of traumas that adolescents are exposed to include sexual abuse, war, community violence, physical trauma, natural disaster, interpersonal violence, life-threatening illness, physical abuse, or maltreatment. Post-traumatic stress disorder was significantly less likely to be diagnosed in those who received psychological therapy in contrast to no treatment controls. Furthermore, PTSD symptoms, when they were present, were reduced in the treatment groups with measures up to a month posttreatment. A further review also showed that psychological therapies were effective in treating symptoms when PTSD was diagnosed (Gillies, 2016).

In order to address the skew of data from high-income studies, initiatives such as the Drankenstein project (Stein et al., 2015) are under way to gather comprehensive data in low- and middle-income settings with a specific remit to explore longer term psychological determinants of health through childhood. Mental health needs to be viewed within the complexity of the context of life experience and how adolescents navigate through such experiences. There are well-documented mental health sequelae from a number of life situations, including physical illness (parental or adolescents themselves) and sudden life changes such as death, bereavement, accident, migration, divorce, and unemployment.

GENDER AND ADOLESCENT MENTAL HEALTH

For many mental health conditions, gender differences have been observed. For example, in relation to depression, there seems to be no systematic differences according to gender in childhood (Hankin et al., 1998), but by the age of 13 more girls than boys exhibit depressive symptoms (Chen & Yu, 2015). A number of theories have been explored to account for such differences, examining genetics, relationship patterns, environmental influences, personality factors such as self-control and regulation (Davidson et al., 2015), and gender role considerations. For many diagnosed mental health conditions, gender variation has been explored. For example, first onset of schizophrenia spectrum psychoses was examined in Finland, where more girls were diagnosed than boys. The array of symptoms displayed also varied by gender, with girls more often displaying mood symptoms and boys tending toward aggressive behaviors, alcohol misuse, and isolation. Of interest was that environmental factors had a different impact according to gender, with family adversities more numerous for girls, who were also more likely to be referred on for specialized care than boys (Talonen et al., 2017). A large review of mental health emergencies showed an association between behavioral disorders and males on the one hand and self-injurious and eating disorders with females (Porter et al., 2016).

The literature shows a pattern where early onset disorders such as conduct problems and child autism have a marked elevation in male children (Zahn-Waxler et al., 2008). Yet, the adolescent onset disorders such as depression and anxiety are often recorded more frequently in females. This does not mean that they are not experienced by both genders. Furthermore, it is unclear to what extent willingness to seek treatment, as well as gender-attuned diagnoses, may contribute to this phenomenon. The pathways from origins to expression of different aspects of clinical problems are unclear. Furthermore, although there may be differences, there are also a number of similarities that cannot be overshadowed by prevalence statistics where both genders suffer—perhaps in differing ways. To fully understand gender differences, it is important to view them in the light of the variety of socially constructed roles and relationships, values, power dynamics, and societal attributes that are differentially attributed in many cultures (Vlassoff, 2007).

IS THERE A DIFFERENCE IN LOW-, MIDDLE-, AND HIGH-INCOME COUNTRIES?

The mental health profile for adolescents seems similar with more drivers of burden prevalent in LMICs, but less research and fewer resources. Certain background factors in low- and middle-income settings may predispose to elevated mental health problems. Risk profiles, risk drivers, and protective factors may be affected by environment or culture (Walker et al., 2011). Research has shown a differential rate and exposure to poverty, violence, premature birth, infectious diseases, disease treatment, and specialized service provision (Stein et al., 2015), as well as a consideration of multiple or accumulated risk exposure (Lund, 2014).

In a recent review of reviews, Das et al. (2016) summarized systematic review evidence on the efficacy of interventions. The systematic reviews they identified covered 604 studies in areas of school, community, digital, and suicide interventions. Of these, the sample groups were almost exclusively drawn from high-income settings, with a single exception of a study in Tanzania. It is a glaring gap in the evidence, and adolescents in low- and middle-income settings are currently dramatically underserved and understudied. They run the risk of being recipients of knowledge transferred from high-income settings, which may or may not be transferable and may not reflect a number of background factors, such as economic standards, social and health infrastructures, school services, workforce expertise, and government provision of services, let alone cultural and social norms. Where there is research, some of the mental health problems seem fairly universal in this age group. What does differ is the background provision, the health and welfare sector responses, the cultural responses, the presence and impact of stigma, and the economic ramifications for both the adolescent and the family.

A more targeted recent systematic review on the effectiveness of mental health promotion interventions based in LMICs was able to identify 22 studies—the majority of which were school based. Encouraging evidence suggests strong interventions, particularly in conflict areas (Barry et al., 2013); yet, despite these promising studies, scale up in low- and middle-income settings has not been automatic. For some conditions, there are beliefs about absence or presence in certain environments, driven often by ill-informed assumptions rather than empirical data. For example, eating disorders are often seen as a high-income problem, yet a recent review in Latin America (Kolar et al., 2016) identified that eating disorders were commonly found.

Many of the world's adolescents reside in LMIC settings. Within those settings, adolescents comprise a high proportion of the population. A recent review (Kolar et al., 2016) in low-income settings showed that, despite large gaps, there is an emerging evidence base showing that interventions are viable and effective in a multitude of settings. Furthermore, they point out the utility of harnessing existing structures, such as school/education or health settings, to provide a platform for such provision. When reviews focus specifically on low- and middle-income

settings (Knerr et al., 2013), studies can be identified and interventions are available with backup evidence (Lachman et al., 2014).

What Are the Consequences of Adolescent Mental Health?

Mental health disorders can result in a wide range of impairments in various domains, such as emotional, cognitive, and social (Esch et al., 2014). A recent review noted that substance use and disruptive behaviors had a link to school disengagement and educational attainment—more so than mood or anxiety disorders. Although the links are complex, the "downward spiral" may have life-long consequences for adolescents.

ADOLESCENT MENTAL DISORDERS AND RAMIFICATIONS FOR QUALITY OF LIFE

It is important to understand the severe impact of mental health and behavioral disorder diagnoses on adolescent well-being and quality of life. A recent review explored this concept and found quality-of-life measures available for conditions including neurodevelopmental disorders, attention deficit hyperactivity disorder, autism spectrum disorder, motor disorders, and intellectual disability (Jonsson et al., 2016). The comprehensive review demonstrated that self-reported global quality of life was lowered when compared to typical/healthy controls—accurate for various disorders and different dimensions of quality of life. These authors further pointed out that caregiver ratings on behalf of adolescents were less accurate than self-ratings, and cautions about the ability of caregivers to accurately appreciate the quality-of-life impacts on adolescents, who should provide self-ratings if more accurate measures are required. Furthermore, this review highlighted the absence of good data for a wide range of mental disorders, such as depression, anxiety, eating disorders, and schizophrenia, clearly demonstrating an enormous gap in our knowledge and understanding in this area or the oversight of the importance of quality of life for such adolescents.

MENTAL HEALTH IN THE FAMILY

The burden of mental health problems may not be confined to the adolescent as shouldering the burden, but there may be cause to explore the effects of parental mental health—especially severe mental health conditions—on adolescent outcomes. A 10-year follow-up study of the adolescent children of parents diagnosed with panic disorder, major depression, or both showed an array of elevated problems in the children, with continued appearance of new disorders as

they progressed through adolescence (Hirshfeld-Becker et al., 2012). Moreover, it is important to understand if interventions for such adolescents are established and effective (Bee et al., 2014).

Adolescent mental health needs to be viewed within their life context, understanding those around them in terms of etiology, burden, support, and well-being. Evidence suggests that siblings of adolescents with mental health diagnoses have elevated psychopathology (Ma et al., 2015). The mechanisms for these effects are unclear, but the findings clearly identify the need for whole-family approaches to adolescent mental health. A national longitudinal study (Hamilton, 2005) showed that having grandparents in the household was linked to less deviant behavior and lower depressive symptoms among certain populations. However, living in a household with other adults, such as aunts, uncles, and cousins, was linked to greater depressive symptoms. On the other hand, the literature suggests that internalizing symptoms—which are relatively common during adolescence—have a considerable impact on family members (Hughes & Gullone, 2008).

Which Interventions Can Improve Adolescent Mental Health?

MENTAL HEALTH SERVICES FOR ADOLESCENTS

Mental health services for adolescents have been much neglected. They are often underfunded, referrals and access to services for adolescents are wanting, and the provision of a high-quality workforce has not been optimum. As such, there is a global underprovision for mental health problems. Studies not only claimed that at least 1 in 10 adolescents will have some form of mental health difficulty at some point, but also noted that under a third seek treatment or help (Kaushik et al., 2016). Although insufficient services may be an issue, obstacles exist in the access pathway, particularly because of the stigma (Moses, 2010) linked with adolescent and child mental health experiences (Daumerie et al., 2012). A systematic review of 42 studies confirmed the widespread nature of such stigma, and as a consequence of both public and self-stigma, secrecy abounded and service uptake was hampered (Kaushik et al., 2016). Belfer (2008) categorized five elements of underprovision related to economic factors, manpower inadequacies, training insufficiencies, service provision, or ineffective (or absent) policy. It seems that awareness needs to precede efficacious interventions (Hoven et al., 2008)—and often such awareness is lacking (Graeff-Martins et al., 2008).

Formal care is one element of need. However, good parenting and day-to-day care are seen as important factors in health development and avoiding adolescent mental health problems. Poor care can cover the absence or lack of care, as well as care strategies that are unhelpful. For example, van der Watt (2014) showed the links between parenting style, attachment, and bullying. Parenting in the presence of mental health may affect adolescent mental health in turn. Parenting that involves violence, abuse, relationship strain, and disengagement can affect adolescents.

Overall, there are some interesting possibilities that are gaining traction that may directly affect adolescent mental health. These can be seen as prevention interventions to stop problems occurring in the first place or deteriorating if already there. They can be interventions to promote positive mental health or prevent/reduce negative mental health. The evidence is summarized, bearing in mind that the majority of evidence emerges from high-income countries, with a lack of clarity on how these findings transfer to low- and middle-income settings, let alone the infrastructure and cultural background that may affect the generalizability of such findings (Salam et al., 2016). Although there is growing evidence of effective interventions to hand across an array of problems, access is a decided limiting factor (O'Brien et al., 2016). This is accounted for by inadequate knowledge and expertise for identification and referral from key gatekeepers in the processes, as well as the absence of sufficient services or appropriately trained personnel to respond. As mental health provision is often a low priority or an area of neglect, reach and roll out of proven interventions can be hampered.

There are a number of key interventions with a growing evidence base. Pharmacological interventions are not reviewed in this chapter. Various interventions that hold promise relate to the *type of intervention*, such as cash transfers, psychological interventions (either group or individual), or sport (Liddle et al., 2017); the *people involved* in the intervention, such as parenting or peer programs; or the *location* of the intervention, such as school based, home based, or cyber interventions. A few key examples are discussed in this chapter—although not exhaustively.

CASH TRANSFERS AND SOCIAL PROTECTION

Given that poverty is a direct or indirect driver of many adolescent mental health problems, a growing body of evidence has explored the utility of cash transfers for enhancing outcomes. Cash transfers simply refer to regular small payments on the one end of a continuum and behaviorally linked incentive payments at the other. Studies have looked at conditional versus unconditional cash payments. In the area of adolescent mental health, the role of cash transfers is often not the direct priority of the study, but the provision of cash may well be seen as a mediator in reduced emotional trauma, especially when such mental health factors are part of a complex pathway to outcomes. For example, a recent analysis has shown that cash transfers may reduce adolescent sexual risk behaviors (Cluver et al., 2016). When these transfers are supplemented with good care, including emotional care, the effects are greater (Cluver et al., 2014). Furthermore, when the pathways to such effects are explored (Cluver et al., 2016), it seems that risk behaviors are mediated by increased psychosocial problems. Thus, cash transfers may hold some promise for mental health problem amelioration, especially when such mental health problems are driven by poverty-related challenges.

PARENTING PROGRAMS

There is sound evidence on the efficacy of parenting programs. There have been reviews in both high-income and LMIC settings to this effect. Specific forms of parenting programs have been explored in an effort to understand the core components of such programs. For example, some are based on mindfulness (Townshend et al., 2016) or other theoretical bases. Some explore alternative discipline and positive parenting skills. Family-based programs may be highly effective with some habitual behaviors. For example, a smoking review provided a rigorous overview of studies, data, complexity, variables, and effects (Thomas et al., 2015). The review concluded that there is moderate quality evidence indicating the positive efficacy of family-based interventions in preventing adolescents from smoking behaviors in the first place.

There have been numerous systematic reviews on parenting programs as an intervention for specific mental health challenges in adolescents (Zwi et al., 2011), to promote well-being in some form, or to review a defined therapeutic approach (Medlow et al., 2016), such as individual, group, mindfulness training (Townshend et al., 2016), or the like. The literature is complex as often programs directed at parents are not necessarily labeled as a parenting program and may be missed in systematic reviews. Various reviews may not concentrate on adolescents or disaggregate studies according to child age. They may locate parenting within the family or community or at a population level (Kato et al., 2015).

Yet, on the whole the various reviews show a consistent body of knowledge showing effective changes (Kuntsche & Kuntsche, 2016) in areas such as reduced substance use (Allen et al., 2016) and eating disorders (Hart et al., 2015). There is also some evidence that combination or compound programs that have multiple components rather than single components may enhance efficacy (Kuhn & Laird, 2014), and generally there is emerging evidence of the cost-effectiveness of such programs (Charles et al., 2011).

PEER INTERVENTIONS

Peers may well be a resource that can be harnessed to good effect. Peer-led parenting programs have been reported and evaluated positively (Munns et al., 2016). Peer interventions need the specific training and preparation of peers, and although there are advantages in terms of connection and good relationships, there are also disadvantages of utilizing peers when this is a substitute for paid social workforce provision.

PSYCHOLOGICAL INTERVENTIONS (INDIVIDUAL AND GROUP)

A wide range of psychological approaches have been tried, including talking therapies with a variety of theoretical approaches, such as family therapy; cognitive behavioral therapy; group, family, or individual therapy; and the like. There

is a good evidence base on the efficacy of such interventions—often with specific adolescent mental health conditions targeted. Gillies et al. (2013) examined the effectiveness of an array of psychological therapies for those diagnosed with post-traumatic stress disorder (Gillies et al., 2013). Using Cochrane-style rigor, they identified 14 studies that included 758 adolescents exposed to a range of traumas, such as disaster, violence (civil, domestic or sexual), as well as road traffic accidents. The data are somewhat skewed as most adolescents were already in contact with some form of trauma support provision. They found consistent evidence of improvement of symptoms, anxiety levels, and depression levels. For those with longer term data, improvement was sustained at 1-year follow-up. This review pointed out the various forms of intervention but with little evidence on relative efficacy.

Many prevention initiatives are targeted at a specific mental health problem. For example, there have been considerable attempts to address the elevated suicidal burden (including ideation, attempts, and completions) among adolescents. Although the link between ideation and attempts is not clear, there are some encouraging data on interventions (Calear et al., 2016). This review identified 28 well-conducted trials, with more than 50% recording some form of significant effect across the spectrum of ideation, attempts, and deliberate self-harm. However, most of these studies were underpowered to explore the specific impact on suicidal completions—and the few post intervention studies have failed to show protective effects (Szumilas & Kutcher, 2011).

Over time, a number of reviews have shown a growing body of evidence related to effective interventions in a variety of contexts for specific conditions such as suicide (Robinson et al., 2013), alcohol (Foxcroft & Tsertsvadze, 2011), drug use (Gates et al., 2006), and eating disorders (Pratt & Woolfenden, 2002).

SCHOOL-BASED PROGRAMS

As many adolescents are in the school system, interventions within that system may hold promise of efficacy and reach. However, many adolescents may not be in school, and mental health problems may be directly associated with disengagement in school provision. In a review of reviews, a synthesis report identified 12 reviews of school-based interventions, covering over 100 single reports. These incorporated both prevention and the promotion of good mental health (Das et al., 2016). An analysis of the global literature showed it is highly skewed toward high-income settings. An overview table (Table 17.1) summarizes some of the school-based interventions available and their findings in terms of effect outcomes.

COMMUNITY-BASED INTERVENTIONS

There is growing evidence that community-based interventions, delivered by a variety of providers, may be effective. These community-based interventions have the advantage of close reach, relevance, cultural adaptability, and potential for sustainability

TABLE 17.1 Summary of School-Based Interventions for Mental Health of Adolescents

Author	Year	LMIC Included	No. of Studies	Any Significant Effects Identified
Calear and Christensen	2010		42 studies (28 programs)	Yes—more effective with mental health trained providers; more effective with targeting for those already exhibiting mental health problems
Cheney et al.	2014	No (confined to United Kingdom)	16 studies (8 interventions)	Yes; unclear (high attrition)
De Silva et al.	2013	No	38 studies	Providing map—did not evaluate effectiveness; majority involved psychological interventions
Foxcroft & Tsertsvadze	2011	51 HIC, 1 India, 1 Swaziland	53 trials	20/53 trials showed some evidence of efficacy; all trials related to alcohol use
Faramand et al.	2011	No, but low-income urban youth		
Fothergill et al.	2003	No—United Kingdom and Europe	0 studies identified	No findings as no studies identified to meet criteria
Harrod et al.	2014	No—1 Australia, 7 United States	8	Yes for short-term knowledge improvements, but insufficient evidence for primary prevention, attitudes, or behaviors
Harlow et al.	2014	No	11	Lack of findings due to absence of controlled study designs
Katz et al.	2013	Not given—appears HIC	28 studies on 16 programs	Few evidence-based, school-based school programs that are effective
Kim and Franklin	2009	HIC	7 studies	Mixed results for solution-based therapy
Mason-Jones et al.	2012	26/27 HIC 1 LIC	27	Yes—cost benefits, reduced health disparities, attendance at secondary care facilities
O'Mara and Lind	2013	HIC	14 reviews	Mixed
Werner-Seidler et al.	2017	78 HIC, 1 Chle, 1 Nepal, 1 Indonesia	81 studies	Yes—small size effects for effect on depression and anxiety prevention; small effects evident at 12-month follow-up

HIC, high-income country; LIC, low-income country; LMIC, low- and moderate-income country.

(Sherr et al., 2016; Skeen et al., 2017). A recent review (Bee et al., 2014) looked at those with serious mental illness and found that community-based interventions were both cost-effective and clinically effective. For children with psychotic symptoms, the data were incomplete. For adolescents with severe depression, they identified 26 trials. Although the meta-analysis showed no specific gains for adolescent mental health or social functioning, there was a well-established effect for reducing parental depressive symptoms and negative parenting behaviors. Furthermore, their review suggested that adolescents were favorable to peer interactions and normalizing activities.

CAN WE MEET THEIR NEEDS IN CYBERSPACE?

Digital technology, web-based interventions, social networking, and the possibilities afforded by the new technologies may provide an exciting and potentially efficacious avenue for provision—especially in low- and middle-income settings (Kauer et al., 2014). Recent reviews have shown great promise—such as web-based mental health programs (Davies et al., 2014). Cognitive behavioral therapy delivered via web-based provision has been shown to be effective (Musiat & Tarrier, 2014), especially in relation to anxiety or depression treatments (Clarke et al., 2015). A systematic review of youth-specific programs showed promise for such programs with the benefit of global reach (Rice et al., 2014). A systematic review of web-based suicide prevention interventions (Perry et al., 2016) could only identify one study that met inclusion criteria—but it did show reductions in suicidal ideation as well as hopelessness and depression—thus showing promise but also indicating the need for more high-quality evidence. However, the new avenues of delivery may also represent new avenues of adversity (Bottino et al., 2015). So, cyberbullying, for example, must also be considered as a new threat to adolescents. Research seems to suggest that there are many parallels between cyberbullying and in-person bullying and the heightened attention to what appears a new phenomenon may be an artifact of press attention, with the fundamental aspects of the problem relatively unchanged (Suzuki et al., 2012). Cyberbullying and cybervictimization seem to be related to mental health (Sourander et al., 2010). Cybersolutions may also be effective in reducing negative behaviors and enhancing mental health (Cross et al., 2016). So, it appears that a new medium not only may enhance or exacerbate known mental health problems and may provide a new and different form and expression of mental health problems, but also may provide a new and exciting avenue for intervention.

Conclusions

There are copious numbers of studies detailing the problems, examining correlates and drivers of adolescent mental health, and listing interventions on a number of fronts. Interventions to prevent mental health problems exist, as do those to treat

or intervene with mental health difficulties. Furthermore, there is abundant evidence of effective interventions to promote positive mental health. It seems that the time for study now needs to give way to a time for action. How much longer will there be an approach to adolescent mental health that encompasses meticulous gathering of data, but poor follow-up and integration of findings into policy and provision? It is also clear that there is no magic bullet. For all the literature, effects are often small, and eradication of the problem is way beyond current reach.

The problems are complex; thus, the solutions may well need to be comprehensive if they are to be effective. The area of study is beset with problems. The adequacy and accuracy of measurement tools are an ongoing challenge—let alone the ability to generalize between settings. There are a number of shortcomings globally that result in an inadequate response to adolescent mental health. This includes underfunding and underresourcing of provision; an absence of priority setting for the numerous interventions that are effective; a failure to address the drivers of adolescent mental health problems, let alone the consequences; and a piecemeal understanding of the prevalence, predictors, effective interventions, and complexities that surround the general area. A relative skew in understanding and reaction exists, with greater insight and provision in high-income settings and more neglect and inadequate provision in low-income settings. This skew works in reverse when the stressors that exacerbate mental health problems, such as poverty, poor infrastructure, and harsh environmental conditions, are often more pervasive in low- and middle-income settings. Yet, for adolescents mental health problems are universal, and the prevalence, by any number of accounts, is greater than the provision.

Mental health problems can cause severe and ongoing suffering, affecting adolescents and those around them in the short and longer terms. The growing knowledge base shows that interventions through home, school, community, or service platforms can consistently make a difference and lead to improvements. The comprehensive number of reviews in the area all seem to advocate for more evidence and more studies. Although evidence-based programming is a sound strategy, the time for gathering evidence may now need to be supplemented with action. How much longer can adolescents wait for the slow machinery to gather, collate, comprehend, and apply the evidence? Globally, mental health is a low priority on public health and services agendas, with lack of attention, action, resources, and support. The Millennium Development Goals showed specific focus and achievement on survival. The new Sustainable Development Goals have raised the bar, with an aspiration for thriving. To reach these goals, there needs to be a concerted effort to provide for adolescent mental health. The dawn of an action agenda must be the next step.

Acknowledgment

References

Allen, M. L., Garcia-Huidobro, D., Porta, C., Curran, D., Patel, R., Miller, J., & Borowsky, I. (2016). Effective parenting interventions to reduce youth substance use: A systematic review. *Pediatrics. 138*(2), pii:e20154425.

Barry, M. M., Clarke, A. M., Jenkins, R., & Patel, V. (2013). A systematic review of the effectiveness of mental health promotion interventions for young people in low and middle income countries. *BMC Public Health*, 13, 835.

Bee, P., Bower, P., Byford, S., Churchill, R., Calam, R., Stallard, P., . . . Abel, K. (2014). The clinical effectiveness, cost-effectiveness and acceptability of community-based interventions aimed at improving or maintaining quality of life in children of parents with serious mental illness: A systematic review. *Health Technology Assessment*, *18*(8), 1–250.

Belfer, M. L. (2008). Child and adolescent mental disorders: The magnitude of the problem across the globe. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, *49*(3), 226–236.

Bottino, S. M., Bottino, C. M., Regina, C. G., Correia, A. V., &Ribeiro, W. S. (2015). Cyberbullying and adolescent mental health: Systematic review. *Cadernos de saúde pública, 31*(3), 463–475.

Calear, A. L., & Christensen, H. (2010). Systematic review of school-based prevention and early intervention programs for depression. *Journal of Adolescence, 33*(3), 429–438.

Calear, A. L., Christensen, H., Freeman, A., Fenton, K., Busby Grant, J., van Spijker, B., & Donker, T. (2016). A systematic review of psychosocial suicide prevention interventions for youth. *European Child & Adolescent Psychiatry, 25*(5), 467–482.

Charles, J. M., Bywater, T., & Edwards, R. T. (2011). Parenting interventions: A systematic review of the economic evidence. *Child: Health*, *Care and Development, 37*(4), 462–474.

Chen, J., & Yu, J. (2015). Sex differences in genetic and environmental influences on adolescent depressive symptoms: A meta-analytic review. *Depression Research and Treatment, 2015*, 476238.

Cheney, G., Schlösser, A., Nash, P., & Glover, L. (2014). Targeted group-based interventions in schools to promote emotional well-being: A systematic review. *Clinical Child Psychology and Psychiatry, 19*(3), 412–438.

Clarke, A. M., Kuosmanen, T., & Barry, M. M. (2015). A systematic review of online youth mental health promotion and prevention interventions. *Journal of Youth and Adolescence, 44*(1), 90–113.

Cluver, L. D., Orkin, F. M., Boyes, M. E., & Sherr, L. (2014). Cash plus care: Social protection cumulatively mitigates HIV-risk behaviour among adolescents in South Africa. *AIDS. 28*(Suppl. 3), S389–S397.

Cluver, L., Orkin, M., Boyes, M. E., & Sherr, L. (2015). Child and adolescent suicide attempts, suicidal behavior, and adverse childhood experiences in South Africa: A prospective study. *The Journal of Adolescent Health, 57*(1), 52–59.

Cluver, L. D., Orkin, F. M., Meinck, F., Boyes, M. E., & Sherr, L. (2016). Structural drivers and social protection: Mechanisms of HIV risk and HIV prevention for South African adolescents. *Journal of the International AIDS Society, 19*(1), 20646.

Cluver, L. D., Orkin, F. M., Yakubovich, A. R., & Sherr, L. (2016). Combination social protection for reducing HIV-risk behavior among adolescents in South Africa. *Journal of Acquired Immunodeficiency Syndromes, 72*(1), 96–104.

Costello, E., Erkanli, A., & Angold, A. (2006). Is there an epidemic of child or adolescent depression? *Journal of Child Psychology and Psychiatry and Allied Disciplines, 47*, 1263e71.

Cross, D., Shaw, T., Hadwen, K., Cardoso, P., Slee, P., Roberts, C., . . . Barnes, A. (2016). Longitudinal impact of the Cyber Friendly Schools program on adolescents' cyberbullying behavior. *Aggressive Behavior, 42*(2), 166–180.

Das, J. K., Salam, R. A., Lassi, Z. S., Khan, M. N., Mahmood, W., Patel, V., & Bhutta, Z. A. (2016). Interventions for adolescent mental health: An overview of systematic reviews. *The Journal of Adolescent Health, 59*(4S), S49–S60.

Daumerie, N., Vasseur Bacle, S., Giordana, J. Y., Bourdais Mannone, C., Caria, A., & Roelandt, J. L. (2012). Discrimination perceived by people with a diagnosis of schizophrenic disorders. International Study of Discrimination and Stigma Outcomes (INDIGO): French results. *Encephale*, *38*(3), 224–231.

Davidson, L. L., Grigorenko, E. L., Boivin, M. J., Rapa, E., & Stein, A. (2015). A focus on adolescence to reduce neurological, mental health and substance-use disability. *Nature*, *527*(7578), S161–S166.

Davies, E. B., Morriss, R., & Glazebrook, C. (2014). Computer-delivered and web-based interventions to improve depression, anxiety, and psychological well-being of university students: A systematic review and meta-analysis. *Journal of Medical Internet Research, 16*(5), e130.

De Silva, S., Parker, A., Purcell, R., Callahan, P., Liu, P., & Hetrick, S. (2013). Mapping the evidence of prevention and intervention studies for suicidal and self-harming behaviors in young people. *Crisis*, *34*(4), 223–232.

Esch, P., Bocquet, V., Pull, C., Couffignal, S., Lehnert, T., Graas, M., . . . Ansseau, M. (2014). The downward spiral of mental disorders and educational attainment: A systematic review on early school leaving. *BMC Psychiatry*, *14*, 237.

Flynn, A. B., Falco, M., & Hocini, S. (2015). Independent evaluation of middle school-based drug prevention curricula: A systematic review. *JAMA Pediatrics*, *169*(11), 1046–1052.

Fothergill, A., Satherley, P., & Webber, I. (2003). A systematic review on the effectiveness of school nurse implemented mental health screening available for adolescents in schools. *Journal of Psychiatric and Mental Health Nursing, 10*(5), 625–626.

Foxcroft, D. R., & Tsertsvadze, A. (2011). Universal school-based prevention programs for alcohol misuse in young people. *Cochrane Database of Systematic Reviews*,(5), CD009113.

Gates, S., McCambridge, J., Smith, L. A., & Foxcroft, D. R. (2006). Interventions for prevention of drug use by young people delivered in non-school settings. *Cochrane Database of Systematic Reviews*,(1), CD005030.

Gillies, D., Maiocchi, L., Bhandari, A. P., Taylor, F., Gray, C., & O'Brien, L. (2016). Psychological therapies for children and adolescents exposed to trauma. *Cochrane Database of Systematic Reviews,* (10), CD012371.

Gillies, D., Taylor, F., Gray, C., O'Brien, L., & D'Abrew, N. (2013). Psychological therapies for the treatment of post-traumatic stress disorder in children and adolescents. *Evidence-Based Child Health, 8*(3), 1004–1116.

Graeff-Martins, A. S., Flament, M. F., Fayyad, J., Tyano, S., Jensen, P., & Rohde, L. A. (2008). Diffusion of efficacious interventions for children and adolescents with mental health problems. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, *49*(3), 335–352.

Hankin, B. L., Abramson, L. Y., Moffitt, T. E., Angell, K. E., Silva, P. A., & McGee, R. (1998). Development of depression from preadolescence to young adulthood: emerging gender

differences in a 10-year longitudinal study. *Journal of Abnormal Psychology*, *107*(1), 128–140.

Harlow, A. F., Bohanna, I., & Clough, A. (2014). A systematic review of evaluated suicide prevention programs targeting indigenous youth. *Crisis*, *35*(5), 310–321.

Hamilton, H. A. (2005). Extended families and adolescent well-being. *The Journal of Adolescent Health, 36*(3), 260–266.

Harrod, C. S., Goss, C. W., Stallones, L., & DiGuiseppi, C. (2014). Interventions for primary prevention of suicide in university and other post-secondary educational settings. *Cochrane Database of Systematic Reviews,* (10), CD009439.

Hart, L. M., Cornell, C., Damiano, S. R., & Paxton, S. J. (2015). Parents and prevention: A systematic review of interventions involving parents that aim to prevent body dissatisfaction or eating disorders. *The International Journal of Eating Disorders, 48*(2), 157–169.

Hirshfeld-Becker, D. R., Micco, J. A., Henin, A., Petty, C., Faraone, S. V., Mazursky, H., . . . Biederman, J. (2012). Psychopathology in adolescent offspring of parents with panic disorder, major depression, or both: A 10-year follow-up. *American Journal of Psychiatry, 169*(11), 1175–1184.

Hoven, C. W., Doan, T., Musa, G. J., Jaliashvili, T., Duarte, C. S., Ovuga, E., . . .; WPA Awareness Task Force. (2008). Worldwide child and adolescent mental health begins with awareness: A preliminary assessment in nine countries. *International Review of Psychiatry, 20*(3), 261–270.

Hughes, E. K., & Gullone, E. (2008). Internalizing symptoms and disorders in families of adolescents: A review of family systems literature. *Clinical Psychology Review, 28*(1), 92–117.

Jones P. (2013). Adult mental health disorders and their age at onset. *British Journal of Psychiatry, 202*(s54), s5e10.

Jonsson, U., Alaie, I., Löfgren Wilteus, A., Zander, E., Marschik, P. B., Coghill, D., & Bölte, S. (2016). Annual research review: Quality of life and childhood mental and behavioural disorders—a critical review of the research. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, Oct 6. doi:10.1111/jcpp.12645. [Epub ahead of print]

Kato, N., Yanagawa, T., Fujiwara, T., & Morawska, A. (2015). Prevalence of children's mental health problems and the effectiveness of population-level family interventions. *Journal of Epidemiology, 25*(8), 507–516.

Katz, C., Bolton, S. L., Katz, L. Y., Isaak, C., Tilston-Jones, T., Sareen, J.; Swampy Cree Suicide Prevention Team. (2013). A systematic review of school-based suicide prevention programs. *Depression and Anxiety, 30*(10), 1030–1045.

Kauer, S. D., Mangan, C., & Sanci, L. (2104). Do online mental health services improve help-seeking for young people? A systematic review. *Journal of Medical Internet Research, 16*(3), e66.

Kaushik, A., Kostaki, E., & Kyriakopoulos, M. (2016). The stigma of mental illness in children and adolescents: A systematic review. *Psychiatry Research, 243*, 469–494.

Kessler, R. C., Amminger, G. P., Aguilar-Gaxiola, S., Alonso, J., Lee, S., & Ustün, T. B. (2007). Age of onset of mental disorders: A review of recent literature. *Current Opinion in Psychiatry, 20*, 359.

Kieling, C., Baker-Henningham, H., Belfer, M., Conti, G., Ertem, I., Omigbodun, O., . . . Srinath, S. (2011). Child and adolescent mental health worldwide: Evidence for action. *Lancet, 378*, 1515–1525.

Kim, J. S., & Franklin, C. (2009). Solution focused brief therapy in schools: A review of the outcome literature. *Children and Youth Services Review, 31*, 412–438.

Knerr, W., Gardner, F., & Cluver, L. (2013). Improving positive parenting skills and reducing harsh and abusive parenting in low- and middle-income countries: A systematic review. *Prevention Science, 14*(4), 352–363.

Kolar, D. R., Rodriguez, D. L., Chams, M. M., & Hoek, H. W. (2016). Epidemiology of eating disorders in Latin America: A systematic review and meta-analysis. *Current Opinion in Psychiatry, 29*(6), 363–371.

Kuhn, E. S., & Laird, R. D. (2014). Family support programs and adolescent mental health: Review of evidence. *Adolescent Health*, *Medicine and Therapeutics, 5*, 127–142.

Kuntsche, S., & Kuntsche, E. (2016). Parent-based interventions for preventing or reducing adolescent substance use—A systematic literature review. *Clinical Psychology Review, 45*, 89–101.

Lachman, J. M., Cluver, L. D., Boyes, M. E., Kuo, C., & Casale, M. (2014). Positive parenting for positive parents: HIV/AIDS, poverty, caregiver depression, child behavior, and parenting in South Africa. *AIDS Care*, *26*(3), 304–313.

Liddle, S. K., Deane, F. P., & Vella, S. A. (2017). Addressing mental health through sport: A review of sporting organizations' websites. *Early Intervention Psychiatry*, *11*(2), 93–103.

Lu, C., Black, M. M., & Richter, L. M. (2016). Risk of poor development in young children in low-income and middle-income countries: An estimation and analysis at the global, regional, and country level. *The Lancet. Global Health, 4*(12), e916–e922.

Lund, C. (2014). Poverty and mental health: Towards a research agenda for low and middle-income countries, commentary on Tampubolon and Hanandita. *Social Science & Medicine, 111*, 134–136.

Ma, N., Roberts, R., Winefield, H., & Furber, G. (2015). The prevalence of psychopathology in siblings of children with mental health problems: A 20-year systematic review. *Child Psychiatry and Human Development, 46*(1), 130–149.

Mason-Jones, A. J., Crisp, C., Momberg, M., Koech, J., De Koker, P., & Mathews, C. (2012). A systematic review of the role of school-based healthcare in adolescent sexual, reproductive, and mental health. *Systematic Reviews*, *1*, 49.

Medlow, S., Klineberg, E., Jarrett, C., & Steinbeck, K. (2016). A systematic review of community-based parenting interventions for adolescents with challenging behaviours. *Journal of Adolescence, 52*, 60–71.

Moses, T. (2010). Being treated differently: stigma experiences with family, peers, and school staff among adolescents with mental health disorders. *Social Science & Medicine, 70*(7), 985–993.

Munns, A., Watts, R., Hegney, D., & Walker, R. (2016). Effectiveness and experiences of families and support workers participating in peer-led parenting support programs delivered as home visiting programs: A comprehensive systematic review. *JBI Database of Systematic Reviews and Implementation Reports*, *14*(10), 167–208.

Musiat, P., & Tarrier, N. (2014). Collateral outcomes in e-mental health: A systematic review of the evidence for added benefits of computerized cognitive behavior therapy interventions for mental health. *Psychological Medicine, 44*(15), 3137–3150.

O'Brien, D., Harvey, K., Howse, J., Reardon, T., & Creswell, C. (2016). Barriers to managing child and adolescent mental health problems: A systematic review of primary care practitioners' perceptions. *The British Journal of General Practice*, *66*(651), e693–e707. doi:10.3399/bjgp16X687061

O'Mara, L., & Lind, C. (2013). What do we know about school mental health promotion programmes for children and youth? *Advances in School Mental Health Promotion, 6*(3), 203–224.

Perry, Y., Werner-Seidler, A., Calear, A. L., & Christensen, H. (2016). Web-based and mobile suicide prevention interventions for young people: A systematic review. *Journal of the Canadian Academy of Child and Adolescent Psychiatry*, *25*(2), 73–79.

Porter, M., Gracia, R., Oliva, J. C., Pàmias, M., Garcia-Parés, G., & Cobo, J. (2016). Mental health emergencies in paediatric services: Characteristics, diagnostic stability and gender differences. *Actas españolas de psiquiatría*, *44*(6), 203–211.

Pratt, B. M., & Woolfenden, S. R. (2002). Interventions for preventing eating disorders in children and adolescents. *Cochrane Database of Systematic Reviews,* (2), CD002891.

Rice, S. M., Goodall, J., Hetrick, S. E., Parker, A. G., Gilbertson, T., Amminger, G. P., . . . Alvarez-Jimenez, M. (2014). Online and social networking interventions for the treatment of depression in young people: A systematic review. *Journal of Medical Internet Research, 16*(9), e206.

Robinson, J., Cox, G., Malone, A., Williamson, M., Baldwin, G., Fletcher, K., & O'Brien, M. (2013). A systematic review of school-based interventions aimed at preventing, treating, and responding to suicide-related behavior in young people. *Crisis. 34*(3), 164–182.

Salam, R. A., Das, J. K., Lassi, Z. S., & Bhutta, Z. A. (2016). Adolescent health interventions: Conclusions, evidence gaps, and research priorities. *The Journal of Adolescent Health, 59*(4S), S88–S92.

Sherr, L., Yakubovich, A. R., Skeen, S., Cluver, L. D., Hensels, I. S., Macedo, A., & Tomlinson, M. (2016). How effective is help on the doorstep? A longitudinal evaluation of community-based organisation support. *PLoS one*, *11*(3), e0151305.

Shonkoff, J. P., Garner, A. S.; Committee on Psychosocial Aspects of Child and Family Health; Committee on Early Childhood, Adoption, and Dependent Care; Section on Developmental and Behavioral Pediatrics. (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics. 129*(1), e232–e246.

Skeen, S., Sherr, L., Tomlinson, M., Croome, N., Ghandi, N., Roberts, J. K., & Macedo, A. (2017). Interventions to improve psychosocial well-being for children affected by HIV and AIDS: a systematic review. *Vulnerable Child Youth Stud*, *12*(2), 91–116.

Sourander, A., Brunstein Klomek, A., Ikonen, M., Lindroos, J., Luntamo, T., Koskelainen, M., . . . Helenius, H. (2010). Psychosocial risk factors associated with cyberbullying among adolescents: A population-based study. *Archives of General Psychiatry*, *67*(7), 720–728.

Stein, D. J., Koen, N., Donald, K. A., Adnams, C. M., Koopowitz, S., Lund, C., . . . Zar, H. J. (2015). Investigating the psychosocial determinants of child health in Africa: The Drakenstein Child Health Study. *Journal of Neuroscience Methods*, *252*, 27–35.

Suzuki, K., Asaga, R., Sourander, A., Hoven, C. W., & Mandell, D. (2012). Cyberbullying and adolescent mental health. *International Journal of Adolescent Medicine and Health*, *24*(1), 27–35.

Szumilas, M., & Kutcher, S. (2011). Post-suicide intervention programs: A systematic review. *Canadian Journal of Public Health*, *102*(1), 18–29.

Talonen, S., Väänänen, J., & Kaltiala-Heino, R. (2017). Gender differences in first onset schizophrenia spectrum psychoses. *Nordic Journal of Psychiatry*, *71*(2), 131–138.

Thomas, R. E., Baker, P. R., Thomas, B. C., & Lorenzetti, D. L. (2015). Family-based programmes for preventing smoking by children and adolescents. *Cochrane Database of Systematic Reviews,*(2), CD004493.

Townshend, K., Jordan, Z., Stephenson, M., & Tsey, K. (2016). The effectiveness of mindful parenting programs in promoting parents' and children's wellbeing: A systematic review. *JBI Database of Systematic Reviews and Implementation Reports*, *14*(3), 139–180. doi:10.11124/JBISRIR-2016-2314

van der Watt, R. (2014). Attachment, parenting styles and bullying during pubertal years. *Journal of Child and Adolescent Mental Health*, *26*(3), 251–261. doi:10.2989/17280583.2014.947966

Vlassoff, C. (2007). Gender differences in determinants and consequences of health and illness. *Journal of Health*, *Population*, *and Nutrition, 25*(1), 47–61.

Walker, S. P., Wachs, T. D., Grantham-McGregor, S., Black, M. M., Nelson, C. A., Huffman, S. L., . . . Rahman, A. (2011). Inequality in early childhood: Risk and protective factors for early child development. *Lancet*, *378*, 1325–1338.

Werner-Seidler, A., Perry, Y., Calear, A. L., Newby, J. M., & Christensen, H. (2017). School-based depression and anxiety prevention programs for young people: A systematic review and meta-analysis. *Clinical Psychology Review, 51*, 30–47.

World Health Organization (WHO). (2016). Adolescent health epidemiology. Retrieved from   http://www.who.int/maternal_child_adolescent/epidemiology/adolescence/en/. Accessed December 13, 2016.

Zahn-Waxler, C., Shirtcliff, E. A., & Marceau, K. (2008). Disorders of childhood and adolescence: Gender and psychopathology. *Annual Review of Clinical Psychology*, *4*, 275–303.

Zwi, M., Jones, H., Thorgaard, C., York, A., & Dennis, J. A. (2011). Parent training interventions for attention deficit hyperactivity disorder (ADHD) in children aged 5 to 18 years. *Cochrane Database of Systematic Reviews,*(12), CD003018.

Teens in Public Spaces and Natural Landscapes

ISSUES OF ACCESS AND DESIGN

Sara Brunelle, Mariana Brussoni, Susan Herrington,
M. Kyle Matsuba, and Michael W. Pratt

For most adolescents around the world, the reality is that they have no obvious rights to public space, and their ability to access landscapes and nature is often more restricted today than in previous generations (Hart, 1987; Hart et al., 1992). As minors, adolescents are legally prohibited from property ownership and are often excluded from public spaces through design, policy, and society's ambivalence toward them (Bell et al., 2003; Childress, 2004). Further, there are concerns about access to safe public spaces free from danger, especially for girls and women (Daniel, 2016; Parikh, 2016). In these problematic positions, adolescents are often unable to explore and appropriate the outdoors for their own use and are inhibited in their ability to understand and engage with these wider environments.

While adolescents highly value natural environments for recreation, restoration, and socializing, spaces designed specifically for teens to engage with public spaces and to enjoy natural environments are uncommon (Chawla, 2002; Childress, 2000; La Rochelle & Owens, 2014; Owens, 1997, 2002; Ward Thompson et al., 2005). Disconnection from public spaces and natural environments is concerning, particularly for this age group, whose attitudes are important markers of long-term social change for the future (Wells & Lekies, 2006). This disconnect, in part, may be attributed to the negative public perceptions of adolescents generally and to adolescents in public spaces specifically (Austin & Willard, 1998; Males, 1996; Weller, 2007). All this matters because identities are being formed in adolescence, a period when people are establishing the values, attitudes, behaviors, and places in society that they will carry with them throughout the rest of their lives.

In this chapter, we investigate past and current perceptions of adolescents and how those perceptions influence policies and practices around the design of public spaces. By public spaces, we mean markets, parks, squares, streets, and beaches that are freely open and accessible to people (Daniel, 2016). We further explore the need for and benefits associated with public spaces, including natural landscapes,

for adolescents. Third, we identify adolescents as a distinct landscape user group with significant spatial needs and discuss ways to harness the power of adolescents in environmental debate and in civic and natural disaster relief efforts. Finally, we examine ways to incorporate teens' developing needs, both physical and psychosocial, into public space design that facilitates their connection with local communities and prioritizes their engagement with public space, civic life, and natural environments. We discuss these issues with an awareness that we live in a global community where culture and conditions differ vastly for adolescents.

Teens and Public Spaces

ALIENATED TEENS

While *adolescence* refers to an acknowledged developmental period, *teenager* is a socially constructed term (Weller, 2006) and has acquired symbolic significance (Jamieson & Romer, 2008). As such, we use the term *teenager* here to discuss adolescents' relationship with society because it is steeped in symbolism and social construction.

The research literature on teenagers' relationship to space, landscape, and the natural environment highlights their desire for a sense of belonging, welcoming, and community and the paucity of spaces meeting these types of needs (Driskell et al., 2008; La Rochelle & Owens, 2014; Ver, 2014; Weller, 2007). Recent studies, however, indicated that teenagers are excluded from, or not welcomed in, much of the public realm for a variety of reasons (Bell et al., 2003; Kato, 2009; Nemeth, 2006; Owens, 2002; Woolley et al., 1999). For teenage girls, their exclusion from public spaces can often be exacerbated by concerns about safety. In one study situated in New Delhi, 92% of females reported having been sexually harassed in public spaces (UN Women, 2013). Indian women felt uncomfortable resting, waiting, or sitting alone in these spaces. Rather, they preferred being in groups and out of the direct public gaze (Parikh, 2016).

To make public spaces safe, policymakers in some countries have limited the spatial world of teens and young adults, looking on these teens and young adults with suspicion, intolerance, and moral censure (Fischer & Poland, 1998; Malone, 2002). In fact, Owens (2002) argued that teens are often purposely designed out of public spaces, and that provision of facilities for teens may actually foster their exclusion, allowing adults to watch over and control the teens' activities. For example, skate parks, one of the few public spaces designed expressly for teens, are often coupled with banning of skateboarding from other community areas. By excluding teens from other public spaces, skate parks serve as a way to control youth behavior (Owens, 1997, 2002).

There are concerns that publicly and privately owned spaces, including commercial plazas, schools, parks, and playgrounds, may use safety as an excuse to heavily police and exclude "problem" individuals (Chiu, 2009; Fischer & Poland,

1998). Efforts to exclude teenagers from public spaces have even spawned commercial products, including an ultrasonic deterrent marketed as "the solution to the eternal problem of unwanted gatherings of youths and teenagers in shopping malls and around shops" (Kids Be Gone, n.d.). Public space is considered an extension of the private domain of adults (Valentine, 2004), and keeping teens "invisible" in the public domain is a means of maintaining public order (Matthews, Limb, et al., 2000; Matthews, Taylor, et al., 2000; Sibley, 1995; Valentine, 2004).

However, teens have little choice other than to be in public spaces (Lieberg, 1995). Teenagers' vulnerable social position and lack of financial resources to appropriate their own spaces make them more dependent on public and open space than adults. Classified as minors, politically they have little or no influence on conventional spheres of decision-making (Weller, 2007). Without legal rights to space, they have limited ability to manipulate, modify, or occupy landscapes (Childress, 2004; Matthews, Limb, et al., 2000). Thus, teenagers are left to claim the leftovers in the array of planned public spaces (Childress, 2004; Hall et al., 1999; Matthews, Taylor, et al., 2000; Weller, 2007), such as parking lots, abandoned lots, and underpasses where adults are not commonly found (Matthews, Limb, et al., 2000).

Urban policy and design that limit teens' access to local public space and natural environments undermines children's right to their city and impedes the creation of child- *and teen*-friendly cities as outlined by the Child Friendly City Initiative, an embodiment of the Convention on the Rights of the Child (United Nations Children's Fund [UNICEF], 2014). The commitments of a child-friendly city include the right to *be an equal citizen of their city with access to every service, regardless of ethnic origin, religion, income, gender, or disability,* as well as the ability to *participate in the social and cultural life* of their community, to *walk safely in the streets on their own,* and to *meet friends and play*. While children have been afforded many "rights" by the international community and have been encouraged to participate in areas such as schools, community action, policy advocacy, and governance (UNICEF, 2006), realizing these rights is a different story. As it relates to policies around public spaces, there is little evidence of such involvement by children, but rather isolation from involvement. Isolating teens from the social life of their cities through design and policy further alienates teens from the chance to *express their opinion on the city that they want* and further limits their sense of belonging and inspired engagement to *influence decisions about their city* (UNICEF, 2014). Alienating teens from public spaces thus reduces the social capital of neighborhoods and cities, making them less resilient to stressors they may face, such as natural disasters (Daniel, 2016).

PUBLIC PERCEPTION OF TEENS MANIFESTS IN THE PUBLIC REALM

Not helping with this public perception of teenagers is recent controversial research suggesting that the current generation of American youth are relatively

narcissistic, earning them the label "Generation Me" (Twenge et al., 2012). Twenge and colleagues (Twenge & Campbell, 2009; Twenge et al., 2012) have presented research clearly illustrating the generational shift of youth toward being more self-absorbed, as evidenced by increases in narcissism scores on personality measures and decreases in their concern for others, their willingness to contribute to charities, in their expression of empathy for others, and their engagement in civic activities among the current cohort relative to earlier cohorts.

Broadly paralleling Twenge et al.'s findings are those of Owens (1997), who identified an increase in negative reporting on teen issues from 1952 to 1992. Reporting on teen social problems climbed by 79% and reports on teen substance abuse by 93% over this period. Paradoxically, a review of US juvenile crime rate statistics revealed that property crime committed by juveniles aged 10 to17 has declined since 1980 (Snyder & Sickmund, 2006). Media depictions correspond with and arguably reinforce public perceptions of teens, perpetuating images of delinquency, violence, and nonconformity that are threatening, particularly in public spaces (Osler & Starkey, 2005; Valentine, 2004; Valentine & McKendrick, 1997). Twenty-two US states have made it a crime to "disturb" school, which includes "boisterous" behavior and "annoying conduct" (Ripley, 2016). This influences treatment of teenagers in the public realm: Despite not being engaged in disruptive behavior, they may be asked to leave public spaces under the assumption that they will cause trouble (Owens, 2002). Teen presence and activities thus may not be seen as a legitimate use of the public realm and may be considered a potential threat to public order (Matthews, Limb, et al., 2000; Matthews, Taylor, et al., 2000; Morrow, 2000).

Antisocial and at-risk behaviors among adolescents are not isolated to the United States. UNICEF reports have referenced adolescence as the time period when people from many countries engage in many at-risk behaviors, such as drug use, acts of violence, and unsafe sex (UNICEF, 2011). The unfortunate consequence is that it leaves people in these countries with negative perceptions of adolescents. In Africa, for example, youth are often perceived as being "dangerous, criminal, decadent, and given to a sexuality that is unrestrained" (Diouf, 2003, p. 4).

TEENS NEED TO BE SEEN POSITIVELY

In recent years, there has been a strong emphasis on the need to recognize the positive strengths of adolescent development, and not just problems and deficiencies (Lerner et al., 2003), and the importance of changing public perception to realize that the vast majority of teenagers are not bad, a nuisance, or narcissistic. In their interpretation of Twenge et al.'s (2012) data, Arnett et al. (2013) found no compelling evidence that there has been an increase in narcissism and also found that other, more positive, measures, such as civic engagement, showed no significant declines between 1976 and 2006 (Trzesniewski & Donnellan, 2010). Further, Arnett et al. (2013) argued that the rate of risky behaviors has gone down over the decades,

citing decreases in automobile fatalities, teen pregnancy, and criminal activities among youth. In light of these findings, Arnett et al. (2013) raised concerns about the dangerous message that Twenge et al. (2012) and others are sending when they portray youth as "selfish, morally deficient, and unconcerned about others" (p. 19). Such a message may lead to teens responding to negative treatment and becoming alienated from society and, therefore, not receiving the support they need to become constructive, contributing members of society. Globally, there has also been a recent emphasis by international organizations in partnership with companies to focus on empowering youth around the world by identifying and building on their strengths (see UNICEF, 2017).

TEENS NEED PUBLIC SPACES FOR THEIR DEVELOPMENT

From a developmental standpoint, local environments play an important role in teens' development and social identity formation (Chiu, 2009; Lieberg, 1995), and public space in particular is an important place of transition, moving away from the restrictions of childhood toward the independence of adulthood (Matthews, Limb, et al., 2000). The adolescent period marks a shift toward greater independence in activities and choices (UNICEF, 2011). This shift is an important development in personal, social, and civic identity. Teens use public space as a stage to test ideas and train for adulthood by gaining local knowledge and input on their community (Lieberg, 1995). Socializing with others helps to develop social competencies, to begin to explore personal and social identities, and to foster young people's identities as citizens (France, 1998; Weller, 2007). Identities formed in adolescence are important for establishing the values, attitudes, and behaviors carried throughout life (Wray-Lake et al., 2010). Public spaces, whether plaza, street, or park, offer arenas for teens to explore and express themselves as they develop their public selves (Matthews, Limb, et al., 2000) and can facilitate teenagers' engagement as citizens (Weller, 2007).

However, the literature indicates that we are not currently meeting the public space and environmental needs of people across the world, and that this is detrimental to their well-being. For example, many of the megacities in Asia have high levels of pollution, noise, congestion, and crime rates and few useful public spaces, conditions not supportive to human development (Asia Development Bank, 2017). Further, specific subgroups, such as girls and teens with physical challenges, have limited access to safe public spaces, which can then hinder their physical, emotional, and social development. For example, in India, while males are at ease in most public spaces, females feel more comfortable in some versus others (Parikh, 2016).

In many parts of the developing world, youth engage in manual labor jobs, such as farming, as a form of livelihood. In fact, nearly a quarter of the world's work youth are involved in agriculture (UNICEF, 2011). Having good, safe public roads is important to transport goods from rural villages to urban markets, ensuring

their livelihood and a sense that they are being productive members of society (Daniel, 2016). Research has indicated that a sense of belonging and the perceived ability to contribute to the environment and experience a sense of personal control are important factors in adolescents' mental health and identity formation (Driskell et al., 2008; Evans et al., 2005). Place is also a highly specific and important feature of the development of teenage identity and sense of self (Vanderbeck & Dunkley, 2003).

Allowing adolescents to understand, evaluate, and participate in public spaces and natural landscapes around them is thus critical for these adolescents' development and could have long-term significant effects on their attitudes toward environmental degradation and conservation behaviors. Public spaces and natural environments provide an ideal venue for the practice of social participation and allow users to see and understand many social problems (Woolley et al., 1999). Though modern society may be inclined to view teenagers as apathetic with respect to political and community life, they in fact manifest clear civic values, such as supporting order and opposing pollution and litter (UNICEF, 2011; Weller, 2007; Woolley et al., 1999). While teens may have an alternative understanding of community, they are involved in novel forms of civic engagement that are (re) shaping their environments (UNICEF, 2013; Weller, 2006, 2007).

TEENS AND NATURAL LANDSCAPES

Attitudes toward the environment provide a bellwether for the importance of ensuring that teens are engaged with the natural landscape. Research indicated that contact with nature is associated with environmental attitudes and ecological behaviors (Collado et al., 2015; Wells & Lekies, 2006). For example, studies of environmental activists provide evidence of the importance of early exposure to nature in childhood in fostering later involvement in environmental activities (Chan, 2009; Chawla, 1999; Horwitz, 1996; Matsuba et al., 2012). Hence, keeping teens from participating in nature, and discussions and decisions around the natural landscape, including social, political, and ecological aspects, may lead to a decline in their concern for conservation efforts in the future.

In fact, recent studies have identified a decline in the environmental concerns of teens over the last 30 years. Wray-Lake et al. (2010) examined trends in high school seniors' environmental attitudes, beliefs, and behaviors from 1976 to 2005. The results indicated that environmental concerns of adolescents increased into the early 1980s, but then declined across the remainder of these three decades. These trends clearly indicated that youth in the past two decades were not as willing as were young people in the late 1970s to endorse conservation behaviors, such as cutting down use of heat, electricity, or driving and increasing the use of bicycles or mass transit (Wray-Lake et al., 2010).

Most of this research takes place in a North American context; less is known about the changing youth attitudes about the environment in other regions of

the world. While there are youth movements worldwide in response to climate change (UNICEF, 2011, 2012), it is unclear what percentage of the youth population are aware of and engaged in environmental activities. Fein (n.d.) studied adolescents' attitude toward the environment in the Asia-Pacific region and found modest awareness of environmental concepts and issues. In Australia, Theilking and Moore (2001) found low environmental awareness and behavior among their university sample.

Adolescents' opinions and attitudes are important markers of long-term social change (Wray-Lake et al., 2010). Recent declines in environmental engagement among adolescents signal the need for a renewed focus on environmental education (Fein, n.d.; Wray-Lake et al., 2010) and for immersive exposure to natural environments. Appreciative outdoor activities (e.g., time outdoors enjoying nature), consumptive outdoor activities (e.g., hunting and fishing), media exposure (e.g., books and television), and witnessing negative environmental events (e.g., seeing a special outdoor area be commercially developed) during one's youth were predictive of later life ecocentric versus anthropocentric beliefs (Chawla, 1999; Ewert et al., 2005). Such experiences allowed significant exposure to natural environments and also provided both formal and informal education about the natural environment.

Unfortunately, relying on the education system as a delivery method for environmental education and opportunities is not realistic in many developing countries. In many sub-Saharan countries, the majority of adolescents do not complete primary school, let alone secondary school (UNICEF, 2012). In Uganda, few of the adolescents who are fortunate to attend school will participate in innovative programs around environmental education and engagement because most schools focus on traditional courses, such as English, math, social studies, and science, and do not have resources to expand beyond these core subjects (UNICEF, 2015).

NATURAL SPACES AS PLACES OF RETREAT

While facilitating a connection to nature is essential for supporting and encouraging responsible environmental attitudes, beliefs, and behaviors, it is also essential to mental health and well-being, regardless of whether individuals reside in rural or urban environments (Maas et al., 2006). Research indicates that exercise in green settings improves mood, self-esteem, and affective and cognitive restoration (Bagot et al., 2015; Barton & Pretty, 2010; Mitchell, 2013). Natural environments are particularly rich in the characteristics necessary for restorative experiences, such as relieving stress and focusing attention (Kaplan, 1993). In Japan, researchers have studied the effects of "forest bathing," referring to making contact with the forest and immersing oneself in its atmosphere (Park et al., 2010). Park et al. (2010) reported a significant reduction in physiological stress-related measures such as cortisol levels, blood pressure, and pulse rate among those who were assigned to the forest bathing condition compared to those who were asked to walk in the city instead.

A primary quality that defines restorative places is the psychological comfort they provide. These are often places that provide opportunities to spend time alone, escape everyday life, think, and reflect. For most of their lives, teens have been under the careful watch of parents, teachers, or other adults; the teenage years are often their first opportunity to spend time alone and become more comfortable with solitude (Larson & Richards, 1989). Thus, certain aspects of adolescent development may be overlooked if landscape design focuses strictly on public social gathering places. Places to be alone, particularly for teens, are not often a consideration in the design of public spaces. Often, such places are designed so intimacy and privacy are not possible, prioritizing surveillance and safety instead. Secluded yet safe places are needed (Owens, 1997), particularly those that provide a connection with nature (La Rochelle & Owens, 2014). Teens express appreciation for natural landscapes, considering them among the most valued types of outdoor spaces, particularly natural parks or undeveloped agricultural lands (La Rochelle & Owens, 2014). These places were valued for being restorative, with qualities such as beauty, the opportunity to be alone, and specific natural elements such as the grass, trees, and animals.

Facilitating Youth Engagement

While we have argued that facilitating teens' access to public and natural spaces is essential not only to the creation of child-friendly cities but also for their healthy development, prioritizing "inclusion" and ignoring engagement are also problematic. Iveson (2006) argued that focusing on inclusion through policy and design is fundamentally limiting as it is still dominated by a vision of social control. Engagement can be positioned as an alternative to the inclusion/exclusion framework (Iveson, 2006). Engagement embraces uncertainty and does not require a predetermined expectation for behavior. This approach should "not require young people to stop being angry about their place in the (adult) world in order to be valued, but rather seeks to engage with young people in building a shared project for social change" (Iveson, 2006, p. 50). In the next section, we present a case study of how teens are involved in shaping their space.

THE PROJECT MORRINHO CASE STUDY: THE POWER AND POTENTIAL OF TEEN AGENCY

Project Morrinho is a teen-conceived, teen-directed play project that has ongoing a group of 20 local Brazilian teens to engage in serious and sustained reflection of their community through mimetic play for over 15 years (Angelini, 2013). The 4,000-square-foot maquette of a real-life favela in Rio de Janeiro is built on a small hill, after which it is named, abutting the city it represents. The model is constructed from painted terra-cotta bricks, mortar, detritus, and repurposed

objects and is populated by thousands of avatars—1-inch figurines that represent members of their community. These figurines are multiplayer characters in a simulated urban reality that includes the everyday drama of police, criminal, and civilian. These avatars are used in role-play games where the boys transform them into hundreds of different characters with different voices and histories (Angelini, 2013). Players have invested thousands of hours of labor, constructing and maintaining their areas, modeled after a real-life favela. All the players have been residents of local favelas, and new players are expected to build and maintain their own part of the model to participate and to contribute to maintenance of the common spaces (Angelini, 2013).

The model and its role-playing game allow the participants to engage in certain narratives about their community, exploring issues such as class, race, economics, corruption, and crime and positioning themselves within the social order of the everyday world (Angelini, 2013). Angelini, an ethnographer, observed that the play at Morrhino was not escapism, but rather a form of commentary where teens "explore the reality that is all around them and circulates through power relations, ideology, and media representations" (Angelini, 2013, p. 195).

Morrinho was conceived outside of what could be considered traditional forms of engagement, which are typically inspired by government initiative, nongovernmental organizations (NGOs), art, or academic institutions. The model itself is a theater for youth engagement and participation in their community, allowing the participants to grapple with aspects of their own life. It is also an act of expression, demonstrating a set of beliefs through representation and the mechanics of the game.

Morrinho has been recognized for its aesthetic value and ingenuity and has become a popular international exhibit and tourist attraction. However, the project was not always so well received. The boys who first built Morrinho were chastised for the age and gender appropriateness of their play (Angelini, 2013). The police who first stumbled on Morrhino accused the youth of building a three-dimensional map for tactical invasions on other favelas, suspicious that the boys had ties to a local drug gang. They were ordered to dismantle the model at gunpoint, but refused, and the model was later dismissed as harmless child's play. What is clear is that, through play, the youth built an important working knowledge of their community. Planners in Rio took the opportunity to engage with its participants to better understand favela youth's perspective of the city (Angelini, 2013).

OTHER WAYS YOUTH HAVE BEEN ENGAGED

Tapping into the on-the-ground knowledge and agency of teens is an important strategy. Teens (and young adults) have been at the forefront of global justice and social change movements, including the American civil rights struggles, the "Chipko" movement in India, and the Palestinian youth's intifada challenge of the Israeli military (Quiroz-Martinez et al., 2005) As documented by UNICEF's

The Participation of Children and Young People in Emergencies, teens have been on the front line of natural disaster relief, instrumental in the building back of communities (UNICEF, 2007). After the 2004 tsunami in Southeast Asia, for example, children and teens made significant contributions by providing emotional support, helping find food and shelter, and joining guard duty. Some of their activities preceded the action and implementation of aid agencies (UNICEF, 2007).

Such demonstrated capacity in the wake of natural disasters and the range of activities they have undertaken have led organizations to advocate for youth participation in disaster preparedness and mitigation work, assigning particular roles and actions to youth in the event that emergencies occur (UNICEF, 2007). This can have an especially significant impact in the global south, where youth make up a large portion of the population (UNICEF, 2007). Youth participation in relief, recovery, and rehabilitation helps them feel valued; is an antidote to depression, frustration, and boredom; and is considered one of the best therapies for dealing with traumatic events (UNICEF, 2007).

From a global perspective, evidence suggests that teens and young adults are an attractive target group to engage in leading the development of a culture of environmental sustainability (Riemer et al., 2014). Studies suggested that more youth-based environmental engagement programs (EEPs) are needed to help combat the impact of climate change (Sayal et al., 2016). Engagement programs can include a wide variety of activities, such as conferences, organizations, afterschool activities, and community and political engagements. These activities can be integrated into formal education, but often they are independent and community based.

Teen-centric Design and Spatial Characteristics That Support Teens

With few precedents of spaces strategically designed to invite and accommodate teens, this section focuses on design strategies recommended by research on the spatial and environmental needs of this age group, expanding on strategies and offering possible applications to enhance teenagers' connection to their communities.

HANGING OUT

Lieberg (1995) identified two landscape characteristics that support the specific needs of teens: *places of retreat* and *places of interaction. Places of retreat* afford teens the opportunity to withdraw from the adult world and into their personal spaces or the social world of their peer group, whereas *places of interaction* allow teens to "meet and confront the adult world" (Lieberg, 1995). In terms of landscape opportunities, *retreat* and *interaction* are characteristics that can be found in both urban and natural public space settings. While teens look for a variety of

recreational activities in their local environments (Weller, 2007), the primary activity that public space can support for teens—whether in retreat or interaction—is hanging out.

Accepting and embracing "hanging out" as one of the primary ways that teens spend their time and recognizing this activity as an acceptable use of the public realm will better serve this specific landscape user group. In terms of evaluating the quality of the spaces they live in, the opportunity to hang out is highly desirable to young teens (Chawla & Malone, 2003; Weller, 2007). Growing Up in Cities (GUIC), an international effort to understand the youth perspective in urban planning, compiled a wealth of material using participatory action research with young people in low- and mixed-income neighborhoods. The resulting "child-based" indicators described positive and negative neighborhood characteristics, including two main qualities: communities where teens felt accepted by adults and local spots where they could hang out (Chawla & Malone, 2003). Hanging out happens in everyday places that have a range of characteristics. They can be in highly visible public locations with spaces that also allow users to fade into the background, what Lieberg (1995) described as "backstage" into border zones for withdrawal and privacy. Hangout spaces can become "haunts" that are regularly visited over and over and used for socializing (Childress, 2000; Lieberg, 1995; Weller, 2007). However, hanging out is a "roving" activity, creating a web of hang out spaces in teen geography and community life (Lieberg, 1995; Matthews, Limb, et al., 2000; Weller, 2007).

Hanging out and walkability.

The GUIC child-based indicators also identify the importance of places where youth can navigate freely and safely to meet friends and participate in activities (Chawla & Malone, 2003). Teen landscapes should be walkable, helping make them easily accessible, as well as promoting active transport through the landscape (Carlson et al., 2015; Kurka et al., 2015). Walking (or riding bicycles) appeals to other needs of teens as well. Childress (2000) described a characteristic "right-nowness" of teenagers, as their focus is on the immediate in thought and action as they move through the world. This focus on the immediate has the side effect of making teenagers susceptible to boredom. The ability to walk to an appealing destination, by themselves or with friends, is a means to satisfy this need for immediacy (Childress, 2000).

Spatial characteristics of hanging out.

Hangout spaces are flexible, accommodating a single person and embracing different scales of groups (Childress, 2000; Lieberg, 1995). This can be expressed in the scale of the space as well as through spatial elements like seating or other site furnishings. Seating options are critical, including flexibility in orientation and posture, design and arrangement, and placement (Childress, 2000). Researchers at the play equipment design company Kompan Incorporated determined that

teenagers sit on benches differently from adults, preferring to sit up high with their feet propped, leaning, and huddling (Owens, 2002). Holahan (1978) found that successful outdoor spaces at a housing project were characterized by seating arrangements that simultaneously facilitated informal social interactions and presented a vantage point to the activities of those nearby. Placement of seating is thus important. Teens want to socialize with their friends in public. However, park designs typically include benches scattered along pathways that are for single users or couples and do not encourage gatherings and large-group conversation (Owens, 2002).

Good design for teens also has to take into account bringing people together in a way that seems accidental and allows people to retreat easily. Thus, teen spaces are best located near paths to facilitate easy entrances and exits, making entering and exiting the space a definite social act (Childress, 2000). Anchoring objects to lean on, whether seating, tables, planters, walls, pillars or corners, create comfortable sites for social interaction (Childress, 2000). Spatially, Childress (2000) observed that teenagers choose small and strongly bounded spaces that are often enclosed on two or three sides. This finding was echoed in the GUIC study, which revealed that young people appreciate localities with strong geographical boundaries (Chawla & Malone, 2003).

In addition to the need for togetherness, teens need *places of retreat* for hanging out, providing stillness and calm as a counterpoint to the constant motion of their day (Childress, 2000; Lieberg, 1995). To facilitate this, places of retreat should provide access to nature and offer views of the landscape. Childress (2000) connected this need to the introspective nature of adolescents, their basic developmental task of finding themselves and meaning in their world. Situating prospect-refuge experiences strategically to reveal a view and the activities of others while recreating in the park is ideal for teens (Owens, 2002). This safe vantage point also affords the opportunity for people watching, which is a strong draw for teens. Platforms that raise the viewer up offer more extent and drama to the view. Strategically placed swings that allow users to fly over the landscape also work well for teens.

It is also important to identify hanging out as a program element in and of itself. This approach could be applied to the regional parks mandate as a means to accept and accommodate teen users. Childress critiqued the American park systems' preference for "program" over "hangout" (Childress, 2000). In his history of the American parks system, Cranz (1982) traced this idea back to a nineteenth-century emphasis on structure and scheduled activities for groups segregated by age and sex. For the parks system, lack of activity is seen as problematic rather than as an end in itself.

CREATIVE SPACE MAKING

The design of public spaces needs to be flexible and adolescent friendly in order to accommodate the fact that teenagers have different needs, values, and priorities

and, as a result, often use public spaces in ways different from other age groups. One approach has been to design dedicated spaces for teens. However, these spaces, despite the best of intentions, have been critiqued as largely an excuse to design teens out of other public spaces (Owens, 2002). In effect, such approaches isolate rather than integrate teens into the wider society. Further, places planned explicitly for teens, such as "teen centers," may be shunned by teens because they may be considered "uncool" and represent the planner's agenda and interpretation of what teenagers are supposed to do, rather than that of the adolescents themselves (Childress, 2000).

An alternative approach to design and policy on adolescent accessibility is to integrate teens into existing public areas by layering teen-centric design onto public spaces, rather than developing areas specifically for teens. This approach is responsive to the needs of teen users. Most adolescent behaviors and activities do not need specific environments because they can be performed in a variety of settings (Childress, 2000; Owens, 2002). Many of the aspects that adults value and require from landscapes are similar to those expressed by teens, such as views of nature and opportunities for recreation, restoration, and socialization in safe environments (Gearin & Kahle, 2006; La Rochelle & Owens, 2014). Providing for multiple user groups can be addressed through flexible site programming. The move toward institutionalized activities in childhood and adolescence, such that the majority of their time is expected to be organized and supervised, has resulted in youth activities taking place in formalized and organized settings that intensify the spatial segregation of generations (Rasmussen & Smidt, 2003). While teens may be enrolled in specific recreational programming, this model is averse to the flexible hangouts that teens require. Indeed, youth in the international GUIC study identified neighborhoods with a range of spaces for unprogrammed activities as a positive feature (Chawla & Malone, 2003).

Teens appear adept at identifying underutilized space and considering multiple uses for landscapes (Gearin & Kahle, 2006). Chiu (2009) described how skateboarders' use of public spaces often contradicts or reinvents intended uses. They identify niches for skateboarding, noticing and using details in the landscape, such as handrails and planters, which are typically unnoticed or ignored by other users. Another study examined adults' and teenagers' thoughts on urban green space in Los Angeles, finding that adults focused on activities and cited a need for additional recreation-oriented parks for teens (Gearin & Kahle, 2006). In contrast, no teens suggested playing fields or skate parks. Their focus was on modifying places to be accessible to youth and flexible enough for multiple, unstructured uses. Teens, unlike the adults, identified places that were typically overlooked in terms of greening opportunities, such as the neighborhood underpass and local alleyways (Gearin & Kahle, 2006). As Childress (2000) observed, while asphalt painted with white lines may represent a parking lot during the workday, in the evenings it can become a meeting hall, cycle track, and skate park, among other things.

Underutilized and undervalued spaces appear in many forms, and some of the most successful have been sites that allowed for constant manipulation by teens so that they can challenge themselves and where they are allowed responsibility to accomplish real things (Childress, 2000). Nature and natural materials can provide some of the most flexible spaces for this sort of activity, in addition to providing many of the important mental and physical health benefits described previously.

Giving teens the ability to appropriate and modify spaces in their local communities challenges the notion of teenage apathy. The shaping of local spaces empowers disenfranchised adolescents to become political actors through "developing and redeveloping" areas within their communities. Participation in constructing one's surroundings heightens the meaning of places and gives people a greater sense of control. It also highlights the need for a broader societal acceptance of teenagers as active citizens (Weller, 2007).

Conclusion

Adolescents' developmental needs and emerging identities must be supported by inclusive and welcoming public space design that engages them in their physical and social worlds. Rather than public spaces that seek to marginalize teenagers, flexible designs that are considerate of diverse and multiple users can encourage teenagers' participation in society, increasing cross-generational contact that can help break down stigmas, fears, and perceived barriers across age groups in order to promote teenagers' civic engagement and help to nurture future stewards of society and the environment, both natural and built.

References

Angelini, A. M. (2013). *Model favela: Youth and second nature in Rio de Janeiro*. New York, NY: City University of New York.

Arnett, J. J., Trzesniewski, K. H., & Donnellan, M. B. (2013). The dangers of generational myth-making: Rejoinder to Twenge. *Emerging Adulthood*, *1*(1), 17–20. http://doi.org/10.1177/2167696812466848

Asia Development Bank. (2017). *Green cities*. Retrieved from https://www.adb.org/green-cities/#intro

Austin, J. A., & Willard, M. (Eds.). (1998). *Generations of youth: Youth cultures and history in twentieth-century America*. New York: NYU Press.

Bagot, K. L., Allen, F. C. L., & Toukhsati, S. (2015). Perceived restorativeness of children's school playground environments: Nature, playground features and play period experiences. *Journal of Environmental Psychology*, *41*, 1–9. http://doi.org/10.1016/j.jenvp.2014.11.005

Barton, J., & Pretty, J. (2010). What is the best dose of nature and green exercise for improving mental health? A multi-study analysis. *Environmental Science & Technology*, *44*(10), 3947–3955. http://doi.org/10.1021/es903183r

Bell, S., Thompson, C. W., & Travlou, P. (2003). Contested views of freedom and control: Children, teenagers and urban fringe woodlands in Central Scotland. *Urban Forestry & Urban Greening*, *2*(2), 87–100. http://doi.org/10.1078/1618-8667-00026

Carlson, J. A., Saelens, B. E., Kerr, J., Schipperijn, J., Conway, T. L., Frank, L. D., . . . Sallis, J. F. (2015). Association between neighborhood walkability and GPS-measured walking, bicycling and vehicle time in adolescents. *Health & Place*, *32*, 1–7. http://doi.org/10.1016/j.healthplace.2014.12.008

Chan, T. S. (2009). *Environmental sustainability as a generative concern: An exploratory study of the narrative identities of leaders in the environmental sustainabilty movement* (Doctoral dissertation). Northwestern University, Evanston, IL.

Chawla, L. (1999). Life paths into effective environmental action. *The Journal of Environmental Education*, *31*(1), 15–26. http://doi.org/10.1080/00958969909598628

Chawla, L. (2002). *Growing up in an urbanixing world*. London, England: Earthscan.

Chawla, L., & Malone, K. (2003). Neighbourhood quality in children's eyes. In P. Christensen & M. O'Brien (Eds.), *Children in the city: Home, neighbourhood and community* (pp. 118–141). London, England: RoutledgeFalmer.

Childress, H. (2000). *Landscapes of betrayal, landscapes of joy: Curtisville in the lives of its teenagers*. Albany, NY: State University of New York Press.

Childress, H. (2004). Teenagers, territory and the appropriation of space. *Childhood*, *11*(2), 195–205. http://doi.org/10.1177/0907568204043056

Chiu, C. (2009). Contestation and conformity: Street and park skateboarding in New York City public space. *Space and culture*, *12*(1), 25–42.

Collado, S., Corraliza, J. A., Staats, H., & Ruiz, M. (2015). Effect of frequency and mode of contact with nature on children's self-reported ecological behaviors. *Journal of Environmental Psychology*, *41*, 65–73. http://doi.org/10.1016/j.jenvp.2014.11.001

Cranz, G. (1982). *Politics of park design: A history of urban parks in America*. Cambridge, MA: MIT Press.

Daniel, K. (2016). *Public spaces*. Retrieved from http://healthbridge.ca/images/uploads/library/Final_Electronic.pdf

Diouf, M. (2003). Engaging postcolonial cultures: African youth and public space. *African Studies Review*, *46*(2), 1–12.

Driskell, D., Fox, C., & Kudva, N. (2008). Growing up in the new New York: Youth space, citizenship, and community change in a hyperglobal city. *Environment and Planning A*, *40*(12), 2831–2844. http://doi.org/10.1068/a40310

Evans, W. P., Owens, P. E., & Marsh, S. C. (2005). Environmental factors, locus of control, and adolescent suicide risk. *Child and Adolescent Social Work Journal*, *22*(3–4), 301–319. http://doi.org/10.1007/s10560-005-0013-x

Ewert, A., Place, G., & Sibthorp, J. (2005). Early-life outdoor experiences and an individual's environmental attitudes. *Leisure Sciences*, *27*(3), 225–239. http://doi.org/10.1080/01490400590930853

Fein, J. (n.d.). *Young people and the environment. Implications of a study of youth environmental attitudes and education in the Asia pacific region for curriculum reform during the UN decade of education for sustainable development*. Unpublished manuscript.

Fischer, B., & Poland, B. (1998). Exclusion, "risk," and social control—reflections on community policing and public health. *Geoforum*, *29*(2), 187–197. http://doi.org/10.1016/S0016-7185(98)00006-2

France, A. (1998). "Why should we care?": Young people, citizenship and questions of social responsibility. *Journal of Youth Studies*, *1*(1), 97–111. http://doi.org/10.1080/13676261.1998.10592997

Gearin, E., & Kahle, C. (2006). Teen and adult perceptions of urban green space Los Angeles. *Children, Youth and Environments*, *16*(1), 25–48.

Hall, T., Coffey, A., & Williamson, H. (1999). Self, space and place: Youth identities and citizenship. *British Journal of Sociology of Education*, *20*(4), 501–513. http://doi.org/10.1080/01425699995236

Hart, R. (1987). Children's participation in planning and design: Theory, research, and practice. In C. S. Weinstein & T. G. David (Eds.), *Spaces for children: The built environment and child development* (pp. 217–239). New York, NY: Plenum Press.

Hart, R., Katz, C., Iltus, S., & Mora, M. R. (1992). International Student Design Competition of two community elementary schoolyards. *Children's Environments*, *9*(2), 65–67.

Holahan, C. J. (1978). *Environment and behavior: A dynamic perspective*. New York, NY: Plenum Press.

Horwitz, W. A. (1996). Developmental origins of environmental ethics: The life experiences of activists. *Ethics & Behavior*, *6*(1), 29–53. http://doi.org/10.1207/s15327019eb0601_3

Iveson, K. (2006). Cities for angry young people. In B. J. Gleeson & N. Sipe (Eds.), *Creating Child Friendly Cities* (pp. 49–65). London, England: Routledge.

Jamieson, P., & Romer, D. (2008). *The changing portrayal of adolescents in the media since 1950*. Oxford, England: Oxford University Press. http://doi.org/10.1093/acprof:oso/9780195342956.001.0001

Kaplan, R. (1993). The role of nature in the context of the workplace. *Landscape and Urban Planning*, *26*(1), 193–201. http://doi.org/10.1016/0169-2046(93)90016-7

Kato, Y. (2009). Doing consumption and sitting cars: Adolescent bodies in suburban commercial spaces. *Children's Geographies*, *7*(1), 51–66. http://doi.org/10.1080/14733280802630908

Kids Be Gone. (n.d.). *Mosquito device*. Retrieved from http://www.kidsbegone.com/

Kurka, J. M., Adams, M. A., Todd, M., Colburn, T., Sallis, J. F., Cain, K. L., . . . Saelens, B. E. (2015). Patterns of neighborhood environment attributes in relation to children's physical activity. *Health & Place*, *34*, 164–170. http://doi.org/10.1016/j.healthplace.2015.05.006

La Rochelle, M., & Owens, P. E. (2014). Poetic perspective, critical insight: A study of youth attitudes toward place and community. In L. E. Bass (Series Ed.), *Sociological Studies of Children and Youth, Volume 18. Soul of society: A focus on the lives of children & youth* (M. N. Warehime, Ed.) (pp. 27–62). Bingley, England: Emerald Group. http://doi.org/10.1108/S1537-46612014000018013

Larson, R., & Richards, M. H. (1989). Introduction: The changing life space of early adolescence. *Journal of Youth and Adolescence*, *18*(6), 501–509. http://doi.org/10.1007/BF02139070

Lerner, R. M., Dowling, E. M., & Anderson, P. M. (2003). Positive youth development: Thriving as the basis of personhood and civil society. *Applied Developmental Science*, *7*(3), 172–180. http://doi.org/10.1207/S1532480XADS0703_8

Lieberg, M. (1995). Teenagers and public space. *Communication Research*, *22*(6), 720–744. http://doi.org/10.1177/009365095022006008

Maas, J., Verheij, R. A., Groenewegen, P. P., de Vries, S., & Spreeuwenberg, P. (2006). Green space, urbanity, and health: How strong is the relation? *Journal of Epidemiology and Community Health*, *60*, 587–592. doi:10.1136/jech.2005.043125

Males, M. A. (1996). *The Scapegoat Generation: America's War on Adolescents*. Monroe, ME: Common Courage Press.

Malone, K. (2002). Street life: Youth, culture and competing uses of public space. *Environment and Urbanization*, *14*(2), 157–168. http://doi.org/10.1177/095624780201400213

Matsuba, M. K., Pratt, M. W., Norris, J. E., Mohle, E., Alisat, S., & McAdams, D. P. (2012). Environmentalism as a context for expressing identity and generativity: Patterns among activists and uninvolved youth and midlife adults. *Journal of Personality*, *80*(4), 1091–1115. http://doi.org/10.1111/j.1467-6494.2012.00765.x

Matthews, H., Limb, M., & Taylor, M. (2000). The "street as thirdspace." In S. L. Holloway & G. Valentine (Eds.), *Children's geographies: Playing, living and learning* (pp. 54–68). Abingdon, England: Routledge.

Matthews, H., Taylor, M., Percy-Smith, B., & Limb, M. (2000). The unacceptable flaneur: The shopping mall as a teenage hangout. *Childhood*, *7*(3), 279–294. http://doi.org/10.1177/0907568200007003003

Mitchell, R. (2013). Is physical activity in natural environments better for mental health than physical activity in other environments? *Social Science & Medicine*, *91*, 130–134. http://doi.org/10.1016/j.socscimed.2012.04.012

Morrow, V. M. (2000). "Dirty looks" and "trampy places" in young people's accounts of community and neighbourhood: Implications for health inequalities. *Critical Public Health*, *10*(2), 141–152. http://doi.org/10.1080/713658244

Nemeth, J. (2006). Conflict, exclusion, relocation: Skateboarding and public space. *Journal of Urban Design*, *11*(3), 297–318.

Osler, A., & Starkey, H. (2005). *Changing citizenship: Democracy and inclusion in education*. Maidenhead, England: Open University Press, McGraw-Hill.

Owens, P. E. (1997). Adolescence and the cultural landscape: Public policy, design decisions, and popular press reporting. *Landscape and Urban Planning*, *39*(2), 153–166. http://doi.org/10.1016/S0169-2046(97)00052-2

Owens, P. E. (2002). No teens allowed: The exclusion of adolescents from public spaces. *Landscape Journal*, *21*(1), 156–163. http://doi.org/10.3368/lj.21.1.156

Parikh, R. M. (2016, October). How do men and women rest in public spaces? Gender tells all. *The Quint*. Retrieved from https://www.thequint.com/women/2016/10/05/men-and-women-react-and-behave-differently-in-public-spaces-gender-discrimination-public-access-finds-study

Park, B. J., Tsunetsugu, Y., Kasetani, T., Kagawa, T., & Miyazaki, Y. (2010). The physiological effects of Shinrin-yoku (taking in the forest atmosphere or forest bathing): Evidence from field experiments in 24 forests across Japan. *Environmental Health and Preventive Medicine*, *15*(1), 18–26. http://doi.org/10.1007/s12199-009-0086-9

Quiroz-Martinez, J., Wu, D. Pei, & Zimmerman, K. (2005). *ReGeneration: Young People Shaping Environmental Justice*. Oakland, CA: Movement Strategy Center.

Rasmussen, K., & Smidt, S. (2003). Children in the neighbourhood: The neighbourhood in children. In P. Christensen & M. O'Brien (Eds.), *Children in the city: Home, neighbourhood and community* (pp. 82–100). London, England: RoutledgeFalmer.

Riemer, M., Lynes, J., & Hickman, G. (2014). A model for developing and assessing youth-based environmental engagement programmes. *Environmental Education Research*, *20*(4), 552–574.

Ripley, A. (2016). School-disturbance laws have outlawed being a teenager in America. *The Atlantic*. Retrieved from http://www.theatlantic.com/magazine/archive/2016/11/how-america-outlawed-adolescence/501149/

Sayal, R., Bidisha, S. H., Lynes, J., Riemer, M., Jasani, J., Monteiro, E., . . . Eady, A. (2016). Fostering systems thinking for Youth Leading Environmental Change: A multinational exploration. *Ecopsychology*, *8*(3), 188–201.

Sibley, D. (1995). *Geographies of exclusion: Society and difference in the West*. London, England: Routledge.

Snyder, H. N., & Sickmund, M. (2006). *Juvenile offenders and victims 2006 national report*. Washington, DC: National Center for Juvenile Justice.

Theilking, M., & Moore, S. (2001). Young people and the environment: Predicting ecological behavior. *Australian Journal of Environmental Education*, *17*, 63–70.

Trzesniewski, K. H., & Donnellan, M. B. (2010). Rethinking "Generation Me": A study of cohort effects from 1976–2006. *Perspectives on Psychological Science*, *5*(1), 58–75. http://doi.org/10.1177/1745691609356789

Twenge, J. M., & Campbell, W. K. (2009). *The narcissism epidemic: Living in the age of entitlement*. New York, NY: Free Press.

Twenge, J. M., Campbell, W. K., & Freeman, E. C. (2012). Generational differences in young adults' life goals, concern for others, and civic orientation, 1966–2009. *Journal of Personality and Social Psychology*, *102*(5), 1045–1062. http://doi.org/10.1037/a0027408

United Nations Children's Fund (UNICEF). (2006). *The state of the world's children 2007: Women and children: The double dividend of gender equality*. New York, NY: Author.

United Nations Children's Fund (UNICEF). (2007). *The participation of children and young people in emergencies: A guide for relief agencies, based largely on experiences in the Asian tsunami response*. Bangkok, Thailand: UNICEF EAPRO.

United Nations Children's Fund (UNICEF). (2011). *The state of the world's children 2011: Adolescence—An age of opportunity*. New York, NY: Author. Retrieved from http://www.unicef.org/sowc2011/

United Nations Children's Fund (UNICEF). (2012). *Progress for children: A report card on adolescence* (No. 10). New York, NY: Author.

United Nations Children's Fund (UNICEF). (2013). *Youth in action on climate change: inspirations from around the world*. New York, NY: United Nations Joint Framework Initiative on Children, Youth and Climate Change. Retrieved from https://www.unicef.org/education/files/Publication_Youth_in_Action_on_Climate_Change_Inspirations_from_Around_the_World_English.pdf

United Nations Children's Fund (UNICEF). (2014). *Child Friendly Cities* website. Retrieved from http://childfriendlycities.org/. Accessed July 23, 2014.

United Nations Children's Fund (UNICEF). (2015). *Situation analysis of children in Uganda*. New York, NY: Author.

United Nations Children's Fund (UNICEF) (2017). *Adolescence: What you really think of them*. Retrieved from https://www.unicef.org/adolescence/

UN Women. (2013). *Annual report 2012–2013*. Retrieved from http://www.unwomen.org/~/media/Headquarters/Attachments/Sections/Library/Publications/2013/6/UNwomen-AnnualReport2012-2013-en%20pdf.pdf

Valentine, G. (2004). *Public space and the culture of childhood*. Ashgate, England: Aldershot.

Valentine, G., & McKendrick, J. (1997). Children's outdoor play: Exploring parental concerns about children's safety and the changing nature of childhood. *Geoforum*, *28*, 219–235.

Vanderbeck, R. M., & Dunkley, C. M. (2003). Young people's narratives of rural-urban difference. *Children's Geographies*, *1*(2), 241–259. http://doi.org/10.1080/14733280302192

Ver, E. (2014). *Teens and improvised spaces: A study of appropriation of outdoor places— Academic Commons* (Master's thesis). Columbia University, New York, NY.

Ward Thompson, C., Aspinall, P., Bell, S., & Findlay, C. (2005). "It gets you away from everyday life": Local woodlands and community use—What makes a difference? *Landscape Research*, *30*(1), 109–146. http://doi.org/10.1080/0142639042000324794

Weller, S. (2006). Skateboarding alone? Making social capital discourse relevant to teenagers' lives. *Journal of Youth Studies*, *9*(5), 557–574. http://doi.org/10.1080/13676260600805705

Weller, S. (2007). *Teenagers' citizenship: Experiences and education (relationship and resources)*. Abingdon, England: Routledge.

Wells, N. M., & Lekies, K. S. (2006). Nature and the life course: Pathways from childhood nature experiences to adult environmentalism. *Children, Youth and Environments*, *16*(1), 1–25.

Woolley, H., Spencer, C., Dunn, J., & Rowley, G. (1999). The child as citizen: Experiences of British town and city centres. *Journal of Urban Design*, *4*(3), 255–282. http://doi.org/10.1080/13574809908724451

Wray-Lake, L., Flanagan, C. A., & Osgood, D. W. (2010). Examining trends in adolescent environmental attitudes, beliefs, and behaviors across three decades. *Environment and Behavior*, *42*(1), 61–85. http://doi.org/10.1177/0013916509335163

HIV Prevention Among Adolescents

WHAT HAVE WE LEARNED AND WHERE ARE WE?

Audrey Pettifor and Hamsa Subramaniam

Adolescents and HIV

Adolescents and young people face a high risk of HIV infection in many settings. An estimated 5.4 million young people aged 15–24 are living with HIV, accounting for 15% of the total burden of persons living with HIV worldwide (Joint United Nations Program on HIV/AIDS [UNAIDS], 2014). Adolescent girls and young women aged 15–24 years are at particularly high risk of HIV infection, accounting for 20% of new HIV infections among adults globally in 2015, despite accounting for just 11% of the adult population (UNAIDS, 2014). Young women in sub-Saharan Africa are at particularly high risk, with incidence rates of 2%–5% observed in many settings (A. Pettifor et al., 2016; Shisana et al., 2014).

It is estimated by UNAIDS that more than 90% of new HIV infections in central Asia, Europe, North America, the Middle East, and North Africa in 2014 were among people from key populations and their sexual partners (Baggaley et al., 2015). Globally, information on HIV infection rates in adolescent key populations (key populations here are considered men who have sex with men, people who inject drugs, and sex workers) are scarce; however, where such data do exist, the levels of infection observed are significantly higher than in the general youth population (Baggaley et al., 2015). Many individuals who engage in sex work or injection drug use began before the age of 18 (Silverman, 2011). In Asia, it is estimated that 95% of new HIV infections among young people occur among key populations (Baggaley et al., 2015). In the United States, adolescent men who have sex with men are at very high risk of infection, particularly young men who have sex with men of color. Among 13- to 19-year-old, 92.8% of HIV infections were attributed to male-to-male sexual contact (Centers for Disease Control and Prevention, 2012).

It is important to consider adolescent HIV prevention from a life course perspective and to tailor prevention programs to young people's developmental stage. Adolescence is a time of key life transitions in family, school, and peer domains and

in health behavior (Viner et al., 2012). Adolescents transition from living at home to living on their own or with a partner; may have a first child during this time, get married, leave school, start tertiary education, or enter the workforce; and often become responsible for their own health care (Viner et al., 2012). These transitions can increase the risk of HIV infection, particularly when there are not supportive contextual and structural factors in place. Adolescent health is shaped by many structural drivers and systems, including the health care system, education system, labor markets, economic policy, health policy, ability to engage in civic participation, and religion and culture (Patton et al., 2016). It is important for prevention programs to acknowledge the importance of families, friends/peers, and partners in young people's lives and also the role of key social environments like school, culture, and society. It is also important to acknowledge that adolescents are a heterogeneous group, and the risk factors for HIV differ by age, gender, and context. It is important to tailor prevention programs to address these characteristics—one size does not fit all.

Increasingly, reviews of adolescent HIV prevention programs have acknowledged the importance of context and environment on the success of programs in achieving positive health outcomes (Mavedzenge et al., 2014; Protogerou & Johnson, 2014; Svanemyr et al., 2015). Svanemyr and colleagues (2015) proposed a framework for developing enabling environments to improve adolescent sexual and reproductive health. They described enabling environments as a set of interrelated conditions—legal, political, social, and cultural, among others—that affect the capacity of young people to lead healthy lives and access relevant and necessary services, information, and products (Svanemyr et al., 2015). A component of enabling environments is acknowledging the multiple levels of influence in shaping adolescent health and using an ecological framework to address the individual, relational, community, and societal impacts on adolescent sexual and reproductive health.

Adolescence is a time when young people often strive to develop an identity that is separate from their parents/family; nevertheless, parent/family involvement in the lives of adolescents is important, particularly as it relates to HIV prevention. Limited but consistent evidence finds that adolescents' talking to their parents about sex leads to delayed sexual initiation and greater contraceptive use, and better parent–adolescent communication is also associated with adolescent self-esteem, self-worth, better social functioning, and fewer mental health problems (Patton et al., 2016).

In addition, peer influence during adolescence has been found to play an important role in shaping sexual behavior and HIV prevention behaviors. Adolescents whose peers participate in risk behaviors are more likely to smoke, drink alcohol, and engage in risky sexual behavior. At the same time, communication with partners about condom use and HIV prevention can reduce HIV risk (Patton et al., 2016). A recent review of peer influence on adolescent HIV risk behavior in sub-Saharan Africa actually concluded that while all studies ($n = 11$) found evidence

for an association between peers and at least one peer exposure/outcome association, there were no clear patterns by type of peer exposure or outcome (Fearon et al., 2015).

Societal and cultural norms around adolescent sexuality and gender also shape adolescent behavior and HIV prevention. In many settings, access to HIV prevention services is limited for adolescents as it is not deemed acceptable for them to be sexually active, particularly adolescent girls. Lack of youth friendliness, confidentiality, and stigma associated with youth accessing sexual and reproductive health services keep many adolescents from accessing necessary preventive services (S. Napierala Mavedzenge et al., 2011). In a number of countries, adolescents are unable to access HIV testing without parent or guardian consent. Of 90 countries with available data, 58 required parental consent for young people to access HIV counseling and testing (HCT), and 72 required consent to receive one or more sexual and reproductive health services (UNAIDS, 2016). Barriers to care are often even greater for adolescent key populations where their behaviors are stigmatized or illegal. Adolescent men who have sex with men in many settings where homosexuality is illegal may not seek needed care for fear of being reported by health care workers. Similarly, adolescents engaged in sex work may also not seek care for fear of being sent to state institutions or harassed by law enforcement (a potential unintended consequence of laws designed to protect minors defining sex work among those under 18 as child exploitation) (McClure et al., 2015).

A key element of ensuring adolescents have access to effective HIV prevention involves framing HIV and sexual and reproductive health services as a fundamental human right. The UNAIDS Reference Group on HIV and Human Rights offered a number of human rights–oriented recommendations to member states under three broad headings: (a) removing punitive laws, policies, and practices, particularly those targeting key populations and instead creating a more enabling environment through protective laws, policies, and practices; (b) accelerating universal access to treatment; and (c) scaling up the human rights programs that are essential to an effective response to HIV (World Health Organization [WHO], 2013). Ensuring that adolescents are protected by laws that reduce the risk of violence and allow free access to prevention services is key to reducing HIV infection.

While there are a number of social drivers that increase adolescent risk of HIV, violence is acknowledged as an important structural factor that affects many adolescents and increases HIV risk in many settings. A global meta-analysis with prevalence rates from 331 samples and nearly 10 million participants found prevalence rates for child sexual abuse were 11.8% (18.0% for girls and 7.6% for boys) (UNAIDS Reference Group on HIV and Human Rights, n.d.). In 22 of the 32 countries with available data, young women reported experiencing more recent intimate partner violence than women in older age groups (UNAIDS, 2016). Fear of violence or actual experiences of violence also act as a deterrent for many adolescents, in particular adolescent key populations, keeping them from accessing HIV prevention services. In addition, it has been documented that young women

who have experienced intimate partner violence are less likely to use prevention services such as condoms and preexposure prophylaxis (PrEP) (A. E. Pettifor, Measham, Rees, & Padian, 2004; Roberts et al., 2016).

Acknowledging the importance of context and violence in adolescent sexual and reproductive health, the International Conference on Population and Development Programme of Action stressed the importance of gender relations and equality and violence against adolescents as part of comprehensive sexuality education (Haberland & Rogow, 2015). Addressing violence against adolescent women and boys not only likely will improve HIV prevention, but also will support the Sustainable Development Goals 16.2 (SDG 16.2), which aim to end abuse, exploitation, trafficking, and all forms of violence against and torture of children.

State of HIV Prevention

Given the burden of HIV infection among adolescents globally, adolescents are a focus population for HIV prevention. As of 2016, there were a number of HIV prevention interventions that have been shown to decrease HIV risk among adolescents and young people (Johnson et al., 2011; Mavedzenge et al., 2014). This is certainly encouraging; however, there are still a limited number of rigorously conducted evaluations of HIV prevention programs with HIV incidence end points among adolescents. To date, there have been six trials conducted with HIV incidence as an end point and one with HIV prevalence among adolescents and young people (Baird et al., 2012; Cowan et al., 2010; Jewkes et al., 2008; Karim, 2015; A. Pettifor et al., 2016; Population Council, 2016; Ross et al., 2007). All of these studies were conducted in sub-Saharan Africa; some have been school based, and many have addressed structural drivers of HIV infection, such as gender-based violence, education, or poverty. To date, none of these studies have demonstrated an impact on HIV incidence, although some have shown impacts on gender-based violence and genital herpes (herpes simplex virus 2 [HSV-2]).

One trial of cash transfers provided to young women and their parent guardians in Malawi did show a reduction in HIV prevalence 18 months after the start of the study and also showed reductions in young women having sex and having an older partner (Baird et al., 2012). The HIV Prevention Trials Network (HPTN) 068 study involved a cash transfer provided to young women and their parent guardian conditional on school attendance in South Africa. While there was no effect of the intervention on HIV or HSV-2 incidence, there was a significant reduction in intimate partner violence, having had a partner in the past 12 months, and unprotected sex in the past 3 months (A. Pettifor et al., 2016). Another cash transfer trial conducted in South Africa among adolescents found an impact on incidence of genital herpes (HSV-2) infection but not HIV infection (Karim, 2015). Similarly, the Stepping Stones intervention, which was a group-based,

multisession behavioral intervention with a focus on reducing intimate partner violence and gender inequality, saw a reduction in the incidence of genital herpes, but not in HIV among young men and women aged 15 to 26 (Jewkes et al., 2008).

It is encouraging that many of the interventions among adolescents have aimed to address structural drivers of HIV risk. However, many of the interventions have attributed the lack of impact on HIV incidence to larger contextual factors that affected successful implementation or uptake of the intervention. In a recent interim report on the Population Council's Adolescent Girls Empowerment Program randomized controlled trial (RCT) in Zambia, a program that addresses numerous factors to provide a more enabling environment for young women to reduce HIV risk, the report attributed a lack of impact on pregnancy, HSV-2, or HIV incidence to larger community and structural factors, such as families, boys and men in the community and community leaders, as well as societal norms around sexual and reproductive health and use of prevention services (Population Council, 2016). Similar concerns were voiced about the *Mema kwa Vijana* school-based trial in Tanzania (Ross et al., 2007) and the Regai Dzive Shiri community-based study in Zimbabwe (Cowan et al., 2010).

In fact, there have been a number of meta-analyses and systemic reviews of HIV prevention programs for adolescents (Johnson et al., 2011; Mavedzenge et al., 2014; Picot et al., 2012). Overall, these reviews suggested positive changes for nonbehavioral outcomes such as increasing safer sex knowledge, attitudes, and intentions, and they have had smaller impacts on behavioral outcomes such as condom use.

From these reviews of reviews, a number of key characteristics have been synthesized to abstract features of interventions that have been effective in reducing HIV risk. Interventions are more likely to be successful when tailored to the gender, ethnicity or race, and age or developmental stage of the intervention participants (Protogerou & Johnson, 2014). In addition, interventions that are theory based and provide skills training and practice with communication and negotiation skills are found to be associated with reduced sexual risk-taking. In addition, linkage to contraceptive services has been found to increase efficacy (Protogerou & Johnson, 2014).

A review by Protogerou and Johnson (2014) noted 14 parameters as important to reducing sexual risk-taking among adolescents, including condom use skills training; communication/negotiation skills training; cognitive behavioral skills training; if the intervention targets vulnerable samples, then ensures the intervention is tailored to address the needs of that population; tailoring interventions to the age or developmental stage of the adolescent; ethnic- or race-relevant content; gender-relevant content; theory-based interventions; formative research conducted prior to the intervention implementation; randomized controlled designs; inclusion of control groups in the study design; acceptance cues (i.e., if adolescents found the intervention to be acceptable to them); supportive school environment; and targeting immediate social

influences (e.g., interventions that address parental or peer influences on risk behaviors) (Protogerou & Johnson, 2014).

Given the importance of context and gender, a review of sexuality and HIV education programs found that those that addressed gender and power explicitly were five times more likely to be effective; 80% were associated with significantly lower rates of sexually transmitted infections (STIs) or unintended pregnancy, compared to 17% that did not incorporate these concepts (Haberland, 2015). The review also found that programs that used participatory and learner-centered teaching approaches, facilitated critical thinking and personal reflection about gender and power and how these concepts affect a young person's life, and allowed participants to see themselves as change agents were more effective. In fact, in a recent review of comprehensive sexuality education, Haberland and Rogow (2015) noted that engaging adolescents in critical thinking about gender, power, and rights through comprehensive sexuality education could expand the outcomes that such programs traditionally target to include early marriage, sexual coercion, intimate partner violence, homophobic bullying, girls' agency, school safety, sex trafficking, or gender norms. Interventions that aim to address multiple social determinants such as poverty, education, and gender equality may have important benefits for multiple interrelated outcomes (Haberland & Rogow, 2015).

BEHAVIORAL INTERVENTIONS

There are numerous HIV prevention behavioral studies that have aimed to reduce sexual risk of HIV among adolescents. In a meta-analysis of these types of studies conducted between 1990 and 2008, there were 67 studies that met the study criteria and were included in the analysis (Johnson et al., 2011). Of these studies, 78% were conducted in United States, and 73% of participants were recruited from schools or community contexts. The authors concluded that overall these interventions had shown success in reducing incident STIs, sex frequency, number of partners, delaying coital debut, increasing condom use, and increasing skills to negotiate safer sex and access condoms. In another systematic review of school-based behavior change interventions, Picot et al. reported on data from 12 RCTs that met the quality criteria for the review and reported that the strongest evidence was for changes in knowledge and self-efficacy, but impacts on behavioral outcomes like condom use were limited (Picot et al., 2012).

SCHOOL-BASED HEALTH AND SEXUALITY EDUCATION FOR HIV PREVENTION

The potential population-level impact of school-based health and sexuality education programs on HIV prevention is significant. Sexual debut occurs most often during adolescence, and equipping this population with the knowledge and tools

to engage in safer sex can be a practical and efficient way to prevent transmission of HIV and other STIs (UNAIDS, 2012).

Given that sexual health, gender equality, and human rights are interrelated, the desired framework for school-based HIV/STI prevention is one that seeks to empower young people to protect their health and to see themselves as equal members of society. These qualities are made explicit in the International Conference on Population and Development's + 5 conference, where they call for comprehensive sexuality education as an integral part of "promoting the well-being of adolescents, enhancing gender equality and equity as well as responsible sexual behavior, to protect them from early and unwanted pregnancy, sexually transmitted diseases including HIV/AIDS, and sexual abuse, incest and violence" (Haberland & Rogow, 2015; UN General Assembly, 1999). To achieve this, school-based health and sexuality education cannot be an add-on to the school curriculum. Rather, it should be part of a coordinated, adolescent-focused effort involving stakeholders from public health, education, law enforcement, and the local community (Haberland & Rogow, 2015).

Most school-based health and sexuality education programs started in the early 1990s as curriculum add-ons, emphasizing abstinence only or abstinence plus as the primary prevention strategy, particularly programs funded by faith-based organizations and the US-funded President's Emergency Plan for AIDS Relief (PEPFAR) (Fonner et al., 2014). Abstinence-based prevention strategies (waiting until marriage to have sex as the primary method of HIV/STI prevention) were utilized not only in school-based prevention programs, but also in a range of health behavior change and HIV prevention settings; these strategies still persist in many countries. Arguments against abstinence-based prevention emerged quickly and gained traction, citing both ethical objections and practical challenges to withholding non–abstinence prevention methods from this population (Mmari & Blum, 2009). The most significant of these arguments was that abstinence-only education prevented potentially lifesaving information from reaching individuals who often did not have power in sexual relationships—a clear violation of ethics and human rights. Younger, less experienced individuals—especially girls—were already facing challenges in sexual relationships. Not having comprehensive information that could protect them and their health was a violation of human rights. Further, abstinence-only strategies exclude sexual minorities and other vulnerable adolescents who in many settings are engaged in transactional sex or who do not have marriage as a life option (Haberland & Rogow, 2015; Wagman et al., 2009). Most important, there is no evidence that abstinence education is associated with reductions in HIV incidence (Lo et al., 2016).

The school program interventions demonstrating effectiveness in increasing condom use, increasing the age of sexual debut, and improving knowledge of sexual and reproductive health include a combination of school-, health-, and community-based approaches. Kirby et al. surveyed a wide range of existing school-based health and sexuality education programs and noted the following

topics as shared among the most successful curricula: factual information on HIV and other STIs, structure and functions of the human reproductive system, family planning methods and decision-making; risks associated with certain sexual behaviors; and prevention methods (Kirby, 2002). Students were typically instructed in these topics through peer mentorship, clubs, plays, and other youth-friendly activities. Elements of successful interventions also included conducting a needs assessment prior to intervention design, increasing access to health services, providing adolescent-friendly extracurricular activities, peer mentorship, community mobilization, training of school-based health and sexuality education facilitators, and condom promotion (Linda & Renee, 2007; Protogerou & Johnson, 2014).

Several evaluations have been conducted to demonstrate the impact of school-based health and sexuality education programs in sub-Saharan Africa. A study evaluating a peer education and facilitator training among a selected group of middle-school children in Addis Ababa demonstrated significant improvement in HIV knowledge, willingness to go for HIV testing and counseling, and increased likeliness to use condoms postintervention (Menna et al., 2015). A trial including 20 rural communities in Mwanza, Tanzania, evaluated the MEMA kwa Vijana intervention, a four-part intervention including a participatory in-school program, government health worker training on youth-friendly services, community-based condom promotion, and community-wide mobilization, including youth health weeks (Ross et al., 2007). Collecting both biological and sociobehavioral data over a 3-year period, the intervention had a significant impact on improving knowledge and reported attitudes and behaviors; however, there were no consistent or significant results pertaining to reduction in HIV seroconversion or HSV-2 incidence (Ross et al., 2007).

In a review of reviews of adolescent prevention programs, in-school HIV prevention education interventions had high-quality evidence with consistent effectiveness in increasing knowledge and attitudes, high-quality evidence with inconsistent evidence for behavior change outcomes, and moderate-quality evidence with mixed results for biological outcomes. Overall, it was noted that interventions were more effective when delivered by a trained adult facilitator, they were multiple-session programs, curricula included skills- and knowledge-building activities, and programs were designed to the local context. Evidence suggested that abstinence-only and peer-led interventions were not effective (Mavedzenge et al., 2014).

Most studies demonstrating the success of school-based health and sexuality education programs use increasing knowledge and awareness of HIV, increasing condom use, reducing number of sexual partners, and improving self-efficacy as proxies for HIV transmission reduction (Fonner et al., 2014; Mavedzenge et al., 2014; Menna et al., 2015). The MEMA kwa Vijana evaluation is one of only a handful that used biological end points to assess the impact of school-based health and sexuality education programs on the reduced incidence of STIs. Biological

end points for studies understanding school-based HIV prevention are rare. Even so, while the intervention increased knowledge and reported attitudes of HIV/STIs, no significant inferences could be made regarding reduction of HIV incidence as a result of the intervention (Ross et al., 2007).

A Cochrane Review of six trials evaluating school-based health and sexuality education programs as they specifically aimed to reduce STI transmission or pregnancy was among several reviews finding no decisive evidence demonstrating the effectiveness of such interventions (Aj et al., 2016; Ross et al., 2007). The school-based programs evaluated in the Cochrane Review had no demonstrable effect on HIV prevalence (relative risk [RR] 1.03, 95% confidence interval [CI] 0.80 to 1.32, three trials; 14,163 participants); HSV prevalence (RR 1.04, 95% CI 0.94 to 1.15; three trials, 17,445 participants); or the number of adolescent pregnancies postintervention (RR 0.99, 95% CI 0.84 to 1.16; three trials, 8,280 participants) (Aj et al., 2016).

While it is important to note the behavioral successes of school-based health and sexuality education programs, it remains unclear that curriculum-based interventions alone are enough to prevent STI transmission and pregnancy among adolescents. The most vulnerable and marginalized adolescents are not in school and are therefore by definition not reached by school-based health and sexuality education programs (Haberland & Rogow, 2015). Another challenge is that most studies rely on self-reported behaviors, the validity and reliability of which are at times ambiguous (Haberland & Rogow, 2015; Mavedzenge et al., 2014; Michielsen et al., 2010; Paul-Ebhohimhen et al., 2008; Protogerou & Johnson, 2014). Poverty, gender dynamics, cultural norms, access to health services, and community involvement are important factors in designing successful interventions and therefore need to be part of integrated, adolescent-focused HIV prevention interventions (S. M. Napierala Mavedzenge et al., 2011). These elements are shared in the school-based health and sexuality education programs deemed successful and should be more fully acknowledged in the intervention planning, design, and measurement phase in future programs.

ADOLESCENT-FRIENDLY SERVICES AS PREVENTION

Public health guidance in the last few decades has promoted delaying marriage and pregnancy to ensure that adolescents stay in school and has emphasized family planning (Wegelin-Schuringa et al., 2014). Because of this, adolescents and young adults between the ages of 10 and 24 find themselves between pediatric health services and adult health services, without accessible, relevant health services tailored to their life stage. A majority of adolescents who are sexually active do not believe that they are engaging in risky sexual behavior or at risk for HIV, even though HIV incidence is highest in this age group (Peralta et al., 2007). Furthermore, young people are the least likely to seek diagnostic services, especially for HIV testing (Bumgarner et al., 2017). An evaluation of youth-friendly health services

conducted in South Africa indicated that in spite of health care worker training, there was still evidence that the capacity to deliver positive experiences was in need of improvement, particularly in the context of family planning and HIV/STI services (Geary et al., 2015). These facts underscore the importance of high-quality, youth-friendly services in preventing HIV.

The World Health Organization describes youth-friendly services as providing "rights-based, quality health services" to individuals between the ages of 10 and 24, especially for women and sexual minorities (WHO, 2002). Clinicians play a central role in equipping adolescents to address sexual health in practical ways by providing contraception, medically accurate information, and counseling on safer sexual behaviors (Bearinger et al., 2007). Another quality essential to catering to adolescents is guaranteeing confidentiality and autonomy, such that they may consent to their own treatment and care. Further, clinics should have convenient hours of operation where adolescents may attend without fear of stigma and are compatible with school and work schedules (Wegelin-Schuringa et al., 2014). If trained appropriately, providers can account for the client's life stage and socioeconomic circumstance when providing services and guidance (Wegelin-Schuringa et al., 2014). Of interventions measuring use of health services, those that trained health care workers in adolescent-friendly service provision, in addition to community activities, showed evidence of increased service uptake (based on reported use). Even so, a range of studies demonstrated improved uptake in health services when they were accessible and youth friendly (S. M. Napierala Mavedzenge et al., 2011).

Interventions that combine health care worker training, demand generation for adolescent health services, community mobilization, and improved health facility treatment of adolescents are ready for large-scale implementation (Denno et al., 2015). While youth centers seem like a convenient entry point for health service delivery, a review of existing programs and interventions demonstrated that youth centers are not an effective or cost-effective intervention for providing adolescent-friendly health services. That said, more research is needed to understand how such interventions improve uptake of essential services among vulnerable and marginalized adolescent populations (Denno et al., 2015).

Increasing HIV testing is among the priorities to prevent HIV incidence among adolescents and is an essential gateway service for many prevention and care programs. Among the interventions intended to increase testing, repeated testing alongside HIV/STI educational programs were the most successful (Bumgarner et al., 2017). Factors that increase the likelihood of HIV testing uptake among adolescents include being in committed relationships; concern about future health; doing what is socially responsible; and open HIV-related communication between sexual partners (Bumgarner et al., 2017). In addition to these sociobehavioral factors, the success of testing programs relies on widely accessible testing and counseling services. Given the practical challenges of going to the health facility to receive a test, particularly in rural areas, home testing and

mobile testing have become convenient alternatives (Labhardt et al., 2014). Home testing is when health providers go door to door to offer HIV testing to all house-hold members. The mobile testing approach is providing testing at community gatherings.

Another opportunity to broaden access to testing is the use of the HIV self-test (Pérez et al., 2016). This could be particularly useful for adolescents given their overall low rates of testing. The large caveat with HIV self-testing, however, is that there is limited evidence demonstrating linkage to care if a home test is positive. Because a health care worker is not overseeing the testing process, the opportunity to confirm a positive test result and provide support for those that are confirmed positive is lacking. This problem is presumably more acute among adolescents and is of critical concern given that early linkage to care promotes optimal HIV man-agement (Makusha et al., 2015).

A cluster-randomized trial was conducted in Lesotho to evaluate mobile testing and home testing side by side among adolescents. Among adolescents testing for the first time, home-based testing rates were found to be 22.5% higher than in the mobile testing group (Labhardt et al., 2014). The Sustainable East African Research in Community Health (SEARCH) trial demonstrated the impact of hybrid model of mobile testing plus home testing with community sensitization in Ugandan and Kenyan rural settings. A total of 86,421 (88%) of adolescents were tested for HIV, compared to the 28% prior testing rate. The SEARCH trial also found evidence of reduced stigma among those tested (Kadede et al., 2016).

For high-density urban areas with a concentration of high-risk adolescents, a study in Haiti demonstrated the effectiveness of a community-based HIV and health testing model. HIV testing was offered within a package of several other tests, alongside community sensitization. This particular campaign identified an adolescent and youth population with an HIV prevalence six times higher than the estimated national adolescent prevalence. While this program was focused on identifying cases and linking to care, this testing model was highly accepted by the community and could take on components of behavior change and repeated testing to prevent future infections among negative adolescents (Reif et al., 2016).

Voluntary medical male circumcision (VMMC) has been another pillar in HIV prevention since 2007, reducing the likelihood of HIV acquisition among heterosexual men by approximately 60% (Auvert et al., 2005). While VMMC was not specifically targeted toward adolescents in the initial implementation, between 34% and 55% of all VMMC services provided in priority countries were received by males aged 10–19 (Njeuhmeli et al., 2014). A systematic review of VMMC programs described the behavior change continuum for VMMC in-tervention planning in the following three stages: preintention, intention, and action (Sgaier et al., 2015). Each stage has key motivators and barriers to getting to the next stage.

A prominent reason why a large proportion of VMMC uptake is among adolescents is because circumcision often coincides with traditional circumcision

practices occurring during adolescence (Njeuhmeli et al., 2014). Other key motivators for VMMC uptake are peer champions, parents, and female partners. Successful VMMC programs have leveraged these motivators to guide messaging and service provision to increase adolescent uptake of VMMC, in addition to highly tailored social mobilization campaigns and counseling (Njeuhmeli et al., 2014; Sgaier et al., 2015). Successful interventions also included advocacy with community leaders through existing structures; community mobilization, particularly women; interpersonal communication through "VMMC Peer Champions" and the like; nominal financial incentives; and use of mass media campaigns (Kripke et al., 2016).

There are still clear barriers to VMMC uptake, particularly having to do with the quality of health service provision. Negative interaction with providers; violations of privacy; requiring parental consent; shame or embarrassment associated with receiving the procedure; fear of pain associated with the procedure; and misinformation are cited in many studies as reasons for adolescent males refusing VMMC. In a study conducted in Botswana, investigators noted that afternoon and evening hours were recommended by adolescent clients as the best time to receive health services (Lesedi et al., 2011). For VMMC services received in Tanzania, separating adolescents and adult men was seen as more culturally appropriate than providing services for all males together (Plotkin et al., 2013). A study in Rakai, Uganda, highlighted the importance of clear and accurate messaging about VMMC, showing that adolescents who wrongly interpreted beliefs about circumcision's protective value had reduced interest if they knew someone who had been circumcised and died of AIDS (Ssekubugu et al., 2013).

These barriers underscore the importance of developing thoughtful, age-appropriate, and multiprong interventions, not only to reduce HIV incidence through testing or VMMC but also to promote healthy behaviors among adolescents that will carry on throughout their lives. To leverage the high acceptability of VMMC among adolescents, more emphasis must be placed on effectively customizing guidelines and policies, services, and messages to this age group.

Both HIV testing and VMMC campaigns have taken place at schools or have been coordinated with school holidays. VMMC campaigns have been organized in coordination with school holidays with success in targeting adolescent males, particularly in Zimbabwe (Ashengo et al., 2014). That said, analyses of interventions providing HIV testing at school indicated uptake of almost 20 percentage points lower than when testing services are provided in community-based platforms like mobile clinics or door to door (Suthar et al., 2013).

Another important biomedical intervention that has shown great promise for HIV prevention is the use of antiretroviral medication for the prevention of HIV transmission, also known as *treatment as prevention*. The landmark HPTN study 052 demonstrated that provision of antiretroviral treatment to HIV-infected individuals reduced transmission to HIV-uninfected partners by 89% (Cohen et al., 2011). Most countries have now moved to implementing the WHO guidelines

of offering treatment to individuals who test positive for HIV irrespective of their health status or CD4 count (WHO, 2016). It is known that adolescents overall often face greater or different challenges with adherence to HIV treatment than adults (Bobat et al., 2015; Ferrand et al., 2016). There is still a limited evidence base of interventions shown to improve treatment adherence for adolescents (Shaw & Amico, 2016), and the challenges may be different for adolescents who were infected perinatally and thus have been living with HIV for many years versus newly infected adolescents starting antiretroviral therapy (ART) for the first time.

Antiretroviral treatment offers important lifesaving benefits for HIV-infected adolescents and can also offer important prevention benefits for their uninfected partners, but it is also clear that adherence challenges need to be addressed. For HIV-uninfected adolescents, antiretroviral treatment also offers potential prevention benefits, also known as PrEP. There is increasing recognition of the prevention potential of PrEP for populations who are at high risk of HIV acquisition. While there is still limited information on the uptake and adherence of PrEP among adolescent populations, adolescents in many settings are at high risk of HIV acquisition, and PrEP could offer important prevention benefits (Hosek et al., 2016; A. Pettifor et al., 2015).

Gaps and Considerations

The first RCT of an adolescent prevention program with HIV incidence end points was published over a decade ago (Ross et al., 2007). To date, there have still been only a handful of rigorously evaluated trials with HIV incidence end points among adolescents. That said, there are a number of interventions with proven biological evidence of efficacy in adults and that need to be scaled up more widely to adolescents (e.g., VMMC, ART for prevention of mother-to-child transmission, HIV testing and counseling, condom use, and provision of sterile injecting equipment for those who inject drugs).

A recent review of adolescent prevention concluded that there is a need for rigorous research on how best to enable adolescents to access proven prevention technologies (Mavedzenge et al., 2014). There are numerous innovative prevention programs being implemented in many parts of the world. Unfortunately, rigorous evaluation of these programs is still often overlooked, underfunded, or not undertaken at all—as a research and practice community we must continue to prioritize and fund rigorously conducted monitoring and evaluation of programs. There clearly is also a need for more rigorously evaluated comprehensive, combination prevention interventions with biologic end points. There is also a need for more rigorous data to understand factors beyond the individual level that influence risk and uptake of services; we must prioritize collection of this information on the multiple levels of influence that shape adolescents' lives and how they

relate to HIV prevention. Better quality research and information on contextual factors such as gender power, gender-based violence, school environment, and parental and peer relationships is needed. The Lancet Commission on Adolescents highlighted the scarcity of rigorous research on family influences on adolescent health and well-being and noted that, given that families and parents are the most important figures in most adolescents' lives, this is a major knowledge gap (Patton et al., 2016).

Among health service interventions designed specifically for adolescents, there is scant evidence on identifying specific, singular interventions that are significantly effective. Rather, several linked interventions provided in conjunction with one another have demonstrated increased uptake in testing and overall increases in health seeking in this population (S. M. Napierala Mavedzenge et al., 2011). Future research priorities addressing adolescent health care delivery need to consider the larger policy context that includes power in sexual relationships; context of sex, harassment, and other factors that influence sexual risk; and likelihood of adolescents seeking care and help (Haberland & Rogow, 2015). Identifying these key elements can help in designing a context-specific, age-appropriate, rights-based, adolescent-friendly health service experience. This will be particularly true as new technologies such as HIV self-testing and PrEP are offered more widely. For example, understanding the type of support that adolescents and young people will need when using self-testing devices in terms of both counseling support and linkage to care will be needed. In addition, understanding the type of adherence support and alternate models of care to provide new prevention technologies is needed.

A theme that emerged from all of the reviews of adolescent prevention programs to date is the importance of contextual factors in influencing the success of HIV prevention programs for adolescents and young people. Interventions that address the multiple spheres of influence in young people's lives are more likely to be effective—certainly those that have not addressed these factors have identified this as a limitation to program efficacy. In many settings, there is a need to target programs to those at greatest risk and a need for innovative interventions to reach youth. Clearly, the role of technology is a central part of many adolescents' and young people's lives, and better harnessing the use of cell phones and the Internet to deliver interventions and support intervention implementation is a rapidly evolving space.

The development of prevention programs that address multiple social determinants of HIV requires a multisectoral approach and also likely will have an impact on multiple health and social outcomes. While combination prevention programs that address upstream social factors such as education, poverty, and gender norms are complex, it is likely that until we address such influences our impact on preventing new infections in adolescents and adults may be limited.

References

Aj, M., Sinclair, D., Mathews, C., Kagee, A., Hillman, A., Lombard, C., . . . Lombard, C. (2016). School-based interventions for preventing HIV, sexually transmitted infections, and pregnancy in adolescents [Review]. Summary of findings for the main comparison (11). https://doi.org/10.1002/14651858.CD006417.pub3.www.cochranelibrary.com

Ashengo, T. A., Hatzold, K., Mahler, H., Rock, A., Kanagat, N., Magalona, S., . . . Njeuhmeli, E. (2014). Voluntary medical male circumcision (VMMC) in Tanzania and Zimbabwe: Service delivery intensity and modality and their influence on the age of clients. *PLoS ONE*, *9*(5), 1–8. https://doi.org/10.1371/journal.pone.0083642

Auvert, B., Taljaard, D., Lagarde, E., Sobngwi-Tambekou, J., Sitta, R., & Puren, A. (2005). Randomized, controlled intervention trial of male circumcision for reduction of HIV infection risk: The ANRS 1265 trial. *PLoS Medicine*, *2*(11), 1112–1122. https://doi.org/10.1371/journal.pmed.0020298

Baggaley, R., Armstrong, A., Dodd, Z., Ngoksin, E., & Krug, A. (2015). Young key populations and HIV: A special emphasis and consideration in the new WHO Consolidated Guidelines on HIV Prevention, Diagnosis, Treatment and Care for Key Populations. *Journal of the International AIDS Society*, *18*(2), 85–88. https://doi.org/10.7448/IAS.18.2.19438

Baird, S. J., Garfein, R. S., McIntosh, C. T., & Özler, B. (2012). Effect of a cash transfer programme for schooling on prevalence of HIV and herpes simplex type 2 in Malawi: A cluster randomised trial. *The Lancet*, *379*(9823), 1320–1329. https://doi.org/10.1016/S0140-6736(11)61709-1

Bobat, R., Archary, M., & Lawler, M. (2015). An update on the HIV treatment cascade in children and adolescents. *Current Opinion in HIV and AIDS*, *10*, 411–419. https://doi.org/10.1097/COH.0000000000000201

Bumgarner, K. F., Pharr, J., Buttner, M., & Ezeanolue, E. (2017). Interventions that increase the intention to seek voluntary HIV testing in young people: A review. *AIDS Care*, *29*(3), 365–371. https://doi.org/10.1080/09540121.2016.1259456

Centers for Disease Control and Prevention. (2012). HIV among youth in the US. November, 1–4.

Cohen, M. S., Chen, Y. Q., McCauley, M., Gamble, T., Hosseinipour, M. C., Kumarasamy, N., . . . Study, H. (2011). Prevention of HIV-1 infection with early antiretroviral therapy. *The New England Journal of Medicine*, *365*(6), 493–505.

Cowan, F. M., Pascoe, S. J. S., Langhaug, L. F., Mavhu, W., Jaffar, S., Mbizvo, M., . . . Dzive, R. (2010). The Regai Dzive Shiri Project: results of a randomised trial of an HIV prevention intervention for Zimbabwean youth. *AIDS*, *24*(16), 2541–2552. https://doi.org/10.1097/QAD.0b013e32833e77c9.The

Denno, D. M., Hoopes, A. J., & Chandra-Mouli, V. (2015). Effective strategies to provide adolescent sexual and reproductive health services and to increase demand and community support. *Journal of Adolescent Health*, *56*(1), S22–S41. https://doi.org/10.1016/j.jadohealth.2014.09.012

Fearon, E., Wiggins, R. D., Pettifor, A. E., & Hargreaves, J. R. (2015). Is the sexual behaviour of young people in sub-Saharan Africa influenced by their peers? A systematic review. *Social Science & Medicine (1982)*, *146*, 62–74. https://doi.org/10.1016/j.socscimed.2015.09.039

Ferrand, R. A., Briggs, D., Ferguson, J., Penazzato, M., Armstrong, A., Macpherson, P., . . . Kranzer, K. (2016). Review viral suppression in adolescents on antiretroviral treatment: Review of the literature and critical appraisal of methodological challenges. *Tropical Medicine and International Health*, *21*(3), 325–333. https://doi.org/10.1111/tmi.12656

Fonner, V. A., Armstrong, K. S., Kennedy, C. E., O'Reilly, K. R., & Sweat, M. D. (2014). School based sex education and HIV prevention in lowand middle-income countries: A systematic review and meta-analysis. *PLoS One*, *9*(3), e89692. https://doi.org/10.1371/journal.pone.0089692

Geary, R. S., Webb, E. L., Clarke, L., & Norris, S. A. (2015). Evaluating youth-friendly health services: Young people's perspectives from a simulated client study in urban South Africa. *Global Health Action*, *8*(1), 1–9. https://doi.org/10.3402/gha.v8.26080

Haberland, N. A. (2015). The case for addressing gender and power in sexuality and HIV education: a comprehensive review of evaluation studies. *International Perspectives on Sexual and Reproductive Health*, *41*(1), 31–42. doi:10.1363/4103115. Review.

Haberland, N., & Rogow, D. (2015). Sexuality education: Emerging trends in evidence and practice. *Journal of Adolescent Health*, *56*(1), S15–S21. https://doi.org/10.1016/j.jadohealth.2014.08.013

Hosek, S., Celum, C., Wilson, C. M., Kapogiannis, B., Delany-Moretlwe, S., & Bekker, L. (2016). Preventing HIV among adolescents with oral PrEP: Observations and challenges in the United States and South Africa. *Journal of the International AIDS Society*, *19*(Suppl. 6), 1–7.

Jewkes, R., Nduna, M., Levin, J., Jama, N., Dunkle, K., Puren, A., & Duvvury, N. (2008). Impact of Stepping Stones on incidence of HIV and HSV-2 and sexual behaviour in rural South Africa: Cluster randomised controlled trial. *BMJ*, *337*, a506. https://doi.org/10.1136/bmj.a506

Johnson, B. T., Scott-Sheldon, L. A. J., Huedo-Medina, T. B., & Carey, M. P. (2011). Interventions to reduce sexual risk for human immunodeficiency virus in adolescents. *Archives of Pediatrics & Adolescent Medicine*, *165*(1), 77–84. https://doi.org/10.1001/archpediatrics.2010.251

Joint United Nations Program on HIV/AIDS (UNAIDS). (2012). *UN report on the Global AIDS Epidemic. MSF access to essential medicines*. Retrieved from papers2://publication/uuid/4467B415-2E9B-472A-89EF-B30E692EFE5C

Joint United Nations Program on HIV/AIDS (UNAIDS). (2014). *The GAP report*.

Joint United Nations Program on HIV/AIDS (UNAIDS). (2016). *Prevention Gap report*.

Kadede, K., Ruel, T., Kabami, J., Ssemmondo, E., Sang, N., Kwarisiima, D., . . . Chamie, G. (2016). Increased adolescent HIV testing with a hybrid mobile strategy in Uganda and Kenya. *AIDS*, *614*(April), 1. https://doi.org/10.1097/QAD.0000000000001180

Karim, Q. A. (2015). *Impact of conditional cash incentives on HSV-2 and HIV in rural high school students in South Africa. CAPRISA*. Retrieved from pag.ias2015.org/PAGMaterial/PPT/2237.../CAPRISA 007 slides v1.pptx%5Cn

Kirby, D. (2002). The impact of schools and school programs upon adolescent sexual behavior. *Journal of Sex Research*, *39*(1), 27–33. https://doi.org/10.1080/00224490209552116

Kripke, K., Opuni, M., Schnure, M., Sgaier, S., Castor, D., Reed, J., . . . Stover, J. (2016). Age targeting of voluntary medical male circumcision programs using the decision makers'

program planning toolkit (DMPPT) 2.0. *PLoS One*, *11*(7), 10–24. https://doi.org/10.1371/journal.pone.0156909

Labhardt, N. D., Motlomelo, M., Cerutti, B., Pfeiffer, K., Kamele, M., Hobbins, M. A., & Ehmer, J. (2014). Home-based versus mobile clinic HIV testing and counseling in rural Lesotho: A cluster-randomized trial. *PLoS Medicine*, *11*(12). https://doi.org/10.1371/journal.pmed.1001768

Lesedi, C., Hoque, M. E., & Ntuli-Ngcobo, B. (2011). Investigating user-friendliness of the sexual and reproductive health. *Southest Asian Journal of Tropical Medicine and Public Health*, *42*(6), 1431–1443.

Bearinger, L. H., Sieving, R. E., Ferguson, J., & Sharma, V. (2007). Global perspectives on the sexual and reproductive health of adolescents: Patterns, prevention, and potential. *The Lancet*, *369*, 1220–1231.

Lo, N. C., Lowe, A., & Bendavid, E. (2016). Abstinence funding was not associated with reductions in HIV risk behavior in sub-Saharan Africa. *Health Affairs*, *35*(5), 856–863. https://doi.org/10.1377/hlthaff.2015.0828

Makusha, T., Knight, L., Taegtmeyer, M., Tulloch, O., Davids, A., Lim, J., . . . Van Rooyen, H. (2015). HIV self-testing could "revolutionize testing in South Africa, but it has got to be done properly": Perceptions of key stakeholders. *PLoS One*, *10*(3), 1–10. https://doi.org/10.1371/journal.pone.0122783

Mavedzenge, S., Luecke, E., & Ross, D. (2014). Effective approaches for programming to reduce adolescent vulnerability to HIV infection, HIV risk, and HIV-related morbidity and mortality: A systematic review of systematic reviews. *Journal of Acquired Immune Deficiency Syndromes*, *66*(Suppl. 2), S154–S169. https://doi.org/http://dx.doi.org/10.1097/QAI.0000000000000178

McClure, C., Chandler, C., & Bissell, S. (2015). Responses to HIV in sexually exploited children or adolescents who sell sex. *The Lancet*, *385*(9963), 97–99. https://doi.org/10.1016/S0140-6736(14)60979-X

Menna, T., Ali, A., & Worku, A. (2015). Effects of peer education intervention on HIV/AIDS related sexual behaviors of secondary school students in Addis Ababa, Ethiopia: A quasi-experimental study. *Reproductive Health*, *12*(1), 84. https://doi.org/10.1186/s12978-015-0077-9

Michielsen, K., Chersich, M. F., Luchters, S., De Koker, P., Van Rossem, R., & Temmerman, M. (2010). Effectiveness of HIV prevention for youth in sub-Saharan Africa: Systematic review and meta-analysis of randomized and nonrandomized trials. *Aids*, *24*(8), 1193–1202. https://doi.org/10.1097/QAD.0b013e3283384791

Mmari, K., & Blum, R. W. (2009). Risk and protective factors that affect adolescent reproductive health in developing countries: a structured literature review. *Global Public Health*, *4*(4), 350–366. https://doi.org/10.1080/17441690701664418

Napierala Mavedzenge, S., Olson, R., Doyle, A. M., Changalucha, J., & Ross, D. A. (2011). The epidemiology of HIV among young people in sub-Saharan Africa: Know your local epidemic and its implications for prevention. *Journal of Adolescent Health*, *49*(6), 559–567. https://doi.org/10.1016/j.jadohealth.2011.02.012

Napierala Mavedzenge, S. M., Doyle, A. M., & Ross, D. A. (2011). HIV prevention in young people in sub-Saharan Africa: A systematic review. *Journal of Adolescent Health*, *49*(6), 568–586. https://doi.org/10.1016/j.jadohealth.2011.02.007

Njeuhmeli, E., Hatzold, K., & Gold, E. (2014). Medical male circumcision focusing on adolescents: Benefits, challenges, and potential opportunities for linkages with adolescent

HIV, sexual, and reproductive health services. *JAIDS Journal of Acquired Immune Deficiency Syndromes*, *66*, S193–S199. Retrieved from http://journals.lww.com/jaids/Abstract/2014/07011/Lessons_Learned_From_Scale_Up_of_Voluntary_Medical.7.aspx

Patton, G. C., Sawyer, S. M., Santelli, J. S., Ross, D. A., Afifi, R., Allen, N. B., . . . Viner, R. M. (2016). Our future: A *Lancet* commission on adolescent health and wellbeing. *Lancet (London, England)*, *387*(10036), 2423–2478. https://doi.org/10.1016/S0140-6736(16)00579-1

Paul-Ebhohimhen, V. A., Poobalan, A., & van Teijlingen, E. R. (2008). A systematic review of school-based sexual health interventions to prevent STI/HIV in sub-Saharan Africa. *BMC Public Health*, *8*, 4. https://doi.org/10.1186/1471-2458-8-4

Peralta, L., Deeds, B. G., Hipszer, S., & Ghalib, K. (2007). Barriers and facilitators to adolescent HIV testing. *AIDS Patient Care and STDs*, *21*(6), 400–408. https://doi.org/10.1089/apc.2006.0112

Pérez, G. M., Cox, V., Ellman, T., Moore, A., Patten, G., Shroufi, A., . . . Ibeto, M. (2016). "I know that I do have HIV but nobody saw me": Oral HIV self-testing in an informal settlement in South Africa. *PLoS One*, *11*(4), 1–15. https://doi.org/10.1371/journal.pone.0152653

Pettifor, A., MacPhail, C., Hughes, J. P., Selin, A., Wang, J., Gómez-Olivé, F. X., . . . Kahn, K. (2016). The effect of a conditional cash transfer on HIV incidence in young women in rural South Africa (HPTN 068): A phase 3, randomised controlled trial. *The Lancet Global Health*, *4*(12), e978–e988. https://doi.org/10.1016/S2214-109X(16)30253-4

Pettifor, A., Nguyen, N. L., Celum, C., Cowan, F. M., Go, V., & Hightow-Weidman, L. (2015). Tailored combination prevention packages and PrEP for young key populations. *Journal of the International AIDS Society*, *18*(2), 8–22. https://doi.org/10.7448/IAS.18.2.19434

Pettifor, A. E., Measham, D. M., Rees, H. V., & Padian, N. S. (2004). Sexual power and HIV risk, South Africa. *Emerging Infectious Diseases*, *10*(11), 1996–2004. https://doi.org/10.3201/eid1011.040252

Picot, J., Shepherd, J., Kavanagh, J., Cooper, K., Harden, A., Barnett-Page, E., . . . Frampton, G. K. (2012). Behavioural interventions for the prevention of sexually transmitted infections in young people aged 13–19 years: A systematic review. *Health Education Research*, *27*(3), 495–512. https://doi.org/10.1093/her/cys014

Plotkin, M., Castor, D., Mziray, H., Küver, J., Mpuya, E., Luvanda, P. J., . . . Mahler, H. (2013). "Man, what took you so long?" Social and individual factors affecting adult attendance at voluntary medical male circumcision services in Tanzania. *Global Health*, *Science and Practice*, *1*(1), 108–116. https://doi.org/10.9745/GHSP-D-12-00037

Population Council. (2016). *Adolescent Girls Empowerment Program (AGEP): Mid-term findings*. Lusaka, Zambia: Author.

Protogerou, C., & Johnson, B. T. (2014). Factors underlying the success of behavioral HIV-prevention interventions for adolescents: A meta-review. *AIDS and Behavior*, *18*(10), 1847–1863. https://doi.org/10.1007/s10461-014-0807-y

Reif, L. K., Rivera, V., Louis, B., Bertrand, R., Peck, M., Anglade, B., . . . McNairy, M. L. (2016). Community-based HIV and health testing for high-risk adolescents and youth. *AIDS Patient Care and STDs*, *30*(8), 371–378. https://doi.org/10.1089/apc.2016.0102

Roberts, S. T., Haberer, J., Celum, C., Mugo, N., Ware, N. C., Cohen, C. R., . . . Partners PrEP Study Team. (2016). Intimate partner violence and adherence to HIV pre-exposure prophylaxis (PrEP) in African women in HIV serodiscordant relationships: A prospective cohort study. *Journal of Acquired Immune Deficiency Syndromes*, *73*(3), 313–322. [Epub 26 May 2016]. http://journals.lww.com/jaids/pages/articleviewer.aspx?year=2016&issue=11010&article=00012&type=abstract

Ross, D. A., Changalucha, J., Obasi, A. I., Todd, J., Plummer, M. L., Cleophas-Mazige, B., . . . Hayes, R. J. (2007). Biological and behavioural impact of an adolescent sexual health intervention in Tanzania: A community-randomized trial. *AIDS (London, England)*, *21*(14), 1943–1955. https://doi.org/10.1097/QAD.0b013e3282ed3cf5

Sgaier, S. K., Baer, J., Rutz, D. C., Njeuhmeli, E., Seifert-Ahanda, K., Basinga, P., . . . Laube, C. (2015). Toward a systematic approach to generating demand for voluntary medical male circumcision: Insights and results from field studies. *Global Health: Science and Practice*, *3*(2), 209–229. https://doi.org/10.9745/ghsp-d-15-00020

Shaw, S., & Amico, K. R. (2016). Antiretroviral therapy adherence enhancing interventions for adolescents and young adults 13–24 years of age: A review of the evidence base. *Journal of Acquired Immune Deficiency Syndromes*, *72*(4), 387–399.

Shisana, O., Rhele, T., Simbayi, L. C., Zuma, K., Jooste, S., Zungu, N., . . . Onoya, D. E. A. (2014). *South African National HIV Prevalence, Incidence and Behaviour Survey, 2012*. Pretoria, South Africa: Human Sciences Research Council.

Silverman, J. G. (2011). Adolescent female sex workers: Invisibility, violence and HIV. *Archives of Disease in Childhood*, *96*(5), 478–481. https://doi.org/10.1136/adc.2009.178715

Ssekubugu, R., Leontsini, E., Wawer, M. J., Serwadda, D., Kigozi, G., Kennedy, C. E., . . . Gray, R. H. (2013). Contextual barriers and motivators to adult male medical circumcision in Rakai, Uganda. *Qualitative Health Research*, *23*(6), 795–804. https://doi.org/10.1177/1049732313482189

Suthar, A. B., Ford, N., Bachanas, P. J., Wong, V. J., Rajan, J. S., Saltzman, A. K., . . . Baggaley, R. C. (2013). Towards universal voluntary HIV testing and counselling: A systematic review and meta-analysis of community-based approaches. *PLoS Medicine*, *10*(8). https://doi.org/10.1371/journal.pmed.1001496

Svanemyr, J., Amin, A., Robles, O. J., & Greene, M. E. (2015). Creating an enabling environment for adolescent sexual and reproductive health: A framework and promising approaches. *Journal of Adolescent Health*, *56*(1), S7–S14. https://doi.org/10.1016/j.jadohealth.2014.09.011

UNAIDS Reference Group on HIV and Human Rights. (n.d.). *Action on human rights is essential to achieving "the end of AIDS."* New York, NY: Author.

UN General Assembly. (1999). Key actions for the further implementation of the Programme of Action of the International Conference on Population and Development, 1–15. https://doi.org/10.1093/oxfordhb/9780199560103.003.0005

Viner, R. M., Ozer, E. M., Denny, S., Marmot, M., Resnick, M., Fatusi, A., & Currie, C. (2012). Adolescence and the social determinants of health. *The Lancet*, *379*(9826), 1641–1652. https://doi.org/10.1016/s0140-6736(12)60149-4

Wagman, J., Baumgartner, J. N., & Ddaaki, W. G. (2009). Experiences of sexual coercion among adolescent women. *Journal of Interpersonal Violence*, *24*(12), 2073–2095.

Wegelin-Schuringa, M., Miedema, E., Kwaak, A. Van Der, Hooft, K., & Ormel, H. (2014). *Youth friendly health services in multiple perspectives*. Amsterdam, the Netherlands: KIT Health.

World Health Organization (WHO). (2002). *Adolescent friendly health services: An agenda for change* (*46*, 1–3). Geneva, Switzerland: Author. https://doi.org/10.4274/tpa.46.20

World Health Organization (WHO). (2013). *Implementing comprehensive HIV/STI programmes with sex workers*, 171.

World Health Organization (WHO). (2016). *Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations.*

{ SECTION 5 }

Empowerment of Adolescents

Adolescent Development and Capacity Building

Esther F. Akinsola and Anne C. Petersen

Capacity development is the process through which individuals, organizations, and societies obtain, strengthen, and maintain the capabilities to set and achieve their own development objectives over time (Capacity for Disaster Reduction Initiative [CADRI], 2017; United Nations Conference on Environment and Development [UNCED], 1992; United Nations Development Program [UNDP], 2010, 2017). Capacity development consists of three related levels: individual, organizational, and enabling environment. At an individual level, capacity development focuses on skills and knowledge deposited in individuals, communities, and groups. At an organizational level, capacity development focuses on internal policies, systems, and strategies that make it possible for organizations to operate and achieve their goals. At the environmental level, the focus is on the wider society to provide an enabling environment for individuals and organizations to function effectively. It is important to conceptualize and position adolescent capacity building within the broader context of capacity development because capacity is about growth, and capacity development is about supporting growth. The focus of adolescents' capacity building should be on developing their knowledge, skills, and experiences.

Adolescents need support, guidance, and opportunities to develop self-assurance in four areas that are key to creating a happy, healthy, and successful life and ensuring a successful transition to adulthood. These areas are developing (a) a sense of competence, which translates to being able to do something well; (b) a sense of usefulness by having something to contribute; (c) a sense of belonging from being part of a community and contributing to the progress of the community; and (d) a sense of power by having control over one's future. Developing the assets and competencies of adolescents and providing capacity-building opportunities and programs in enabling environments will foster adolescents' positive and successful transition to adulthood as well as their mental and psychological well-being (CADRI, 2017; UNCED, 1992; UNDP, 2017).

Adolescent Capacity Building Globally

The major source of capacity building throughout the world is education. Research summaries on educational attainment of adolescents indicate that, globally, secondary education systems have expanded significantly in many countries from 2008, but secondary school enrollment remains low in the developing world, especially in African and Asian countries (United Nations Children's Fund [UNICEF], 2012; United Nations Educational, Scientific, and Cultural Organization [UNESCO], 2013b, 2015). In Africa and Asia, many pupils of secondary school age are in primary schools because they either entered school late or repeated grades (UNESCO, 2013b; UNICEF, 2012). Further, globally 60% of children of secondary school age are enrolled in secondary school, but in sub-Saharan Africa and the least developed countries, less than one third of their secondary school aged children are enrolled in secondary school (UNICEF, 2012). Boys represent a higher percentage of enrollment than girls (UNESCO, 2013a, 2013b, 2015; UNICEF, 2012). In 14 sub-Saharan African countries, the secondary school completion rate for women aged 20–24 years is less than 10% (UNICEF, 2012).

This situation has not substantially improved since the United Nations Fund for Population Activities (UNFPA; 2014) reported that although most countries have progressed substantially in increasing primary school enrollment, many are lagging behind in secondary school education, particularly for girls. The percentages of adolescent girls who are not in lower secondary school as provided by the report was between 3% and 8% in some developed countries, about 16% in Arab states, about 26% in South and West Asia, and about 36% in sub-Saharan Africa.

Also, UNESCO (2016) reported that the primary school completion rate was 92% in upper middle-income countries, 84% in lower middle-income countries, and 51% in low-income countries. Its report on secondary school completion indicated that between 2008 and 2014, 84% of youths completed upper secondary school in high-income countries, 43% completed in upper middle-income countries, 38% completed in lower middle-income countries, and 14% completed in low-income countries. Further, the report stated that263 million children and adolescents were out of school around the world in 2014. Out of this, 61 million were children of primary school age, 60 million were adolescents of lower secondary school age, and 142 million were youths at the upper secondary school age; sub-Saharan Africa was the region with the most children out of school. In addition, the countries with the 10 highest proportions of over-age primary school students were in sub-Saharan Africa, with more than 35% over-age primary school students (UNESCO, 2016). From the reports provided, it is evident that educational attainment levels for adolescents in low- and middle-income countries are very poor, limiting adolescents' access to the capacity-building resources in schools.

Capacity-building and empowerment initiatives recurrently focus on female adolescents, which is born out of the reality of their disadvantaged status in the majority world. Females are more disadvantaged than their male counterparts because they face higher risks of not obtaining quality education at all or dropping out of school prematurely because of early marriage, early pregnancy, sexually transmitted diseases, and HIV/AIDS infection and maternal death. It is believed that focusing on capacity building and empowerment for girls would facilitate their transition to full and successful adults and significantly reduce the risks that would have endangered their lives.

It is important to recognize that a global approach to adolescent capacity building should equally embrace building the capacity of disadvantaged male adolescents because they coexist in their respective environments. Including male adolescents in capacity building and empowerment would help them to develop their potentials and be equally empowered to be useful to themselves, their families, their communities, and the society at large and reduce the risks of their engaging in unwholesome and criminal activities.

There is no readily available documentation on adolescent capacity-building initiatives in the minority or developed world. The majority of the global adolescent capacity-building initiatives that have been documented have focused on the majority world (low- and middle-income countries). Furthermore, global efforts geared toward building adolescent capacity in the majority world are spearheaded and driven by multinational and international organizations and agencies, such as UNICEF, UNFPA, World Bank, and WHO, among others, and in collaboration and partnership with the governmental agencies and parastatals in the recipient countries and tailored to the country's needs and contexts.

Implications for Research and Understanding

From a research perspective, there is a need to critically appraise and evaluate the capacity-building and empowerment projects that have been carried out and those that are currently running in the majority world to identify the missing links and lapses. Specifically, such evaluation is needed to determine the following:

1. The extent to which both male and female adolescents and their interests are embraced in the design, development, and implementation of the projects. Even if it is necessary to implement gendered empowerment projects, efforts should be made to empower both males and females.
2. There is a need for detailed analysis of environmental factors relating to the project site that may influence the viability and sustainability of the projects.

3. Evaluation studies of the impact of past projects on individuals, families, and the society are needed to determine their effectiveness and benefits as well as identify problems and challenges that might have affected the effectiveness of the programs.

4. It is also necessary to carry out evaluation studies of past projects to determine the extent to which adolescents' interests, needs, and desires are captured and incorporated into project design, development, and implementation to ensure their full engagement, involvement, and participation because these projects directly affect them.

It is the outcome of such evaluation studies that would throw light on the level of success and effectiveness of the capacity-building and empowerment programs and indicate the direction for future projects that address global capacity building and empowerment of male and female adolescents and youth in the majority world.

Assessment of Capacity-Building Needs

Assessment of capacity-building needs of adolescents must take cognizance of their background characteristics, which include cultural upbringing, religion, place of domicile in terms of rural or urban setting, levels of education, and categories in terms of whether they are "in school" or "out of school," "educated" or "not educated." It is very important to carry out needs assessment surveys at individual, community, and organization levels before programs are developed to understand the needs, wants, and desires of adolescents and their communities; determine whether infrastructure exists or needs to be developed; and the capacity of the organizations that will implement the programs. At the individual level, assessment of adolescent capacity building needs must be tailored along the developmental tasks of normal adolescence. Such assessment needs to identify the missing gaps in the acquisition of developmental tasks of adolescence, which require acquisition of intellectual knowledge and life skills. Intellectual knowledge is assumed to be mostly acquired through formal learning (schooling). Still, assessment of learning competencies should be part of needs assessment.

By contrast, personal and life skills in communication, negotiation, leadership, adjustment, and vocations appear not to be consciously and formally taught to adolescents in schools. As such, needs assessments of personal and life skill status of adolescents should be included for documentation in adolescent capacity-building efforts. Establishing a personal sense of identity would probably influence adolescents' vocational goals. Deficits in this area should be assessed. Other gaps in developmental tasks of adolescence could be in areas of management of sexuality, value systems, and impulse control. It is necessary, therefore, for assessment of the capacity-building needs of adolescents to identify gaps in developmental tasks that require building up.

At the community level, adolescent capacity-building needs assessment involves determining whether capacity exists or must be developed and, if it is to be developed, availability of space for its development. In addition, the interests and desires of community members must be assessed to promote community support and nurturance when the program is established in their community. At the organization level, adolescent capacity-building assessment focuses on identifying existing capacity-building programs in the community managed by both public and private organizations and nongovernmental organizations (NGOs) as well as the scope of such programs. Organizational needs assessments examine whether collaboration with existing programs is what is needed, with the aim of expanding the programs to fill in the gaps currently existing to cover all the areas of adolescent developmental challenges, or whether it is necessary to design and develop a new and comprehensive adolescent development capacity-building program that will be broad vertically and horizontally and address the interests and desires of various groups of recipients at individual and community levels and provide them with hope for a better future.

Approaches to Building Adolescent Development Capacity

Bronfenbrenner's ecological systems theory (1989, 1993, 2005) provided a detailed analysis of environmental influences on human development. The theory emphasized that the developing person is embedded in a series of environmental systems in the form of nested structures that interact with one another and with the person to influence the person's development in important ways. The chronosystem dimension of Bronfenbrenner's theory emphasizes that changes in the child (developmental progress) or in any of the ecological contexts of development can affect the direction of the child's development, and the effects of the environmental changes depend on the age or developmental stage of the child. Person–environment–fit theories suggest that people are optimally motivated when there is a good fit between the needs of the individual and the opportunities provided by the environments in which they must work, live, and study, and bad fits would lead to less-than-optimal motivation and mental health problems.

What then are the needs of adolescents? Eccles (2012) identified the developmental needs of adolescence to include providing adolescents with opportunities that make them feel important in the society and respected by key cultural leaders; helping them to have strong peer affiliations; encouraging them to develop sexual intimacy, peer bonding, and close ties with nonfamily adults; promoting their identification with cultural institutions, and helping establish their personal identity (social and occupational identity; Erikson, 1963, 1982). Person–environment–fit theory submits that when adolescents find themselves in poorly fitting social contexts, their mental well-being may decline; their motivational engagement in specific social contexts may also decline; and their performance in the social setting will likely decline as well.

Essential Role of Adolescent Participation for Effectiveness

The World Bank (1994) defined participation as a process through which stakeholders influence and share control over development activities and the decisions and resources that affect them. The Department for International Development (DFID; 2000) defined *participation* as a process that enables people to realize their rights to participate in and access information relating to the decision-making processes that affect their lives. Furthermore, DFID (2010) provided a three-lens view to youth participation in development initiatives, a view adapted from the World Bank (2007) development report. This view conceptualizes adolescents' participation at three levels. One level of participation would see youths participating as beneficiaries of the development program. At the second level, youths would interact as participating partners. At the third level, youths would be seen in a leadership participatory role. Application of the three levels of participation depends on the local context. From a holistic perspective, youths as partners and leaders in developmental initiatives are also beneficiaries. The aim of developing adolescents as partners and leaders in addition to being beneficiaries would be to develop in them the capacity to act and skills and capabilities that will propel them to change their own and others' lives. The World Bank (1992) development report enumerated some of the roles of youth participation in development initiatives to include (a) providing information to young people that facilitates collective and individual actions; (b) engaging young people in consultation that provides useful feedback and perspectives that organizations can incorporate and use for organizational improvement; (c) allowing young people to own the decision-making process or share the role with others on specific issues about projects; and (d) using the proactive nature of young people to allow them to initiate actions that will benefit the organization.

The DFID (2010) summarized case studies documenting some of the benefits of youth participation in development efforts to include improvements in skills, income, and employment opportunities; sustainability of new and existing economic activities; improvements in health and decrease in sexually transmitted infections and substance abuse; enhancement of civil society engagement and reduction in violence and crime; improvement in social and economic opportunities; and improvement and higher investments in continuing education by young people and their families.

Adolescents are meaningfully engaged when interacting as partners and leaders in development programs. Meaningful engagement of adolescents involves power sharing by involving them in a collective decision-making process in which they are given opportunities to make suggestions and decisions and where their contributions are recognized and valued (Eccles & Gootman, 2002). Adolescent engagement has been reported to have positive impacts and benefits for both adolescents and organizations (Zia et al., 2011). Benefits for the adolescents include

obtainment of higher status and stature in the community; improvement in their competencies and boosting of their self-esteem; acquisition of stronger skills and experience as leaders; acquisition of greater knowledge and better understanding of other cultures; attainment of higher levels of self-discipline and schedule management; development if a deeper level of appreciation of the multiple roles of adults; and exposure to opportunities for broader career choices. Benefits for the organizations include their exposure to fresh ideas from young people that are devoid of the usual ways of doing things; access to new perspectives on decisions and relevant information about young people's needs and interests; access to candid opinions and responses about existing services; possession of data for analysis and planning that ordinarily may only be available to young people; increased and effective outreach that provides information sharing among peers; provision of additional human resources as youth and adults share responsibilities; greater acceptance of their messages, services, and decisions because young people are involved in shaping them; increased harmonization through partnering of youth's energy and enthusiasm with adults' professional skills and experience; and enhancement of credibility of the sponsoring organization to the youth and advocates.

Other positive effects of youth engagement on organizations include making youth involvement become an organizational expectation; ensuring that young people help organizations clarify their missions; paving the way for organizations to become more connected and responsive to the youth in the community; helping organizations place greater value on inclusion and representation of youth in their programs, thereby making such organizations more appealing to potential funders; and last allowing organizations to reach out more effectively to communities through advocacy, policymaking, and services.

Additional outcomes of adolescent and youth participation and engagement in development activities have been reported to include adolescents and youth having increased access to decision-making, greater influence, greater opportunity for advocacy and voicing their opinions; increasing the motivational level and empowerment opportunities that build up their confidence level; establishing stronger partnerships between adults and young people and changing adults' perception about youth abilities and capacities; and increasing the young people's skills in self-directed actions.

The enumerated outcomes together with the benefits that accrue to the adolescents and young people for their participation and engagement in development initiatives as well as the benefits that accrue to the organizations are pointers to program effectiveness. These benefits move development programs toward sustainability, which promotes development effectiveness. Essentially, adolescent participation and engagement should be viewed as working with adolescents through collaboration and empowering them through development of capabilities. The sustainability of capacity-building initiatives and development effectiveness are promoted when adolescents are given opportunities to participate by being involved in the planning and development of adolescent capacity-building programs

as collaborators and cocreators and are meaningfully engaged initially as learners or beneficiaries with the near future hope of becoming gainfully employed as trainers.

Conclusions—The Way Forward to Effective Adolescent Development Capacity Building

Eccles (2012) suggested that the best way to think about the role of social contexts in adolescent development is to conceptualize social contexts in terms of risks and opportunities that they provide to participating individuals because (a) social contexts provide opportunities and risks, such as new opportunities for learning skills, attitudes, values, and engaging in new behavioral patterns; and (b) good social policy depends on understanding the nature of contexts and the developmental needs of the adolescents who inhabit the available social contexts.

If we want adolescents to come to and be engaged in particular social contexts, such as youth capacity-building and empowerment centers, we need to make sure that these contexts (centers) provide good stage–environment fit. If we want adolescents to remain in those contexts we need to make sure that what we want to teach them both fits their needs and is worth learning. By adopting this approach, we would be providing adolescents with stage-appropriate contexts in which they can learn the skills, motivations, values, and attitudes necessary for a successful transition into adulthood. Adolescents would also acquire social and cultural capital they need to transit successfully into adult life. Adopting this approach will also decrease the likelihood that adolescents will shift their engagement into other risky social contexts.

Engagement in this case would mean treating adolescents as stakeholders and getting them involved in collective decision-making processes and giving them opportunities to make suggestions about the programs that would count. It would also mean involving them in the planning, designing, and execution of the development capacity-building programs. Adolescent development programs must move away from being conceived as an intervention initiative and be conceptualized as capacity development for them to work and succeed. Furthermore, the capacity development initiatives must center on the adolescents' needs, interests, and desires in their varied social contexts. This is because adolescents' interests in one social context may be different from adolescents' interests in another social context. These adolescents' differential interests make it imperative for pre-program planning research and studies that will assess adolescents' developmental needs, social needs, interests, and desires in relation to their varied social contexts. The data analysis of such studies would inform effective program planning and design that would require the recipient adolescents to be involved in such planning and design.

In general, the following conclusions are drawn:

1. Adolescent development capacity building must be conceptualized as capacity development that is long term, continuous, transferable, and sustainable and not an intervention initiative that is short term, beneficial exclusively to the recipients, and terminates after a short period of training that does not guarantee expertise of the trainee to make the training transferable to future recipients.
2. It is important for adolescents to be involved in the planning, design, and execution of development capacity-building programs that directly affect them.
3. Adolescents need to be allowed to partake in the decision-making process about the programs that affect them to motivate them to develop a sense of belonging and be treated as stakeholders who will have a share of control.
4. The planning and design of adolescent development programs must center on their developmental needs, social needs, interests, and desires positioned within their social contexts, bearing in mind that social contexts of adolescents vary across situations, locations, and culture.
5. The planning, design, and execution of adolescent development programs must also focus on ensuring recipients a profitable and economically viable future that can guarantee them expertise status, such that the recipients of the capacity development training can become trainers in the future and ensure sustainability and provide long-term development opportunities for interested adolescents.

This implies that the adolescent development capacity-building training period must be long enough to ensure training competence that can be transferred to other potential trainees.

This also implies that donor and development agencies need to make provision in their development plans for long-term and sustainable capacity development programs for adolescents and provide sufficient funds to guarantee their continuity and sustainability.

References

Bronfenbrenner, U. (1989). Ecological systems theory. In R. Vasta (Ed.), *Annals of child development: Theories of child development: Revised formulations and current issues* (Vol. 6, pp. 187–251). Greenwich, CT: JAI Press.

Bronfenbrenner, U. (1993). The ecology of cognitive development: Research models and fugitive findings. In R. H. Wozniak & K. W. Fisher (Eds.), *Development in context* (pp. 3–44). Hillsdale, NJ: Erlbaum.

Bronfenbrenner, U. (2005). Ecological systems theory. In U. Bronfenbrenner (Ed.), *Making human beings human: Bioecological perspectives on human development* (pp. 3–15). Thousand Oaks, CA: Sage.

Capacity for Disaster Reduction Initiative (CADRI). (2017). *Capacity development.* Retrieved from http://www.cadri.net/en/areas-we-work/capacity-development. Accessed March 17, 2017.

Department for International Development (DFID). (2000). *DFID's Sustainable Livelihoods approach and its framework.* Retrieved from https://www.glopp.ch/B7/en/multimedia/B7_1_pdf2.pdf. Accessed May 8, 2017.

Department for International Development (DFID). (2010). *Youth participation in development. A guide for development agencies and policy makers.* Retrieved from https://www.youthpolicy.org/wp-content/uploads/library/2010_Youth_Participation_in_Development_Guide_Eng.pdf. Accessed March 17, 2017.

Eccles, J. S. (2012). *Social contexts and adolescent development.* Retrieved from https://curry.virginia.edu/uploads/resourceLibrary/Plenary_Eccles.pdf. Accessed March 17, 2017.

Eccles, J., & Gootman, J. A. (2002). *Community programs to promote youth development.* Washington, DC: National Academic Press.

Erikson, E. H. (1963). *Childhood and society* (2nd ed.). New York, NY: Norton.

Erikson, E. H. (1982). *The life cycle completed: A review.* New York, NY: Norton.

United Nations Children's Fund (UNICEF). (2012, April). *Progress for children: A report card on adolescents* (No. 10). Retrieved from https://www.unicef.org/media/files/PFC2012_A_report_card_on_adolescents.pdf. Accessed May 3, 2017.

United Nations Conference on Environment and Development (UNCED). (1992). *Capacity building—Agenda 21's definition* (Chapter 37). Retrieved from https://www.gdrc.org/uem/capacity-define.html. Accessed March 24, 2017.

United Nations Development Program (UNDP). (2010, July). *Defining and measuring capacity development results UNDP.* Retrieved from https://www.content-ext.undp.org/aplaws_Publications/2688568/Defining%20and%20Measuring%20Capacity%20Development%20July%202010_new.pdf. Accessed March 20, 2017.

United Nations Development Program (UNDP). (2017). *Capacity Development: A UNDP primer.* Retrieved from https://www.undp.org/.../capacity-development/capacity-development..../undp.../. Accessed March 20, 2017.

United Nations Educational, Scientific, and Cultural Organization (UNESCO). (2013a). *Adult and youth literacy: National, regional and global trends, 1985–2015.* Retrieved from https://www.unesdoc.unesco.org/images/0021/0021/74/217409e.pdf. Accessed May 9, 2017.

United Nations Educational, Scientific, and Cultural Organization (UNESCO). (2013b). *Fact sheet on youth and education.* Retrieved from https://www.un.org/esa/socdev/documents/youth/fact-sheets/youth-education.pdf. Accessed May 3, 2017.

United Nations Educational, Scientific, and Cultural Organization (UNESCO). (2015). *Education for All: Global monitoring report 2015: Education for All 2000–2015: Achievements and challenges.* Retrieved from https://www.unesdoc.unesco.org/images/0023/002322/232205e.pdf. Accessed May 9, 2017.

United Nations Educational, Scientific, and Cultural Organization (UNESCO). (2016). *Global education monitoring report: Education for people and planet: Creating sustainable futures for all.* Retrieved from https://www.unesdoc.unesco.org/images/0024/002457/245752e.pdf. Accessed May 4, 2017.

United Nations Fund for Population Activities (UNFPA). (2014). *The power of 1.8 billion: Adolescents, youth and the transformation of the future*. Retrieved from https://www.unfpa.org/sites/default/files/pub-pdf/EN-SWOP14-Report_FINAL-web.pdf. Accessed May 8, 2017.

World Bank. (1992). *World development report 1992: Development and the environment*. New York, NY: Oxford University Press. Retrieved from https://www.openknowledge.worldbank.org/handle/10986/5975. Accessed June 27, 2017.

World Bank. (1994). *World development report 1994: Infrastructure for development*. New York, NY: Oxford University Press. Retrieved from https://www.openknowledge.worldbank.org/handle/10986/5977. Accessed June 27, 2017.

World Bank. (2007). *Development and the next generation*. Retrieved from https://www.documents.worldbank.org/curated/en/556251468128407787/World-development-report-2007-development-and-the-next-generation. Accessed May 8, 2017.

Zia, C., Lever, N., Abens, A., Akitobi, T., Miles, J., Varia, S., Williams, B., Cammack, N., & Anglin, T. (2011). *Engaging youth in partnership: A resource document for youth serving Agencies and Programs. Prepared by National Initiative to Improve Adolescent Health (NIIAH) Youth Engagement Work Group*. Retrieved from https://www.Smhp.psych.ucla.edu/pdfdocs/niiah/niiahyouthengagement resources.pdf

Gender Equity and the SDGs

COLLECTIVE IMPACT FOR CHANGE

Elizabeth Dettori and Geeta Rao Gupta

Adolescent Girls and Global Development

The adolescent years present a unique window of opportunity to invest in the future health and well-being of individuals, households, and societies. The changes that characterize this time—from physical and cognitive growth to emotional and psychological maturation—lay the foundation for later life. The right interventions during this period of development can enrich individual adolescents' lives while building positive outcomes for adulthood. Additionally, as recent research has shown, appropriately targeted interventions can even determine the trajectory of growth and development of the next generation (McCarthy et al., 2016).

Seizing on this brief period to yield multiple long-term returns is particularly important for the many countries in the developing world that are experiencing a demographic shift. Changing mortality and fertility rates are resulting in a youth bulge, where a large share of the population is comprised of adolescents and young adults. In sub-Saharan Africa, for example, over 70% of the population is below the age of 30 years, presenting an economic opportunity for countries in the region (Boumphrey, 2012). Strategic investments in health, education, training, and employment opportunities for this age cohort could transform the youth bulge into a productive workforce, providing a demographic dividend to those nations and accelerating their economic growth (United Nations Population Fund [UNFPA], 2016).

To be effective, however, these investments must acknowledge and address the gender differences that characterize the experience of adolescence for girls as compared to boys. In most societies, the adolescent years are the stage at which

gender norms are more strictly enforced, when girls are taught to be women and boys learn what it means to be a man. It is during this phase of development that gender differences are accentuated, and the trajectory of girls begins to take a distinctly different path from that of boys. Social sanctions may reinforce rigid regimes of masculinity and femininity, which further exacerbate the vulnerabilities that both boys and girls experience (Kågesten et al., 2016).

Typically, in most societies, adolescent girls have less access than boys to opportunities that develop their capabilities or to resources, laying the foundation for gender inequalities that characterize adulthood. Thus, it is essential to understand how age and gender intersect to create specific vulnerabilities for adolescent girls in order to know how to intervene to enable girls to emerge from adolescence with the right capabilities and resources to navigate adulthood and contribute to, as well as benefit from, their country's economic development (Lloyd, 2005; UNICEF, 2011).

In recognition of the role that gender plays in shaping communities and contributing to economic development outcomes, the Millennium Development Goals (MDGs)—the set of eight goals agreed on by the global community in the year 2000—included Goal 3, which promoted gender equality and the empower-ment of women. The target set for Goal 3 was limited to education and called for eliminating gender disparity in primary and secondary education by 2005 and in primary, secondary, and tertiary education by 2015. Although the target and the indicators selected to track progress did not specifically mention adolescent girls, the emphasis on primary, secondary, and tertiary enrollment resulted in tracking of the number of adolescent girls enrolled as compared to boys. In that sense, the MDG goal for gender equality, though limited to only education, served to draw particular attention to at least one facet of adolescents' lives.

SDG GOAL 5: ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS

5.1 End all forms of discrimination against all women and girls everywhere

5.2 Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation

5.3 Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation

5.4 Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate

5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life

5.6 Ensure universal access to sexual and reproductive and health and reproductive rights as agreed in accordance with the Program of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences

5.a Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws

5.b Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women

5.c Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels

---

The Sustainable Development Goals (SDGs), which followed the MDGs and were adopted by world leaders in 2015, cover a broader agenda that pushes forward and beyond the successes of the MDGs. The SDGs envision a fuller and healthier environment, communities that are bolstered by legal and social systems, and individuals that enjoy health and well-being beyond survival. It is an agenda that dares to dream of a world where all individuals, no matter their location or socioeconomic strata, have agency, aspirations, and the realization of a childhood, adolescence, and adulthood that is healthy and productive.

The SDGs, like the MDGs, include a goal—Goal 5—on gender equality. Unlike in the MDGs, however, Goal 5 in the SDGs specifically mentions girls. Goal 5 calls for the achievement of gender equality and the empowerment of all women and girls by 2030. Additionally, of the nine targets included under Goal 5, seven refer to or have relevance for adolescent girls. A further eight of the sixteen goals of the SDGs include targets and indicators that explicitly mention women or girls, and four more goals address issues that disproportionately impact women and girls, thereby providing multiple entry points for addressing the inequalities between the genders in all age groups. The SDGs thus offer enormous potential to rectify persistent gender inequalities and in doing so make marked progress in addressing the vulnerabilities faced by adolescent girls (United Nations, 2015b).

This chapter explores some of the most stubborn gender-based risks and vulnerabilities adolescent girls experience as a cohort; reviews progress made during the MDG era on select goals that focus on, or have relevance for, girls' health and well-being; examines the potential the SDGs offer for adolescent girls and recommends an approach for global action and prioritizing investments to catalyze change for adolescent girls at scale.

Risks and Vulnerabilities

Around the world, adolescent girls continue to be more disadvantaged than boys in four broad domains: developing personal capabilities—health and education; security and safety; accessing economic resources and opportunities; and availing themselves of opportunities to exercise personal agency and leadership

(McCarthy et al., 2016; Sawyer et al., 2012). The result of these disadvantages and the vulnerabilities they create for adolescent girls varies greatly across the age range—10–19 years—that defines the adolescent period.

The adolescent years can be divided into related periods: preadolescence (9–12), early adolescence (12–14), and late adolescence (15–19). The transitions from one stage of adolescence to the next, such as from preadolescence to early adolescence or from early adolescence to late adolescence, are fraught with dangers for young girls. Evidence suggests that the transition from preadolescence to early adolescence is particularly uncertain because it is the stage at which puberty and other significant physical changes coincide with gender socialization, often resulting in restrictions on a girl's mobility and autonomy (McCarthy et al., 2016). Once a girl's development goes off course during this transition, such as through early marriage or pregnancy, it is much more difficult to bring her life back on track to restart education or rebuild her health. Furthermore, the negative consequences of ill health or an education cut short are then transmitted to the girl's children and family, fueling an intergenerational cycle of poverty. The transitions between stages of adolescence need particular attention, and the opportunities they provide to positively shape the course of a young girl's development should not be lost (Jones et al., 2010; McCarthy et al., 2016). Table 21.1 presents a selection of pressing and emerging risks and vulnerabilities faced by adolescent girls in each domain for each stage of adolescence.

The challenges that adolescent girls face become more complicated and more acute against the backdrop of poverty. Multiple and overlapping deprivations mean that poor families, households, and communities are at extreme risk when any shock—small or large, internal or external—disrupts their tenuous equilibrium (Moore, 2005). Likewise, in humanitarian crises, from armed conflict to sudden onset and protracted natural disasters, the risks and vulnerabilities increase exponentially. In a progressively more fragile world, where the number of humanitarian crises, both acute and prolonged, has steadily been on the rise, addressing the risks and vulnerabilities of adolescent girls at all stages of adolescence, while building their resilience, will be critical for addressing the ambitious targets laid out by the global community in the SDGs (Jones et al., 2010).

The MDGs and SDGs: A Review of Progress and Potential for Adolescent Girls

This section reviews the progress made for adolescent girls during the MDG era and the potential of the SDGs to advance that progress, with a specific focus on select goals that relate to the four domains in which girls experience persistent disadvantage: capabilities—health and education; security and safety; accessing economic resources and opportunities; and availing themselves of opportunities to exercise personal agency and leadership.

TABLE 21.1 Risks and Vulnerabilities: Domains and Transitions

	Preadolescence 9–12	Early Adolescence 12–14	Late Adolescence 15–19
Personal Capabilities *Health* *Education*	Transition from early to late primary school Undernutrition and iron deficiency; anemia Early marriage	Beginning of menstruation and reproductive health Mental health HIV/AIDS Need for micronutrient supplementation Risky behaviors linked to tobacco use and alcohol	Lack of family planning, contraceptives and emergency of adolescent pregnancy Sexually transmitted diseases Depression and mental health
Security and Safety *Violence*	Early marriage Bullying Exposure to violence	Lack of systems to protect from violence Getting caught in humanitarian crises Physical and sexual violence	Sexual exploitation Emotional violence
Economic Resources & Opportunities *Land or housing* *Income or employment*	Supporting family wellbeing and participating in care economy	Increased pressure to earn and contribute to family wellbeing	Schooling not matching labor market
Personal agency and Leadership	Exposure to information through new technologies Peer pressure and social exclusion	Shifting decision making, self-esteem and increased risk spurred by access to new technologies Moving from 'sexless' child to gendered adolescents Unfulfilled aspirations and associated vulnerabilities Restricted mobility	Social isolation and reduced public space moving from child to adulthood Exclusion of girls from many community-level decision making bodies

Source(s): Adapted from Breinbauer and Maddaleno (2005); Lancet commission (2016).

CAPABILITY DOMAIN—HEALTH AND EDUCATION

During the MDG era, much, but not enough, progress was made in reductions in the maternal mortality rate, increased access to contraceptives, and reductions in HIV infections and AIDS-related health complications. However, one of the challenges and shortcomings of the MDGs is that it did not have an articulated approach to addressing adolescent health, and as a result adolescent girls continued to bear a disproportionate share of the burden of disease and ill health (UN Women, 2016).

MDG GOAL 6: HIV/AIDS

The absence of specific adolesecent health approaches is perhaps most acutely visible in data on indicators for HIV/AIDS in MDG Goal 6. Although dramatic reductions have been achieved in the overall rate of new infections and deaths caused by AIDS during the MDG years, the data show that adolescent girls, particularly in sub-Saharan Africa, continue to be disproportionately affected. The number of new infections among girls today is nearly double that for boys, and among 15- to 19-year-old adolescents, nearly two thirds of new infections occur in girls (UN Women, 2016).

Research has repeatedly shown that the social and economic inequality between the sexes results in men having greater access to productive resources, which directly affects women's, particularly young women's, risk of HIV. Economic and social dependency on men makes it more likely that adolescent girls will enter into sexual relationships with older men for economic gain, less likely that they will be able to leave risky relationships or insist on condom use, and less likely that they will seek testing or treatment services because of the associated social stigma. In addition to being vulnerable to HIV infection, adolescent girls, because of prevalent gender norms, also have to bear the burden of caring for family members who are infected and for younger siblings in families that have lost all adults to the epidemic. For these reasons, turning the tide against AIDS through the SDGs will require a concerted effort to address the gender inequalities that fuel the spread of infection among adolescent girls (Rao Gupta et al., 2008).

MDG GOAL 5: MATERNAL MORTALITY AND FAMILY PLANNING AND SDG GOAL 3

Notwithstanding the initially slow progress in reducing maternal mortality, ultimately notable advances were made on MDG Goal 5 during the MDG years. By 2015, maternal mortality had declined by nearly 44%, not sufficient to meet the first target specified in the goal—to reduce the maternal mortality ratio by 75%—but nevertheless commendable because it resulted in saving millions of women's lives (Bryce et al., 2013; United Nations, 2015a). In spite of this progress, high numbers

of adolescent pregnancies persist and remain the second leading cause of deaths among girls between the ages of 15 and 19. Early pregnancy, when a girl's body is not yet mature enough for childbearing, can cause obstructed labor, obstetric fistula, and in extreme cases, maternal and/or infant deaths. And, as the MDG data demonstrate, the majority of maternal deaths continue to be due to preventable causes, pointing to the challenges health systems have in providing emergency and basic obstetric care and skilled attendants at birth.

Goal 5 of the MDGs and its targets explicitly recognize that the challenge of combatting maternal mortality is linked to access to reproductive and sexual health services. The goal includes a target and two separate indicators related to access to information and services for sexual and reproductive health and rights (UN Women, 2016). For adolescents, this emphasis on access to reproductive and sexual health information and services is particularly important. Though there are limited data on the sexual behaviors and patterns of young adolescents, nascent work suggests that introducing comprehensive sexual education during those years can have a marked impact on the sexual health and reproductive choices that they make in late adolescence (McCarthy et al., 2016). Investments in this period are therefore essential in addressing the unfinished business of the MDGs in issues ranging from maternal mortality to HIV/AIDS.

Analysis of the unmet need for family planning among women between the ages of 15 to 24 years showed that, among young married women, both the demand for family planning and the proportion of demand satisfied have increased over time (MacQuarrie, 2014). However, unmarried women in the same age group, on average, have an unmet need for family planning that is higher. A comparison across regions showed that unmet need for family planning among young women overall was highest in western and central Africa and second highest in eastern and southern Africa. The analysis also showed that, among young married women, unmet need was highest among the younger women (15–19) and declined with increasing age.

Across regions, the demand for family planning increased between 1990 and 2015, with the largest increases occurring in sub-Saharan Africa and southern Asia. While demand has increased, these regions continue to have some of the highest proportions of women aged 15–49, either married or in a union, with an unmet need for family planning. Accordingly, it is not surprising that these are the two regions that continue to have the highest concentration of maternal deaths, and in 2015, they accounted for 88% of total maternal deaths (UN Women, 2016).

The SDGs have the potential to further decrease the unmet demand for family planning and maternal mortality because the targets and indicators specified under Goal 3 of the SDGs explicitly reference access to reproductive and sexual health services. The goal includes a target and two separate indicators related to access to information and services for sexual and reproductive health and rights.

MDG 3 AND SDG 4: EDUCATION

WASH IN SCHOOL—KEEPING GIRLS LEARNING

A potentially transformative intervention to assist in the retention of girls in school as they transition from primary to secondary is having appropriate water, sanitation, and hygiene (WASH) programs in the school. This includes having physical facilities that provide for girls' safety and privacy—separate restroom facilities that are not in view of male counterparts, and that have associated sanitation components, to allow girls to wash their hands and safely and cleanly dispose of their sanitary materials.

The target for Goal 3 in the MDGs focused entirely on gender parity in education, with a call for gender parity in enrollment at the primary, secondary, and tertiary levels of education. While the target for primary school enrollment was met in almost all countries, not all those who were enrolled completed primary school, and still fewer made the successful transition from primary to secondary school and onward to tertiary education (Unterhalter, 2014). Enrollment and completion rates in secondary education remain lower for girls, particularly in sub-Saharan Africa and South Asia (UNESCO Institute for Statistics [UIS] & United Nations Children's Fund [UNICEF], 2015). For adolescent girls, three of the biggest risks in education are first, dropping out in primary school; second, failing to make the transition from primary school to secondary school; and third, attending school but not obtaining the numeracy, literacy, or vocational skills they need.

Though the causes of dropout in primary and secondary levels vary, there are common patterns related to the demand on girls' time to help care for members of their family, both younger siblings and the elderly, and the prohibitive cost of school fees, supplies, uniforms, or transportation. Further, many families fear for the safety of their girls when they are en route to school or at the school itself. For families that have limited resources, the cost—in actual spending and the loss of the girl's labor for household work—may be too much (UIS & UNICEF, 2015). For girls, dropping out of school can have devastating consequences for their overall well-being later in life, with data showing that additional schooling leads to a 10%–20% increase in earnings and also contributes to lower maternal and infant mortality rates (Psacharopoulos, & Patrinos, 2002; World Bank & International Monetary Fund, 2010).

By calling for inclusive and equitable quality education and explicitly addressing gender differentials in primary, secondary, and tertiary education, Goal 4 of the SDGs holds the potential to complete the unfinished business of the MDGs by addressing the gender-specific barriers to girls' education. And, as research has repeatedly demonstrated, improving girls' education has other multiple benefits, such as reductions in infant and child mortality, reductions in fertility, and increases in women's future earnings. Thus, success on this goal will also

help to meet the targets of several of the other SDGs, particularly those regarding improved health for all and economic growth.

Toward the close of the MDG era, data suggested that more than 700 million women throughout the world—roughly 10% of the world's population—had been married before the age of 18. Further analysis showed that, of that group, more than one in three of the women—roughly 250 million—had been married before the age of 15 (UNICEF, 2014a). Though the MDGs did not have a specific goal, target, or indicator linked to child marriage, through its work on related issues, particularly maternal and child health, the global community has joined together over the past 15 years to begin to tackle this devastating issue. This has resulted in the inclusion of a target in the SDGs that specifically aims to eliminate harmful practices, including early and forced marriage. Success in tackling this issue will require targeted, intersectoral programming and policymaking that address the structural gender-related causes that lie at the root of this practice.

While there may be many reasons that families choose to have their daughters marry early, in extreme cases as young as five and seven and in many parts of the world around the age of 12, the evidence is incontrovertible that early marriage is more likely to occur in poor families (UNICEF, 2014a). Child marriage is inextricably linked to a range of negative consequences for the adolescent girl. It is closely linked to the end of her formal education, leaving her without the necessary education or skills to enter the formal labor market, thereby making her more economically dependent on her husband. It also often causes early and risky pregnancies, putting both the girl and the infants she gives birth to at high risk of disability and death (UNICEF, 2014a). Evidence also suggests that when an adolescent girl marries a man much older in age, she is more vulnerable to physical and sexual intimate partner violence (Mathur et al., 2003).

Indeed, multiple and varied forms of violence against girls remain constant throughout the world and are now considered to be a global problem of epidemic proportions (World Health Organization [WHO], 2013). There are many kinds of violence—from sexual abuse and exploitation, to physical violence, to mental and emotional abuse. Violence can also be structural and condoned by society in the name of culture, such as female genital cutting or child marriage. Recent data gathered at the end of the MDG era suggest that one in three adolescent girls aged 15–19 had been victims of some form of emotional, physical, or sexual violence at the hand of their partner. Further, roughly 120 million girls under the age of 20 had been subjected to forced sexual activity (UNICEF, 2014b).

Violence has significant health and economic consequences and is a gross violation of girls' and women's rights. Yet, violence prevention was not included in the MDGs. Despite its omission, the collection of data on the prevalence and types of

violence was strengthened during the MDG years due to the efforts of civil society organizations, academic institutions, and multilateral organizations. Their efforts increased the visibility of the issue among policymakers and ultimately led to the inclusion of violence against women and children in the SDGs, thus providing an opportunity to scale up efforts to understand, prevent, and respond to violence and its debilitating impacts. Today, there are several efforts under way to gather more systematic data on violence against children and adolescents and to prevent gender-based violence through strategies that are proven to be effective.

RESOURCES AND OPPORTUNITIES: MDG 1 AND SDG 8: PRODUCTIVE EMPLOYMENT AND ECONOMIC GROWTH

The issue of employment and productivity for adolescent girls was encompassed under the second target of MDG Goal 1—which sought to "achieve full and productive employment and decent work for all, including women and young people." Unfortunately, the indicators attached to this goal and target did not track progress by either gender or age. Incomplete data prevent comprehensive analysis across all countries, but in more than half of the countries where data exist, women aged 20–59 are more likely than men to live in the poorest households. Further, though vulnerable employment is decreasing globally, women continue to be represented in disproportionately higher numbers in informal, seasonal, low-paying, contractual jobs that are not protected by labor laws. Even when women are in formal employment, globally, they continue to earn 24% less than men. Gender inequality continues to hamper progress in closing both the wage gaps and opportunities for employment (UN Women, 2016).

The emphasis in the SDGs on comprehensive education that is geared to developing knowledge and vocational training that matches the labor market, coupled with the goals that seek to reduce inequality and improve economic growth, could go a long way to providing more equitable economic opportunity for women and girls. Currently, even when girls have completed secondary and tertiary education, finding employment can be challenging because of gender-related barriers to entry in the labor market—such as a mismatch between the education that girls receive and what the labor market demands or because men are given priority in hiring (World Bank, 2012). This is a significant problem because paid employment is critically important in providing adolescent girls agency and decision-making power.

PERSONAL AGENCY AND LEADERSHIP—MISSING DOMAINS IN BOTH THE MDGS AND SDGS

A difficult-to-measure, but important, component for furthering adolescent girls' well-being is linked to personal agency and leadership. Research shows that social and economic assets are related to longer-term outcomes by giving girls resources that they can employ to minimize their risks and vulnerabilities.

While there is limited evidence of programming and policy at scale, programs in sub-Saharan Africa are showing that empowerment models that emphasize giving girls access to safe spaces where they can voice their opinions, take risks, negotiate to advance their own interests, and build their self-confidence can have a positive impact on their well-being. A key component of these initiatives is regular meetings between girls that are facilitated by a female mentor (Austrian, 2015). Without this focused engagement, too often youth clubs or other community programs that are established to benefit adolescents are often only used by boys. Absent training and opportunity to take on positions of leadership and to actively engage in negotiating for their own interests, structural injustices that disadvantage girls and women will be more likely to continue to be propitiated into their adulthood.

Although Goal 3 of the MDGs mentioned "empowerment" of women as an outcome, the target and the indicators did not have any reference to the means of empowerment for women or girls. The SDGs fill this gap by including several references to women's increased political participation and autonomy in decision-making. As programs are put in place to implement the SDGs on education, health, economic growth, and gender equality, special attention must be paid to create processes that allow women, particularly younger adolescent girls, to occupy publicly visible positions of leadership that allow them to exercise their agency. Several programs are in place to test the effectiveness of life skills training, financial literacy, mentoring programs, and the opportunity to lead group meetings at the community level for empowering adolescent girls. Results from these efforts will go a long way to suggesting a way forward to build the agency and confidence of adolescent girls.

GENDER AND THE GLOBAL GOALS

In summary, the importance of gender as central to development was acknowledged in the MDGs by having a stand-alone goal for gender equality. However, without an explicit requirement to disaggregate progress by gender and age, the goals had limited impact for adolescent girls. Despite this limitation, by setting explicit targets and timelines, as well as indicators to measure progress, the MDGs promoted the value of systematically monitoring progress and using data for decision-making. One of the most enduring contributions of the MDGs is the increased focus on data for joint accountability by diverse actors for reaching common goals (Ocampo, 2014; Wheeler et al., 2017).

Thus, even though the goals did not explicitly identify adolescent girls as a vulnerable population, the value placed on data for monitoring and accountability provided fertile ground for civil society actors to use data disaggregated by gender and age to draw the attention of policymakers to the situation of adolescent girls and raise the profile of issues that affect girls, including child marriage, violence against women and women's economic empowerment.

The evidence-based advocacy efforts by civil society actors created the political momentum to include disaggregation by age and gender in the next generation of global goals, the SDGs. The repeated reference to "girls" in many of the SDGs established the centrality of the well-being of adolescent girls to accomplishing sustainable development. Further, several of the goals, which focus on healthier societies amidst changing demographics, climate change, and increasing urbanization, depend on women and girls enjoying agency and the realization of access to education, health, and employment. The emphasis on the development of safe cities and sustainable economic growth can only occur if women and girls are brought more fully into labor markets and included in the decision-making and planning of governments. The ambitious, and important, Goal 10—to reduce inequality within and among countries—will only be achieved if inequality between the genders is erased.

Overall, the SDGs not only lay out a more ambitious agenda than the MDGs, but also present gender equality as both an end in itself and a means to achieving a healthier, more stable, and more just world. And, most important, they acknowledge that the vision of a gender equitable world cannot be achieved without addressing adolescent girls' physical health, protecting them from violence and exploitation, and enabling them to attend school and acquire the critical numeracy and literacy skills they need to engage in productive economic activity in adulthood.

Working Together for Global Impact

Achieving the bold and ambitious vision for adolescent girls laid out in the SDGs requires identifying catalytic windows of investment and transformative means of scalable implementation. Over the past several years, there has been a marked increase in programs, funding, and research on adolescent girls. Yet, this heightened attention has not achieved impact at scale. One possible explanation for this can be found in the diffusion of activities and investments across organizations and actors. Therefore, for adolescent girls in the SDG era, the question is less about *what* to do and more about *how* to do it. How should the international development community achieve impact at scale? And, how should a response be structured to address the unique challenges of an age group, rather than a single issue? In a world that typically operates through vertically designed, sector-specific programs, how should programs address the multisectoral, gender-specific needs of adolescent girls?

A scan of other efforts in global development that succeeded in achieving impact at scale during the MDG era suggests that the use of a common framework and approach across multiple actors may be the answer. International coordination combined with national-level implementation guided by a shared agenda appear to be the necessary components to achieve results at scale.

An articulated framework and approach that adopts these principles, called Collective Impact, was introduced in 2011 by the research and advisory group FSG in the 2011 publication of the *Stanford Social Innovation Review* (Kania & Kramer, 2011). This framework identifies key ingredients for helping diverse actors work together to achieve complicated and dynamic change to social and development problems. Several of the global and regional partnerships that catalyzed change in the MDG era employed some iteration of the Collective Impact model, which includes five conditions that structure the partnership (Hanleybrown et al., 2012): (1) common agenda (participants share an understanding of the problem and approaches to address it); (2) shared measurement (consistency across participants in collecting data and measuring results to promote accountability); (3) mutually reinforcing activities (differentiation as well as coordination of participants' actions); (4) continuous communication (clear communication that builds trust, motivation, and joint purpose; (5) backbone support (separate staff to serve as links among different organizations and agencies). Also necessary are three specific, but flexible, preconditions: influential champions, adequate financial resources, and an urgency for change.

An analysis of global efforts that made significant progress on particular goals, such as child mortality and education, showed that the elements for success included many of the features of the Collective Impact model: a shared vision for results; collaboration across a diverse set of actors representing researchers, donors, and implementers from civil society, government, the private sector, and intergovernmental organizations; and a common plan on a way forward with mutually agreed-on targets, milestones, and indicators, combined with a significant investment of financial and human capital. Strategic partnerships that harness the collective expertise of interrelated actors are critical to sustainable and scalable programming. The major successes of the MDG era were predicated on just these types of dedicated efforts, which were often born in response to a seemingly intractable challenge.

An instructive example is when the global community joined together to develop the Global Alliance Vaccine Initiative, Gavi (the Vaccine Alliance), in response to the stubbornly high rates of child mortality and low rates of immunization coverage. Created in 2000, at the beginning of the MDG period, Gavi is a public–private alliance that includes governments, industry, and partner organizations to collectively address standards, provisions, and distribution to improve immunization coverage—a proven and cost-effective way of reducing child deaths. The sharp increase in immunization coverage and the decrease in under-five mortality rates over the past decade were in no small part due to the concerted actions of this alliance of partners who worked together to find mutually agreeable solutions to vaccine demand, supply, cost, and delivery.

Part of the success of Gavi is that the diversity of the partnership meant that *all* countries in the developing world, even those in humanitarian crises, could continue to have access to vaccines. Significant investment was made in making the partnership work, including the establishment of a secretariat that convenes the partners. Through the Gavi Strategy and Business Plan, national governments, industry leaders, multilateral organizations, and civil society partners develop shared goals and country-level targets, indicators, and the associated work plans that will be needed to bring them to fruition. Additionally, partners align their commitments on domestic investments and actions. The centralized coordination of complementary implementation plans, and their associated funding and monitoring mechanisms, reinforces shared accountability by enabling partners to make adjustments to their programming to accelerate progress when it is lagging behind.

Another example from the MDG era includes the Global Partnership for Education (GPE), an organization that brings together governments, development partners, and the private sector to address the education needs of countries with low-performing school systems or, in humanitarian crises, through targeted financial support. Established in 2002, GPE provides financial backing to enable governments, particularly in fragile settings, to take primary education to scale.

Similar to Gavi, the partners who came together to form GPE made an investment in the creation of a secretariat. In addition to administering the financial mechanism, the secretariat provides coordination and oversight of the review and approval of funding requests for the development and revision of education sector plans. Additionally, through its technical support and monitoring of mutually agreed indicators, GPE helps to hold partners to account to deliver results for children. The success of MDG 2 and 3, with nearly all countries reaching high levels of primary school enrollment with gender parity, was in part related to GPE's concerted efforts to support the most disadvantaged countries.

While both Gavi and GPE have mechanisms to link national level action with collective accountability and shared responsibility, an alternative model in the MDG era that made the connection between international funding and national leadership was the Global Fund to Fight AIDS, Tuberculosis, and Malaria. Founded in 2002, the Global Fund combined a new funding instrument with nationally driven plans that are contingent on delivering results against mutually agreed indicators and goals. The emphasis on results-based management, and the linking of funding to performance, provided additional transparency and shared accountability that facilitate innovative collaboration across partners. The successes of these partnerships contributed to the establishment of several other global partnerships toward the end of the MDG period to address areas where progress was lagging, and these collectives are now poised to accelerate action in the SDG era (Table 21.2).

TABLE 21.2 Global Partnerships Working on Key Areas Related to Adolescents

Initiative and Partnership	Structure and Agenda
The Secretary General's Every Woman Every Child	Umbrella health framework to coordinate multitude of health partnerships that work on child and maternal health, led by the Secretary gGeneral, has participation from UN agencies, governments, international and national health civil society organizations. A collective Global Strategy for Women's, Children's and Adolescent's Health has been developed and will guide the international health community's work over 2016–2030.
Global Partnership for Education (GPE)	A multistakeholder partnership and funding platform developed in the early years of the MDGs that marries global support with national effort to strengthen basic education in developing countries. GPE efforts focus on the poorest and most vulnerable within societies.
	Since its founding, the percentage of girls in GPE partner countries who finished primary school rose by 13% to 69% in 2013, and the overall completion rate increased by nine points to 72%.
Scaling Up Nutrition (SUN)	Highly coordinated network formalized in 2012 in response to slow and ineffective progress on child mortality and health, with a particular focus on stunting. The partnership is structured to galvanize action at local, national, and international levels and has created a mutually reinforcing movement to end malnutrition. Led by a senior coordinator who is nominated by the Secretary General of the United Nations and supported by a lead group of senior-level champions that help to guide the overall framework of the movement. Fifty-eight countries are participating in the movement, including using a common monitoring and evaluation framework.
Global Alliance Vaccine Initiative (Gavi)	Private–public partnership that was created at the beginning of the MDG era to address stagnating immunization coverage. Gavi has a secretariat that oversees a global-level plan that coordinates partner action in country, in addition to partner collaboration with industry and government. This helps to minimize redundancies and inefficiencies and provides a shared planning and monitoring framework into which all the partners can contribute.
	With its partners, in the MDG period Gavi contributed to reaching an additional 500 million children with immunizations and, in doing so, prevented more than 7 million deaths.
Global Partnership to End Violence Against Children	Launched in 2015, the Global Partnership works across sectors to accelerate action with countries to end violence against children. The partnership secretariat provides technical support to pathfinder countries that are developing national plans of action and also administers a fund that provides catalytic resources to end violence against children.
Global Adolescent Girl Engagement Initiative (GAGE)	Launched by the UK government in 2014, GAGE is a multiyear, multipartner, applied research initiative that seeks to better understand what works in programming and policymaking that focuses on adolescent girls and lifting them from poverty.
UNAIDS, UNICEF, and others: All In!	As part of the broader UNAIDS efforts to end HIV/AIDs, All In! to #EndAdolescentAIDS is a multistakeholder initiative that works with, and on behalf of, adolescents to accelerate efforts in ending HIV/AIDS. This initiative recognizes that adolescents bear a disproportionate burden of new infections, and that to end the epidemic by 2030 different age groups and populations need tailored strategies of action.

A Collective Impact Framework for Adolescent Girls

The experience of Gavi and GPE suggests that the adoption of a Collective Impact approach is needed to catalyze action in select, interrelated, areas of programming for adolescent girls during the SDG era. However, because adolescent girls are an age cohort that has multiple needs met by diverse actors in different sectors, the framework would need to adopt an amended model of Collective Impact. Unlike the partnerships of the MDG era, which included elements of the Collective Impact approach, we recommend a multisectoral initiative that consists of members, *including existing global partnerships*, which work on a range of issues relevant to adolescent girls.

The development of a coordinated agenda on adolescent girls, with mutually agreed-on indicators and activities that reinforce the work of current partnerships and programs, should be led by a set of global champions already working in and through relevant issue-specific initiatives. This effort would need to be supported either by an existing organization that takes on the backbone role of the Collective Impact framework or through the establishment of a secretariat that would assume the responsibility. The work of the initiative, and the prioritization of the adolescent girl agenda within existing partnerships and programs, would be aided by the creation of a funding instrument, or amendment of an existing instrument, that would help to fund and coordinate the implementation of complementary activities. We recommend that the funding mechanism prioritize investments in the early adolescent years, providing a bridge between the significant investments the international community is already making in early childhood development and to complement other funding instruments. Thematically, the partnerships and funding instrument could focus on three broad areas, which provide enough focus and prioritization to help shape the boundaries of the agenda and its shared indicators and goals, but also enough flexibility for national and subnational relevance based on need and context. We recommend three themes: child marriage; adolescent health, with an emphasis on sexual and reproductive health and HIV; and education and empowerment, with an emphasis on transition to secondary education and programs that strengthen life skills, self-confidence, and agency.

An international-level Collective Impact framework will only be successful if it is married with national or subnational initiatives that are locally owned, evidence based, and led at the local level by a diverse set of actors. Leadership by national or subnational government is imperative to success and would be greatly aided by a government-approved adolescent plan and associated budget that includes different line ministries. Like the global framework, the national effort must be a vision shared by all the participants for bringing about change for adolescent girls, with mutually agreed roles and responsibilities, as well as common and transparently monitored goals, targets, and indicators. The participation of adolescents in shaping and implementing the framework will enrich and add enormous value to the credibility of the effort.

DREAMS: A MULTISECTORAL INITIATIVE ADDRESSING STRUCTURAL DRIVERS OF HIV RISK
AMONG ADOLESCENT GIRLS AND YOUNG WOMEN

Girls and young women account for 71% of new HIV infections among
adolescents in sub-Saharan Africa. Many adolescent girls and young women
lack a full range of opportunities and are too often devalued because of gender
bias, leading them to be seen as unworthy of investment or protection. Social
isolation, economic disadvantage, discriminatory cultural norms, orphanhood,
gender-based violence, and school dropout all contribute to girls' vulnerability
to HIV.

In response to this reality and the rising rates of new infections among
adolescent girls in southern Africa, the US President's Emergency Plan for AIDS
Relief (PEPFAR) established an ambitious $385 million initiative, called DREAMS,
supported by public and private donors and technical experts.

The goal of DREAMS is to reduce HIV infections among adolescent girls and
young women by helping them develop into **D**etermined, **R**esilient, **E**mpowered,
AIDS free, **M**entored, and **S**afe women. DREAMS is being implemented in 10 sub-
Saharan African countries that account for nearly half of all new HIV infections
that occurred among adolescent girls and young women globally in 2014. The
countries are Kenya, Lesotho, Malawi, Mozambique, South Africa, Swaziland,
Tanzania, Uganda, Zambia, and Zimbabwe.

DREAMS is about multiple solutions surrounding one problem. The program
delivers a core package that combines evidence-based approaches that go beyond
the health sector, addressing the structural drivers that directly and indirectly
increase girls' HIV risk, including poverty, gender inequality, sexual violence, and a
lack of education.

For each country, DREAMS generates and updates a data dashboard that
documents the number of adolescent girls reached through a layering of different
interventions. The data presented in the dashboards are disaggregated by sex, age,
and location, helping to document who the interventions reach. Since its launch,
DREAMS has reached more than 1 million adolescent girls and young women with
critical HIV prevention interventions.

In South Africa, for example, in partnership with the government, the
DREAMS initiative targets adolescent girls age 10–19 in and out of school,
orphans and vulnerable children age 10–19, young women age 20–24, and male
sexual partners age 20–49 in 19 high-burden and high-transmission subdistricts
within five districts. Using multiple evidence-based interventions, such as
postviolence care, parenting, and caregiver programs, and facilitating access to
already available cash transfers and education subsidies, the DREAMS initiative
addresses multiple structural drivers of HIV transmission among girls and
young women.

DREAMS offers a potential way for organizations from different sectors to work
together to offer multisectoral interventions to achieve a commonly agreed-on
goal—in this case, to ensure positive outcomes for adolescent girls and young women.
Although reduction in HIV transmission among adolescent girls is the outcome
measure tracked, DREAMS has to achieve change on many other dimensions of a

girls' life in order to meet that goal. By catalyzing global partnerships and funding sources, leveraging existing national programs, tracking common indicators of progress in a transparent manner, and targeting adolescent girls most in need, DREAMS is a model of a Collective Impact approach to achieve results at scale.

Conclusion

The inclusive and consultative process of developing the SDGs yielded a comprehensive and ambitious global agenda that seeks to tackle some of the most deeply entrenched inequalities in the world. This agenda celebrates the rapid and marked success and change that characterizes the MDG era, while also pushing civil society, governments, donors, and partners to aspire to even more accelerated progress. Never before have so many different actors connected and collaborated across sectors and between the international, national, and community level. The shifting global political landscape, coupled with multiple protracted armed conflicts, a rise in cyclical and sudden-onset natural disasters, and tightening financial flows makes the need for smart coordinated action even more urgent. In the face of such structural hurdles and in light of the diverse challenges that face adolescent girls, how do we move forward?

In a follow-up to the initial work on developing a Collective Impact model, additional components for the successful implementation of the framework were identified. Chief among them was the investment in relationships and the building of trust among diverse partners. Though not a prerequisite for working together, an oft-cited outcome that arises from Collective Impact efforts is the regeneration of energy and optimism for effecting change, a hope in the ability of the partners to contribute to a better future.

Working on behalf of adolescents requires long-term persistent action and adaptation to respond to evolving needs on the ground and to support the slow and iterative process of normative change. None of our organizations and efforts can do it alone, and we need each other's expertise, energy, and enthusiasm to persevere in the creation of a world where adolescents enjoy the agency and health that the SDGs envision.

RECOMMENDED ACTIONS

- The creation of an adapted Collective Impact framework for adolescent girls in the SDG era driven by a group of champions.
- The engagement in the initiative by key issue-specific global partnerships whose work is relevant to adolescent girls.
- The assumption of the "backbone" role by an existing organization that is working on adolescent girls, or the establishment of a secretariat, to help coordinate the development and monitoring of a shared agenda with associated targets and indicators.

- The establishment of a funding instrument, or the amendment of an existing instrument, that focuses on the early adolescent window and three broad areas of programming: child marriage; adolescent health, with an emphasis on sexual and reproductive health and HIV; and education and empowerment, with an emphasis on transition to secondary education and programs that strengthen life skills, self-confidence, and agency.

References

Austrian, K. (2015). *Randomized evaluation of the adolescent girls empowerment programme*. New York, NY: Population Council.

Boumphrey, S. (2012, February 13). Special report: The world's youngest populations featured on Euromonitor International [Web log post]. Retrieved from http://blog.euromonitor.com/2012/02/special-report-the-worlds-youngest-populations.html

Breinbauer, C., Maddaleno, H. M., & Pan American Health Organization. (2005). *Youth Choices and change:promoting healthy behaviors in adolescents*. Washington, DC: Pan American Health Organization.

Bryce, J., Arnold, F., Blanc, A., Hancioglu, A., Newby, H., Requejo, J., & Wardlaw, T. (2013). Measuring coverage in MNCH: New findings, new strategies, and recommendations for action. *PLoS Medicine*, *10*(5), e1001423.

Hanleybrown, F., Kania, J., & Kramer, M. (2012). Channeling change: Making Collective Impact work. Stanford Social Innovation Review [Website] Retrieved from https://ssir.org/articles/entry/channeling_change_making_collective_impact_work

Jones, N., Harper, C., & Watson, C. (with Espey, J., Wadugodapitiya, D., Page, E., . . . Clench, B. (2010). *Stemming girls chronic poverty—Catalysing development change by building just social institutions*. Manchester, England: Child Poverty Research Center.

Kågesten, A., Gibbs S., Blum, RW., Moreau, C., Chandra-Mouli, V., & Herbert, A., & Amin, A. (2016). Understanding factors that shape gender attitudes in early adolescence globally: A mixed-methods systematic review. *PloS One, 11*(6), e0157805.

Kania, J., & Kramer, M. (2011). Collective impact. *Stanford Social Innovation Review* [Website]. Retrieved from https://ssir.org/articles/entry/collective_impact

Lancet Commission. (2016). Our future: A *Lancet* commission on adolescent health and wellbeing. *The Lancet*, *387*(10036), 2423–2478.

Lloyd, C. (2005). *Growing up global: The changing transitions to adulthood in developing countries*. Washington, DC: National Research Council, National AcademiesPress.

MacQuarrie, K. (2014). *Unmet need for family planning among young women: Levels and trends* (DHS Comparative Reports No. 34). Washington, DC: USAID.

Mathur, S., Greene, M., & Malhotra, A. (2003). *Too young to wed*. Washington, DC: International Center for Research on Women.

McCarthy, K., Brady, M., & Hallman, K. (2016). *Investing when it counts: Reviewing the evidence and charting a course of research and action for very young adolescents*. New York, NY: Population Council.

Moore, K. (2005). *Thinking about youth poverty through the lenses of chronic poverty, life course poverty and intergenerational poverty* (Chronic Poverty Research Centre Working Paper 57). Manchester, England: Chronic Poverty Research Centre.

Ocampo, J. A. (2014). *A post-2015 monitoring and accountability framework*. Paper prepared for the UN Department of Economic and Social Affairs.

Psacharopoulos, G., & Patrinos, H. (2002). *Returns to investment in education: A further update* (Policy Research Working Paper 2881). Washington, DC. World Bank, Latin America and the Caribbean Region.

Rao Gupta, G., Parkhurst J. O., Ogden, J. A., Aggleton, P., & Mahal, A. (2008). Structural approaches to HIV prevention. *The Lancet*, *372*(9640), 764–775.

Sawyer, S., Afifi, R., Bearinger, L., Blakemore, S., Dick, B., Ezeh, A., & Patton, G. (2012). Adolescence: A foundation for future health. *The Lancet*, *379*(9826), 1630–1640.

UN Women. (2016). *Millennium Development Goals gender chart 2015*. New York, NY: United Nations Entity for Gender Equality and the Empowerment of Women.

UNESCO Institute for Statistics (UIS) & United Nations Children's Fund (UNICEF). (2015). *Fixing the broken promise of education for all: Findings from the Global Initiative on Out-of-School Children*. Montreal, Canada: Authors.

United Nations. (2015a). *Millennium Development Goals report 2015*. New York, NY: Author.

United Nations. (2015b). *Transforming our world: The 2030 Agenda for Sustainable Development*. New York, NY: Author.

United Nations Population Fund (UNFPA). (2016). *State of World Population – 10: How our future depends on a girl at this decision age*. New York, NY: Author.

United Nations Children's Fund (UNICEF). (2011). *Boys and girls in the life cycle*. New York, NY: United Nations Children's Fund, Division of Policy and Practice.

United Nations Children's Fund (UNICEF). (2014a). *Ending child marriage: Progress and prospects*. New York, NY: Author.

United Nations Children's Fund (UNICEF). (2014b). *Hidden in plain sight: A statistical analysis of violence against children*. New York, NY: Author.

United Nations Population Fund (UNFPA). (2016). *State of world population—10: How our future depends on a girl at this decision age*. New York, NY: Author.

Unterhalter, E. (2014). Measuring education for the Millennium Development Goals: Reflections on targets, indicators, and post-2015 framework. *Journal of Human Development and Capabilities, 15*(2–3), 176–187.

Wheeler, T., Romano, J., Acuna-Alfaro, J., & Wilde, A. (2017) Using indicators and data to strengthen accountability for the SDGs [Web log post]. Retrieved from http://www.opengovpartnership.org/blog/thomas-wheeler/2017/01/23/sdg-16-data-initiative-making-them-count

World Bank. (2012). *World development report 2012: Gender equality and development*. Washington, DC: Author.

World Bank & International Monetary Fund. (2010). *Global monitoring report 2010: The MDGs after the crisis* (Global Monitoring Report). Washington, DC: World Bank.

World Health Organization. (2013). *Global and regional estimates of violence against women: Prevalence and health effects of intimate partner violence and non-partner sexual violence*. Geneva, Switzerland: Author

Young People's Participation in Program Design Research, Monitoring, and Evaluation

Pamela Wridt

Introduction

Since the ratification of the Convention on the Rights of the Child (CRC), there has been a slow but steady perspective shift within international development agencies toward acknowledging the rights and capacities of young people to participate in decisions that affect their lives. For example, the programming and organizational policies of the United Nations Children's Fund (UNICEF) recognize young people as citizens who actively contribute to their communities, country, and a more just and sustainable world (UNICEF, 2003). Further, a growing body of evidence provides a strong rationale for investing in the genuine and meaningful participation of young people, especially in activities that critically examine the effectiveness of policies and programs intended to address their needs. Benefits of participation and social accountability processes include, for example, improved intergenerational communication and empathy, more relevant and sustainable programming and policies, and improved community conditions for children and adolescents that are informed by their viewpoints and lived experiences. However, the actual *practice* of meaningfully engaging young people in program design research, monitoring, and evaluation of international humanitarian and development initiatives has not been fully embraced or realized by many agencies. Why is this the case? Why does it matter? What can be done to change the situation?

To explore these questions in greater detail, this chapter provides a global analysis of the main concepts, approaches, and outcomes from engaging young people in participatory processes within development initiatives. In particular, the objective was to summarize the factors and processes that enable the meaningful participation of adolescents in program design research, monitoring, and evaluation (RM&E) activities. This analysis focuses on adolescents between the ages

of 10 and 18 years who are living under difficult circumstances, such as instability and protracted conflict, seasonal natural disasters and health epidemics associated with climate change, systemic poverty, and other forms of social marginalization. These marginalized groups are often the recipients of international humanitarian and development agency support and programming, yet they rarely have the opportunity to evaluate the relevance, effectiveness, and impact of these efforts for their daily lives and communities. Because different terms are used across UN agencies to describe this age cohort, children, adolescents, and youth are referred to as *young people* in this chapter.

Literature Review and Theory of Change Analysis

More than 80 academic journal articles were reviewed for this analysis on young people's participation in RM&E, along with a limited number of practitioner guidebooks.[1] The literature spans many disciplines, including social work, education, public health, child protection, urban planning, youth development, early childhood development, and community evaluation (to name a few). In general, the evidence represents three bodies of literature: (a) arguments making the case for young people's participation in RM&E; (b) methodologies and ethical guidelines for young people's participation in RM&E; and (c) case studies of young people's participation in RM&E.

However, there is little *systematic* evidence on the effectiveness, outcomes, and impact of young people's participation in RM&E (for an exception, see Ozer & Douglas, 2013). Rather, the evidence is largely theoretical, qualitative, and anecdotal in nature. There are also evidence gaps in the academic literature on these processes, particularly within lower income countries in the global south receiving development aid from international agencies (Freeman et al., 2003). On the other hand, there was a plethora of literature on participation approaches, adult capacity development required for this type of work, and methodologies for engaging and empowering young people. Based on these trends, one might conclude that the field has been too narrowly focused on why and how to do participatory RM&E rather than on the broader system in which these processes are integrated. For this reason, a theory of change analysis is provided to summarize the evidence for integrating young people's participation in RM&E into development initiatives and systems.

Theory-of-change diagramming is widely used in evaluations to communicate the logic (either explicit or implicit) of an intervention and its hypothesized pathways to achieving impact. Generating information through participatory RM&E with young people *is* an intervention, especially when considering the capacity development required of both young people and adults to do these activities effectively. Acknowledging that participatory RM&E is an intervention is

also crucial to move beyond guidebooks and toolkits on young people's partici-
pation in RM&E, to a systems and process-oriented logic on how it can be effec-
tively integrated into development initiatives and what outcomes policymakers
can expect to see as a result of investing in these efforts. Finally, recognizing that
young people's participation in RM&E is an intervention ensures policymakers
and practitioners are aware that these activities require technical skills, take time,
and must be properly resourced.

Figure 22.1 presents this theory of change analysis, a generalized model for
policy makers and practitioners to support them in understanding and inte-
grating young people's participation in RM&E within their agencies and a variety
of contexts. The narrative of this chapter is structured to align with the diagram
to summarize the context or rationale for young people's participation in RM&E
(Column A); barriers to their participation in RM&E (Column B); implementa-
tion strategies often adopted by agencies to facilitate, enable, and promote young
people's participation in RM&E (Column C); approaches for engaging young
people in meaningful ways in RM&E (Column D); example interventions em-
ployed by international agencies, governments, and civil society organizations to
facilitate young people's participation in RM&E (Column E); and the potential
outputs (Column F), outcomes (Column G), and impact (Column H) of young
people's participation in RM&E.

This analysis provides an opportunity for critical thinking and reflection on the
best pathways for mainstreaming young people's participation within development
initiatives through their involvement in program design RM&E. Mainstreaming
and institutionalizing these processes means that young people's right to partici-
pate in decisions that affect their lives would be implemented at all levels in the
development system (Ennew et al., 2007). This entails organizational leadership,
policies, and resources to support participation and mechanisms for young people
to express their opinions across development agencies and sectors to ensure their
democratic representation and participation in society.

Contextualizing Young People's Participation in RM&E

Following the recent adoption of the Sustainable Development Goals (SDGs) and
the 2030 agenda, all countries, regardless of their level of human development, are
now mandated to include young people as meaningful stakeholders in their na-
tional and local development processes. This mandate is, in part, a reflection of the
"youth bulge," or the emergence of young people as the largest demographic group
in the world. It is also a result of the participation of young people and organi-
zations that work with them in shaping the SDG agenda. According to a recent
analysis from the United Nations Development Program (UNDP; 2016), 65 out of
the 169 SDG targets reference young people explicitly or implicitly, with a focus

Figure 22.1

A — Context

Sustainable Development Goals

65 out of the **169** SDG targets reference young people explicitly or implicitly, with a focus on their **empowerment, participation** and **well-being**

Youth Specific & Inclusive SDGs

2 Hunger
4 Education
5 Gender Equity
8 Decent Work
10 Inequality
13 Climate Change
16 Peaceful, Just & Inclusive Societies
17 Partnerships & Implementation

B — Barriers to Participation

Systems — Institutional — Community-Household — Individual

- Political will, policies, funder priorities, governance structures, resources
- Opportunities & spaces for meaningful participation
- Social and cultural norms and practices regarding young people's participation
- Poverty, awareness, skills, time, interests, social background and networks

C — Implementation Strategies

Enabling Environment — Supply of Practitioners — Demand for Participation

- Partnerships and Networks
- Evidence-Based Advocacy
- Capacity Development
- Standards, Ethics and Guidebooks
- Social Accountability
- Rights-Based Programming

D — Participation Approaches

Civic -- Social – Political   Formal -- Informal

Leadership & Decision-Making
- Adult Led
- Intergenerational
- Adolescent Led

Level of Engagement
Higher
- Leadership
- Influence
- Collaboration
- Consultation
- Information
Lower

E — Example Interventions

- Child Friendly Cities (UNICEF/UN Habitat), "Because I Am a Girl" Urban Program (Plan International), Committee on the Rights of the Child (UN OHCHR)
- Youth and Student Councils, School and Community Management Committees, Youth Forums/Workshops
- Child-Centered Community Development and Disaster Risk Reduction, Edutainment
- U-Report, Youth-Led Groups and Youth Clubs

Young People's Opinions, Priorities, Data, Solutions

F — Outputs (short & long term)

- A1 — National and local development policies and plans that include and properly budget for young people's priorities and needs
- A2 — Expanded opportunities and access to age-appropriate information to voice opinions and make informed decisions
- A3 — Enhanced intergenerational communication and empathy for young people, their rights, assets and needs
- A4 — Improved knowledge, behaviors, attitudes, protection, skills, self-confidence, resiliency

G — Outcomes (short & long term)

- Improved accountability, credibility, relevance and sustainability of systems/policies for young people
- Inclusive institutional structures and processes for young people's meaningful participation
- Improved quality of community environments, enhanced social relationships, improved quality of programs, more equitable and inclusive services

H — Impact

All young people are empowered to contribute to the realization of their rights, the rights of others, and in creating a more just, equitable, sustainable and peaceful world

Assumptions

A1 – Data are considered credible and valid by decision-makers to take actions

A2 – A representative group of young people participates in these processes

A3 – Adults are willing to listen to young people's views and experiences

A4 – Level and type of participation are determinants of individual capacities

FIGURE 22.1 *Theory of change on young people's participation in program design research, monitoring, and evaluation. SDG, Sustainable Development Goals; OHCHR Office of the High Commission for Human Rights.*

on their empowerment, participation, or well-being. There are 20 youth-specific targets spread over six key SDGs: Goal 2 (hunger), Goal 4 (education), Goal 5 (gender equality), Goal 8 (decent work), Goal 10 (inequality), and Goal 13 (climate change). In addition, young people's involvement is considered crucial for participation, inclusion, and accountability processes embedded in Goals 16 (peaceful, just, and inclusive societies) and 17 (partnerships and implementation).

More than 150 target indicators to measure the progress of the SDGs are currently being translated into practice by international development practitioners. This means that agencies like UNICEF are now aligning their programming and impact measures with the SDGs, which will require monitoring of young people's participation. In addition, for the first time, evaluation is explicitly recognized as a requirement in the realization of the SDGs through national evaluation capacity development. These two factors will likely have a significant impact on the inclusion of young people in monitoring and evaluation activities, in both policy and practice. Therefore, it is now more crucial than ever to assess and plan for a new evaluation agenda, one in which young people should be active contributors and stakeholders.

Barriers to Young People's Participation in RM&E

Discourses on barriers to young people's participation in RM&E are quite common in the literature rather than examples of participation in practice (Ennew et al., 2007; Krenichyn et al., 2007). This can be attributed to a range of factors at the individual, household/community, institutional, and systems levels that often intersect to marginalize young people's participation in RM&E of development initiatives. Examining these barriers from an ecological perspective is important for designing strategies and interventions to address them, as different social actors and institutions are involved in programming at various levels within the development system. For example, UNICEF works with governments to achieve development goals for children, emphasizing strategies and interventions that focus on policies and systems for young people. International and national nongovernmental organizations (NGOs) are often implementing partners for UNICEF, working directly with young people and the community to improve children's and women's rights. Together, these strategies enable UNICEF to target different aspects of the system that are required to effect sustainable change.

One crosscutting barrier to young people's participation in RM&E is a lack of systems and processes to ensure these activities are conducted in an ethical manner. For example, many agencies do not have internal ethical review boards for the inclusion of human subjects in research or evaluation, but rather must rely on other institutional mechanism to monitor these processes. Concerns for the ethical engagement of young people in RM&E range from designing terms of reference for the contracting of consultants who have the appropriate expertise

to implement participatory evaluations, to the way data are collected, analyzed, and shared with others. Respect for the dignity, rights, and well-being of children is of critical importance among all stakeholders involved in these activities. Research points to the need for continuous reflexivity among evaluators in regard to the decisions they make and actions taken in relation to the power imbalance between adults and children (Graham et al., 2013). In addition, the principles of respect, benefit, and justice should underpin all activities, such as weighing the harms and benefits of evaluations, the most appropriate methods for obtaining informed consent, protecting young people's confidentiality, and the most appropriate mechanisms for the remuneration of young people involved in RM&E. These principles are often challenging to monitor in practice and can create significant barriers for evaluation managers to implement participatory RM&E with young people.

Further, a lack of *political will*, vague *policies* on participation, *governance structures and processes* that are not youth friendly or inclusive, and *limited resources* constrain professionals in developing participatory RM&E activities with young people (Chatterjee, 2007; Checkoway & Richards-Schuster, 2004b; Protacio-de Castro et al., 2007). For example, many local government structures are hierarchical, with decision-making power concentrated among senior officials. There are few examples of nontokenistic forms of young people's participation when they are invited to engage in such hierarchical governance structures (R. Hart, 1992). Time frames for development work are often determined by bureaucratic, financial, and election time frames, which do not facilitate the participation of young people. Further, there is often no budget and few dedicated resources for young people's participation in most local government departments. For this reason, funders of international development initiatives have an important role in enabling or prohibiting young people's participation in RM&E. However, with a growing interest in objective performance and impact measures, less easily measurable activities like facilitating the participation of young people in RM&E are more difficult for agencies to justify with government or private-sector donors and philanthropic foundations (Freeman et al., 2003).

Given these obstacles, it is not surprising that young people's participation in development initiatives may not translate into effective practice. In fact, in most RM&E interventions, young people have consistently indicated it was their first time to participate in such activities (Wridt, 2015). This is a reflection of a *lack of opportunities and spaces for young people's participation at the institutional level*, including possibilities for their meaningful participation in different phases of the program planning, implementation, and review cycle common across UN agencies. For example, UNICEF has a country and program-planning cycle that takes place over a 4- or 5-year period during which a range of opportunities exist for RM&E. At the national level, research is typically commissioned to understand the situation of children and women, to understand the policy context, and to map out important partnerships for UNICEF's work. These studies help shape country

priorities, national development plans, and programs. However, only a handful of countries have included young people's participation in this type of research. During program implementation, there are other opportunities for young people's participation in RM&E, such as by empowering adolescents to lead monitoring and evaluation activities with their peers to better understand what is working or needs improvement. And, while UNICEF's evaluations do include young people, they are most often involved in a consultative way, such as through one-time focus groups, rather than as knowledge producers, or those with the power to define evaluation questions, lead data collection and analysis processes, and identify recommendations.

The meaningful participation of young people in local, national, and international development processes is fundamentally a question of fostering and enhancing intergenerational empathy, trust, and communication. This is because *social-cultural norms regarding young people's participation* vary for girls and boys and are shaped by adult viewpoints about the role of children in society (West et al., 2007). Therefore, the ability and willingness of adults to listen and act on the viewpoints of a younger generation require time for relationship building and, for adolescents in particular, a sense of trust and reciprocity. Understandings of childhood permeate participatory work and determine how local communities and international agencies view and interact with young people, as well as the types of programs implemented on their behalf (Lambert, 2007). Meanings of childhood also shape the ways young people and their communities respond to programs. For example, research on northern childhoods in the United States and Europe has consistently found narratives that children are vulnerable and in need of protection (Enkhtor, 2007; Evans, 2007). By contrast, children are viewed as capable actors who significantly contribute to their family and communities in many societies in Africa and Asia. However, in all countries, the dominant narrative is that young people are not yet citizens; they are in a "state of becoming" citizens, and their viewpoints are thus excluded from public decision-making processes.

Meanings of childhood translate into practice in different ways for particular subgroups of young people. Even within the same culture, there are diverse childhoods, shaped by factors such as sex, ability, and religion (Chen et al., 2010; O'Kane & Karkara, 2007). These differences can result in certain young people being marginalized in participatory processes due to their position of relative powerlessness in their communities (Lund, 2007). For example, research has found young refugees are not encouraged to evaluate their programs as a result of adults underestimating children's competencies to participate in important tasks (Evans, 2007). In refugee camps, research suggests youth make decisions using their current situation to build toward a future, whereas their elders tend to remain more cognizant of the past. Families may also experience role reversal as young people have greater capacity to navigate their new living environment in humanitarian contexts (Guyot, 2007). Adults may dissuade young people, especially girls, from participating in RM&E activities for these reasons (J. Hart, 2007).

The viewpoints that young people have about adults and their peers are equally important to understand when doing participatory RM&E. In many humanitarian situations, trust and social networks have collapsed, making developing mutual respect and reciprocity challenging among different social groups of adults and young people. There is also a dependency culture (e.g., What are you here to give us?) that is a result of international aid being given without the genuine participation of communities (Cooper, 2007). Where resources are scarce, participatory interventions can even encourage competition rather than cooperation between young people (Evans, 2007). In conflict settings, young people who develop publicly visible leadership skills and competencies (which are often the outcome of participatory work) may be attractive to armed groups, resulting in unintended negative consequences. For child soldiers who have assumed adult roles and responsibilities, listening to the guidance of adults on arrival in refugee camps can be challenging to address in participatory work (Guyot, 2007). Some adolescents are apprehensive about working with adults in participatory ways because they have an experience of being let down by their elders. For example, research has shown a lack of implementation of young people's viewpoints as a result of meanings of childhood, agency management style and staff capacities, and reporting and monitoring constraints (Evans, 2007). Managing expectations about the parameters of feasible change within a participatory process is important for this reason, so that young people understand what is possible in the short and long term and which ideas of theirs may not be realistic to implement.

At the individual level, there are many factors that influence young people's participation in RM&E, such as their *awareness* of opportunities for participation, *social background and networks*, personal *interests, skills*, and free *time* within their school and work schedules to participate. The literature on these barriers primarily comes from the field of youth development, exploring questions of why adolescents want to participate in evaluation activities, their motivations and incentives, and social norms around their participation in community projects. Research suggests young people's participation is influenced by their personality differences, social and emotional skills, and literacy levels (Sabo Flores, 2008). Other studies have found that adolescents require a sense of belonging and trust of others, opportunities to socialize with peers, and activities that adolescents consider fun when engaging in participatory RM&E (Sabo Flores, 2008; Zeldin et al., 2012). When these conditions do not exist, young people tend to drop out of participatory activities. Participatory RM&E approaches need to be sufficiently flexible to accommodate young people's unique needs in a sustained way. For example, girls and boys may approach participation in different ways, and concepts may be thought of in different ways by certain adolescent groups, such as those with disabilities or those from marginalized ethnic/cultural backgrounds (Couch & Francis, 2006; UNICEF, 2013; Zeldin et al., 2012). Girls and young people with disabilities may face additional barriers to participation in RM&E due to their confinement to the private sphere for work and parental fears for their protection (Chakraborty, 2009; UNICEF, 2013).

Implementation Strategies to Foster
Young People's Participation in RM&E

International development agencies and NGOs use a range of strategies to implement young people's participation in RM&E to foster the *demand* for participation, the *supply* of qualified professionals to implement participatory work, and an *enabling environment* in which young people's data can be heard and acted on by decision-makers. By demand, I am referring to strategies that target the individual, household, and community levels of the development system to raise awareness on the importance of *social accountability* processes as a means of improving the quality of services for young people. Demand for participation is rooted in *human rights–based programming* and the mandate of development agencies like UNICEF to realize children's rights. The CRC signaled a change from understanding young people as objects of adult interventions designed to meet their development needs toward a construction of young people as rights holders capable of defining their own criteria for well-being. For many agencies, participation is understood as a means of contributing to the realization of children's rights through consultation, information sharing, and decision-making with young people (Evans, 2007; Lansdown 2011; Skelton, 2007; UNICEF, 2003). Participation is also viewed as a means to inclusion and citizenship because it provides opportunities for young people to learn the skills and attitudes that enable them to function as citizens in a democratic state (J. Hart, 2007; O'Kane & Karkara, 2007).

Much of the literature on young people's participation in RM&E comes from practice and consists of methods toolkits explaining how to effectively facilitate these activities. In fact, there is such an abundance of *guidebooks* now in circulation on the topic, one might have the impression that young people's participation is mainstreamed into all development initiatives (Landsdown & O'Kane, 2014; Sabo Flores, 2008; Save the Children, 2003; UNICEF, 2013). These guidebooks grew out of a recognition that professionals lack the required competencies to implement participatory RM&E with young people. For example, research has shown that while youth development practitioners are trained to work with young people in participatory ways, service delivery and management professionals do not necessarily have the experience and expertise necessary to enable them to work with young people (Ennew et al., 2007). Therefore, *capacity development* is one of the main strategies to improve the *supply* of professionals with the technical knowledge, skills, and attitudes to effectively implement participatory activities with young people. In addition, practitioners from international NGOs have identified *standards, principles, and ethical guidelines* to effective participatory practices with young people, especially as they relate to their meaningful engagement in the process (Feinstein & O'Kane, 2008; Powell et al., 2013; Veitch & Corazon Buala, 2007).

Despite efforts to improve the supply of qualified professionals in this field, not enough attention is given to the preparedness of adults and communities to work with young people in participatory processes (Foster-Fishman et al., 2010). Being humble, considering young people's views as equal to adults, being genuinely interested in their best interests, and being able to talk to young people in a clear and child-friendly manner are all traits that support effective participatory work (Enkhtor, 2007). These attitudes, skills, and values are often new to parents, teachers, and adult practitioners; many are challenged by new ways of working with others and giving up power and decision-making (Sutton, 2007). This is why intergenerational communication and empathy are common outcomes of participatory processes, especially if sufficient time is devoted to building relationships between young people and adults (Children's Environments Research Group, 2014; Wridt, 2015).

Having capable practitioners and a clear rationale about why participatory RM&E with young people matters is not sufficient for mainstreaming these activities into development initiatives. Other strategies to create an *enabling* political *environment* are required, including forming *partnerships* with duty-bearers and leveraging *networks* with governments, the private sector, and civil society organizations. This is because many participatory processes depend on the "coalition of the willing" within and outside of their agencies to be implemented well for many of the factors mentioned previously. Another strategy for implementing participatory RM&E with young people is *evidence-based advocacy*, or the use of data from these efforts to effect change. However, there are few studies that go beyond rhetoric to demonstrate this strategy in practice, indicating a significant knowledge gap in the field that needs to be addressed before participatory work with young people will be taken seriously by policymakers and duty-bearers. For this reason, research stresses the importance of managing expectations with young people on the use of their data and to ensure small-scale immediate actions will be taken with this information, even if larger scale outcomes with the data may occur over time through continuous advocacy (Wridt et al., 2015).

Approaches to Young People's Participation in RM&E

Articles and books on approaches to young people's participation in RM&E are abundant in the literature and typically address two main dimensions: (a) the extent to which young people are involved in *leadership and decision-making*; and (b) the *level of engagement* young people have in the process. Research indicated a continuum of leadership and decision-making, in which either adults or young people have more control over the process. When adults lead a participatory RM&E process with young people, it is often assumed to be consultative in nature because the decisions on what, how, and why data are being collected are determined without the input of young people. On the other hand, when young people

lead a participatory RM&E process, it is assumed to be a higher form of participation in the sense that young people make these decisions. Most researchers argue that a collaborative approach is more realistic in practice, in which adults and young people work across the generations to collect data on an issue and to develop solutions together (R. Hart, 1992). Within international development initiatives, it is more common to find adult-led RM&E activities with young people due to the barriers outlined previously. However, there are a growing number of examples of intergenerational approaches that have been successful (Children's Environments Research Group, 2014; Wridt, 2015).

Young people's level of engagement in RM&E is often expressed as a continuum according to the stages of the evidence generation process and the quality of their engagement (R. Hart, 1992; Kellett, 2010; Sabo Flores, 2008). Lower levels of engagement reflect a consultative approach to participation, in which information is shared with young people or data are gathered from young people by adults. Higher levels of engagement include young people serving in roles of data analysis and in shaping the use of the evaluation findings. Other models explicitly acknowledge the power nuances and multilayered relationships that exist in participatory processes or the fluid nature of activities in which young people exercise varying degrees of power in some aspects of an activity and not in others (Wridt, 2015). The level of engagement young people have in RM&E activities is significant for the quality of the process and the outcomes it generates. For example, young people's involvement in collecting data to identify youth assets and needs is more likely to promote their knowledge development because the process involves learning about issues within their community. Critical consciousness raising may be more likely during data analysis when young people critically reflect on the conditions of their lives and trends in the evaluation results (Foster-Fishman et al., 2010). However, in a recent review of 385 academic journal articles on community-based participatory research, the degree of youth engagement in all phases of the research process revealed higher levels of their participation in designing and conducting research, with fewer examples of their data analysis and use of the findings (Jacquez et al., 2013). Therefore, participatory research processes might increase knowledge and understanding among young people without empowering them to take actions on the results.

Few participatory RM&E processes involve young people in the data analysis phase of research because the methods are not well matched to the developmental needs of the participants (Enkhtor, 2007; Vaughn et al., 2013). Developmentally and culturally appropriate tools are required to build the capacities of young people for evaluation activities, including basic knowledge of the topics or issues that are the focus of the evaluation (Clark, 2010). The cognitive science research suggests that even younger youth have the capacity to understand basic research concepts when the material is presented in a contextually appropriate way (Jacquez et al., 2013). Many researchers point to the need for mentoring by skilled partners for a particular task, which is then gradually withdrawn as the young person's competence

increases and a more equal partnership emerges. Social accountability processes often place duty-bearers in structured advocacy meetings with young people, and thus researchers suggest building their political awareness, or an understanding of power relations, how decisions are made, by whom, and the motivations beyond stakeholder actions (Children's Environments Research Group, 2015). Researchers and practitioners underscore the need to avoid tokenism and manipulation or giving the appearance that young people have a voice, when in fact they have no role in the decision-making process (J. Hart, 2007; R. Hart, 1992; Kara, 2007).

The level of young people's engagement has implications, for example, in the types of evaluations implemented by international development agencies. The most common type is an *evaluation "on" young people* in which the age cohort is the "object" of the assessment, such as an evaluation focusing on the impact of national policies for HIV prevention with adolescents. Typically, these evaluations do not include adolescents, but rather involve adults, who shape policies on their behalf as key informants. Knowledge about young people is therefore generated largely from government representatives, parents, teachers, and other adult service providers (Hampshire et al., 2012).

Evaluations "for" young people are those in which the age cohort is the intended "audience" of the evaluation, such as an evaluation designed to improve programs that serve adolescents. This type of evaluation acknowledges young people as persons with subjectivity, but more often engages young people as "informants" who have cognitive abilities and social competence to contribute viewpoints about a topic (Hampshire et al., 2012). When adolescents are involved, their level of participation and engagement may be limited to one-time consultations through interviews or focus groups. At higher levels of engagement, there are some examples of *evaluations "with" young people*, in which the age cohort is an intended "comanager" or "cofacilitator" of evaluation activities. This means young people are actively and meaningfully engaging in decision-making for, and implementation of, evaluation methods, data collection, analysis, and evaluation report writing and dissemination (for an example evaluation, see UNICEF, 2012). Evaluations of this type extend the recognition of young people's subjectivities to see them as social actors in their own rights (Hampshire et al., 2012).

Example Interventions of Participatory
RM&E With Young People

The most successful interventions of participatory RM&E with young people target the barriers outlined previously from a systems perspective to simultaneously address the demand, supply, and enabling environment. Effective interventions also take into consideration young people's *spatial range* and geographical awareness of the world, their *developmental status* and capacities, the *social-political context* of decision-making, and the *settings or spaces* where young

people have opportunities to participate in their everyday lives (Lundy, 2007). An ecological and life-cycle approach to young people's participation provides an opportunity to understand these relationships. For example, very young children have a limited spatial range, are in the early stages of cognitive and language development, and primarily interact with adults who are family members, neighbors, or caregivers through play-based interactions at home and early childhood development/early childhood education (ECD/ECE) settings. On the other hand, adolescents have greater spatial range due to increased independence and mobility, their identity formation and life skills development are increasingly shaped by their interactions with peers and teachers in their schools and communities, and they may have opportunities to participate in student councils and community programs. Interventions therefore require different approaches, methods, and tools to empower the participation of younger and older adolescents in RM&E (Clark & Percy-Smith, 2006). Tokenistic forms of participation can occur from a mismatch between the focus of the RM&E and young people's spatial awareness and developmental status. For example, encouraging younger adolescents to participate in global conferences with policymakers requires specific methods to ensure they fully comprehend and can engage in these decision-making processes.

It was initially challenging to identify specific examples of interventions that had an explicit focus on young people's participation in RM&E within development initiatives. This is because participation is often taken for granted as a means to an end or is an implicit and "hidden" intervention within international development programming (Cele & Van der Burgt, 2015). However, when broadening the scope to include interventions supported by international and national NGOs and civil society organizations (which are often done in partnership with UN agencies), it was possible to compile relevant examples. Several case studies are worthy of discussion to demonstrate various approaches for effecting change through these evidence-generating processes with young people. These examples are meant to be illustrative rather than exhaustive of the current state of the field and to demonstrate change at the systems, institutional, community/household, and individual levels.

At the *systems level of change*, urban programs such as UNICEF's *Child Friendly Cities* and Plan International's "*Because I am a Girl*" *urban program* have an explicit focus on participatory RM&E with young people to improve the quality and inclusiveness of city services for girls and boys through youth-led monitoring and participatory statistics (Plan International, 2016; UNICEF, 2017). Through an intergenerational approach using mixed methods, such as community mapping, video, and youth-led graphic surveys, data are gathered and analyzed by young people about their community conditions. These data are gathered at the community level to ensure adolescents are empowered to comment on the spatial worlds they are familiar with. The results are then aggregated across communities to develop a local plan of action to improve services in urban regions through evidence-based advocacy with duty-bearers (Children's Environments Research

Group, 2015). Empowering excluded groups like children and adolescents to make knowledge claims about themselves and their communities in decision-making processes is considered essential to address issues of equity and justice.

Another example of a policy-level intervention that includes young people's participation in RM&E is the optional reports submitted by member states to the *Committee on the Rights of the Child* that monitor progress on the implementation of the CRC (Lansdown, 2011). In this context, member states empower young people to generate their own data and information to submit in parallel with national progress reports. These reports shape national priorities for policies and programs for adolescents and thus represent an opportunity to influence systems with young people's inputs.

At the *institutional level of change*, interventions tend to focus on creating sustainable governance structures within institutions and across sectors to manage cities, communities, and schools with the participation of young people. For example, some local governments have established *youth councils* to gather regular input from young people about their experiences in a municipality (Checkoway & Richards-Schuster, 2003, 2004a; Checkoway et al., 2005). These councils tend to involve a few, adult-selected older adolescents who are well educated or articulate, and often these councils lack the inclusive and genuine participation of younger adolescents with differing abilities (Protacio-de Castro et al., 2007). However, youth councils are generally led by young people, and they provide a youth-friendly structure for discussing issues directly relevant for their lives with decision-makers (Percy-Smith, 2010).

Student councils offer similar opportunities for young people to meet on a frequent basis to discuss issues in their school, plan events, and to advocate for student needs. *Community and school management committees* tend to be intergenerational and meet on a quarterly basis to discuss issues and resolve local problems. These committees typically have one boy and one girl representative who are elected by their peers. A common challenge is ensuring that young people's voices are not marginalized by adults and elders during meetings. In the best scenarios, data from young people's RM&E inform decision-making during committee meetings and are used to advocate for school improvements, community services, and programs. And, while there is growing recognition that *youth forums* and *workshops* as a means to facilitate young people's participation within development initiatives is insufficient, one-off meetings sponsored by various donors and the government to represent the country's young people are still common (Enkhtor, 2007; Ennew et al., 2007; J. Hart, 2007).

Interventions at the *community and household level of change* have historically been common among public health, urban-planning, and child protection sectors because they focus on young people's families and everyday lives and conditions. These interventions include *child-centered community development and disaster risk reduction*, an approach for integrating the perspectives of young people into neighborhood design, planning, and social and public services (Narksompong &

Limjirakan, 2015; Porter & Abane, 2008). Community mapping is one common methodology to assess young people's needs, risks, and local assets to plan for disasters and the location of public water, sanitation, and hygiene (WASH) facilities (Wridt, 2010). More recently, citizen-led enumerations of informal settlements with young people have become more common as a strategy in partic-ipatory statistics for marginalized communities to mobilize knowledge about their realities and to advocate for their needs with local governments (Chambers, 2010; Oosterhoff et al., 2016). Adolescents and youth often participate in these processes as data enumerators to advocate for improved household services.

Edutainment (or educational entertainment) is a youth-centered intervention designed to effect social and behavioral change by communicating important con-tent, messaging, and information to young people through artistic platforms and media. It is an emerging area of practice in RM&E activities with young people, including community theater and radio and television programming (Herrington, 2016; Kleine et al., 2016). These interventions provide opportunities for young people to communicate the results of their RM&E activities and to advocate for and take actions that raise awareness about the identified issues (Norris et al., 2012). One common method is youth-led videos to evaluate "the most significant changes" resulting from a program or project (Asadullah & Muniz, 2015).

Research indicates *individual-level change* interventions are crucial for young people to develop their knowledge and skills to meaningfully engage in participa-tory RM&E. Studies have indicated that youth leadership skills and social emo-tional capacities are critical for their genuine participation in RM&E (Sabo, 2008). Community-level participatory action research processes with *youth-led groups and youth clubs* that meet regularly to take action on their rights offer a valu-able approach for addressing inequality and improving young people's capacities to self-organize and to improve their community conditions and self-protection (Article 15 Project, 2014). Others argue for the need to build on adolescent assets and their use of social media technologies as innovative methods for engaging them in RM&E. For example, *U-Report* is a new approach supported by UNICEF and NGOs to engage young people in SMS (Short Message Service) polls and in-formation sharing on topics that affect their lives (Davis & Alvarez, 2016). These data are compiled through volunteer participation using mobile phones and are analyzed and fed back to young people in real time. The results are often shared with decision-makers to inform local and national program planning and monitoring.

Potential Outputs and Outcomes of Participatory RM&E With Young People

The immediate output of a participatory RM&E process with young people is a rich tapestry of qualitative and quantitative data and information that represent their experiences, opinions, priorities, and solutions to issues that affect their

lives. This might include survey data from girls and boys about the quality of their learning environment, maps of risks or safety hazards young people face in their communities, or action plans that young people developed to guide priorities for improving programs and services (see Children's Environment Research Group, 2014, for example outputs). Research suggests participatory data from young people can effect change at all levels in the development system—from individual- to policy-level transformations. This includes short-term changes that young people can implement on their own, as well as changes that young people implement in partnership with adults in their communities and with duty-bearers. However, some changes depend on a number of assumptions to be true for young people's data to be acted on by adult community members and decision-makers.

At the policy or systems level, studies have indicated that the data must be considered credible and valid by decision-makers in order for them to take actions on the information (Wridt et al., 2015) (see A1, Figure 22.1). For example, if a small number of young people are involved in an evaluation, local representatives may be reluctant to change policies as a result of these inputs. Case studies on young people's participation in *national policy formation* and *planning*, while rare, do indicate the value of their contributions in determining *priorities* and advocating for sufficient *budgets* to implement actions on their behalf (Kelley, 2006; Wridt, 2015). For example, in France, UNICEF supports more than 70 municipalities to conduct annual surveys with young people on their community conditions, with young people often leading the data collection and analysis process with their peers (Wridt, 2015). These data are then aggregated at the national level through the support of an academic partner to advocate for the needs of the most marginalized adolescents within and across sectors such as urban planning, social policy, and education. The potential outcomes of these efforts are improved *accountability* of duty-bearers to realize children's rights and more *credible, relevant,* and *sustainable systems and policies* for young people. However, as mentioned previously, there is an evidence gap to effectively articulate the link between participatory RM&E with young people and these outcomes.

At the institutional level of change, it is assumed that a representative group of young people is engaged in RM&E (see A2, Figure 22.1) through expanded *opportunities and access to age-appropriate information to voice their opinions and make informed decisions* on matters that concern them. This includes opportunities for girls and boys, adolescents with disabilities, young people living in refugee camps and in areas of conflict, working adolescents, and adolescent mothers to learn what development agencies are doing on their behalf. This can require revisions in organizational practices, for example, on communicating evaluation results to adolescents in a way that they can understand and comment on. It requires organizational thinking on the appropriate means by which young people are empowered to transform structures, practices, and attitudes that exclude them socially, culturally, politically, and economically (J. Hart, 2007). Organizations have also increased budgets and planning to accommodate participatory RM&E

with young people, such as the amount of time and resources spent to ensure young people's learning about the issues and decision-making process to which they will be exposed (Ennew et al., 2007). The potential outcomes of these changes are improved *institutional mechanisms and processes* that promote *meaningful and inclusive participatory processes with young people* in a sustainable way.

At the community and household level, it is assumed that adults are willing to listen to young people's views and experiences in order to begin a dialogue about matters that concern them (see A3, Figure 22.1). If this assumption holds true, one common result of participatory RM&E is improved *intergenerational communication, trust and empathy for young people*, because participatory processes create safe environments for power sharing across generations (Guyot, 2007). Research demonstrated that participatory RM&E with young people can result in a reduction of domestic abuse toward children, improved social freedoms for girls (Evans, 2007), and an increased demand for participation in family and community decisions (Ennew et al., 2007). When young people participate in RM&E with their peers and adult community members, their protection is enhanced. For example, research indicated that when young people act collectively, they are able to attain better individual and collective protection by preventing and reporting cases of abuse, as well as to refuse social practices that they define as harmful, such as child marriage (Evans, 2007). Research has shown that when young people comprise a majority of refugees in camps, engaging with them in RM&E may translate into changes that are felt by the entire community (Jacquez et al., 2013). This is because knowledge generated through participation is culturally relevant and connected to people's lived experiences and thus is more readily translated into action than knowledge that is generated from academic theory or from outsiders. Participation in RM&E can therefore result in *better programming* (Guyot, 2007; UNICEF, 2003), an improved *quality of community environments*, enhanced *social relationships*, and more *equitable and inclusive services* (Wridt et al., 2015).

For individual outputs, it is assumed that the level and type of participation are determinants of changes in adults' and young people's capacities and skills resulting from their engagement in RM&E (see A4, Figure 22.1). With lower levels of engagement, young people might improve their *awareness* and *knowledge* of an issue, whereas with higher levels of engagement they may be able to develop cognitive *skills* to analyze quantitative data. Individual-level outcomes are the most commonly cited in the research on young people's participation and largely focus on *psychosocial development, cognitive development, skills acquisition*, and *behavioral and attitudinal changes*. For example, research indicated adolescents gain self-confidence, attain knowledge of democracy, learn about other cultures, make networks and contacts with young people from different backgrounds, and explore personal talents and interests (Ennew et al., 2007). Participation is also a psychosocial protective process that supports *resiliency* by enhancing young people's individual competencies, their sense of control, and predictability of their environment and lives (Guyot, 2007; Jacquez et al., 2013). It is important to stress

that individual outcomes are observed in both young people and adults when they participate in RM&E of development initiatives, as the process can be empowering for all generations. Evaluations of participatory processes therefore focus on baseline capacities of adults and how these change over time, as well as the personal changes experienced by young people engaged in this work.

Conclusion

The objective of this chapter was to synthesize and analyze the logic, process, and outcomes from engaging young people in program design RM&E of international humanitarian and development initiatives. As the research demonstrated, the potential impact of these efforts far outweighs any barriers or challenges identified in the literature, and in the context of the SDGs, it is no longer an option to exclude young people's voices in these processes. All young people should be *empowered to contribute to the realization of their rights and the rights of others and in creating a more just, equitable, sustainable, and peaceful world.* Without the genuine participation of young people in shaping and evaluating the programs that serve them, international development initiatives may be missing what is most relevant to their everyday lives, survival, and growth. An even greater risk is a generation of young people who feel that their opinions are not valued, listened to, and acted on by adults, which can lead to frustration and apathy. It is therefore imperative to consider program design RM&E as a logical entry point for international agencies to foster young people's participation in development initiatives. In particular, the evidence gaps mentioned in this review should be given explicit focus by development agencies to better articulate the significance of young people's contributions in creating more relevant, effective, and sustainable programming.

Note

1. For the purpose of this chapter, only the most relevant references are included.

References

Article 15 Project. (2014). *Supporting children's rights and capacities to self-organize.* New York, NY: City University of New York Graduate Center, Children's Environments Research Group. Retrieved from http://crc15.org/

Asadullah, S., & Muniz, S. (2015). *Participatory video and the most significant change: A guide for facilitators.* Oxford, UK: InsightShare. Retrieved from http://www.insightshare. org/resources/pv-handbook.html

Cele, S., & Van der Burgt, D. (2015). Participation, consultation, confusion: Professionals' understandings of children's participation in physical planning. *Children's Geographies*, *13*(1), 14–29.

Chakraborty, K. (2009). "The good Muslim girl": Conducting qualitative participatory research to understand the lives of young Muslim women in the bustees of Kolkata. *Children's Geographies*, *7*(4), 421–434.

Chambers, R. (2010). A revolution whose time has come? The win-win of quantitative participatory approaches and methods. *IDS Bulletin*, *41*(6), 45–55.

Chatterjee, S. (2007). Children's role in humanizing forced evictions and resettlements in Delhi. *Children, Youth and Environments*, *17*(1), 198–221.

Checkoway, B., Allison, T., & Montoya, C. (2005). Youth participation in public policy at the municipal level. *Children and Youth Services Review*, *27*, 1149–1162.

Checkoway, B., & Richards-Schuster, K. (2003). Youth participation in community evaluation research. *American Journal of Evaluation*, *24*(1), 21–33.

Checkoway, B., & Richards-Schuster, K. (2004a). *Facilitator's guide for participatory evaluation with Young People Program for Youth and Community*. Ann Arbor, MI: School of Social Work, University of Michigan. Retrieved from http://www.whatkidscando.org/archives/featurestories/2006pdfs/guidebook.pdf

Checkoway, B., & Richards-Schuster, K. (2004b). Youth participation in evaluation and research as a way of lifting new voices. *Children, Youth and Environments*, *14*(2), 84–98.

Chen, P., Lazar Weiss, F., Johnston Nicholson, H., & Girls Incorporated. (2010). Girls study Girls Inc.: Engaging girls in evaluation through participatory action research. *American Journal of Community Psychology*, *46*, 228–237.

Children's Environments Research Group. (2014). *Child friendly places*. New York, NY: Children's Environments Research Group. Retrieved from http://childfriendlyplaces.org

Children's Environments Research Group. (2015). *Young citizens' score cards*. New York, NY: Children's Environments Research Group and Plan International. Retrieved from http://cergnyc.org/scorecards

Clark, A. (2010).Young children as protagonists and the role of participatory, visual methods in engaging multiple perspectives. *American Journal of Community Psychology*, *46*, 115–123.

Clark, A., & Percy-Smith, B. (2006). Beyond consultation: Participatory practices in everyday spaces. *Children, Youth and Environments*, *16*(2), 1–9.

Cooper, E. (2007). Praxis in a refugee camp? Meanings of participation and empowerment for long-term refugee youth. *Children, Youth and Environments*, *17*(3), 104–121.

Couch, J., & Francis, S. (2006). Participation for all? Searching for marginalized voices: The case for including refugee young people. *Children, Youth and Environments*, *16*(2), 272–290.

Davis, P. E., & Alvarez, J. N. (2016). *Enabling youth participation through technology: U-Report Uganda*. Participedia. Retrieved from http://participedia.net/en/cases/enabling-youth-participation-through-technology-u-report-uganda

Enkhtor, D. (2007). Paving a two-way street: Encouraging children's participation in the study on the physical and emotional punishment of children in Vietnam. *Children, Youth and Environments*, *17*(1), 88–104.

Ennew, J., Hastadewi, Y., & Pierre Plateau, D. (2007). Seen, heard—and forgotten? Participation of children and young people in Southeast, East Asia and the Pacific in

events and forums leading to and following up on the United Nations General Assembly Special Session for children, 2002. *Children, Youth and Environments*, *17*(1), 33–42.

Evans, R. (2007). The impact of concepts of childhood on children's participation: Case of the Bhutanese refugee camp. *Children, Youth and Environments*, *17*(1), 171–197.

Feinstein, C., & O'Kane, C. (2008). *Ethical guidelines for ethical, meaningful and inclusive children's participation practice*. Oslo, Norway: Save the Children.

Foster-Fishman, P. G., Law, K. M., Lichty, L. F., & Aoun, C. (2010). Youth ReACT for social change: A method for youth participatory action research. *American Journal of Community Psychology*, *46*, 67–83.

Freeman, C., Nairn, K., & Sligo, J. (2003). "Professionalising" participation: From rhetoric to practice. *Children's Geographies*, *1*(1), 53–70.

Graham, A., Powell, M., Taylor, N., Anderson, D., & Fitzgerald, R. (2013). *Ethical research involving children*. Florence, Italy: UNICEF Office of Research—Innocenti. Retrieved from http://childethics.com/wp-content/uploads/2013/10/ERIC-compendium-approved-digital-web.pdf

Guyot, J. (2007). Participation: Children and youth in protracted refugee situations. *Children, Youth and Environments*, *17*(3), 159–178.

Hampshire, K., Porter, G., Owusu, S., Mariwah, S., Abane, A., Robson, E., . . . Bourdillon, M. (2012). *Children's Geographies*, *10*(2), 219–232.

Hart, J. (2007). Empowerment or frustration? Participatory programming with young Palestinians. *Children, Youth and Environments*, *17*(3), 1–23.

Hart, R. (1992): *Children's participation: From tokenism to citizenship* (Innocenti Essay No. 4). Florence, Italy: UNICEF.

Herrington, R. (2016). *Monitoring and evaluating participatory theatre for change*. Washington, DC: Search for Common Ground.

Jacquez, F., Vaughn, L. M., & Wagner, E. (2013). Youth as partners, participants or passive recipients: A review of children and adolescents in community-based participatory research (CBPR). *American Journal of Community Psychology*, *51*, 176–189.

Kara, N. (2007). Beyond tokenism: Participatory evaluation processes and meaningful youth involvement in decision-making. *Children, Youth and Environments*, *17*(2), 563–580.

Kellett, M. (2010). Small shoes, big steps! Empowering children as active researchers. *American Journal of Community Psychology*, *46*, 195–203.

Kelley, N. (2006). Children's involvement in policy formation. *Children's Geographies*, *4*(1), 37–44.

Kleine, D., Pearson, G., & Poveda, S. (2016). *Participatory methods: Engaging children's voices and experiences in research*. London, England: Global Kids Online. Retrieved from http://globalkidsonline.net/tools/guides/participatory-research/

Krenichyn, K., Schaefer-McDaniel, N., Clark, H., & Zeller-Berkman, S. (2007). Where are young people in youth program evaluation research? *Children, Youth and Environments*, *17*(2), 594–615.

Lambert, L. (2007). Releasing the true potential: Adolescent participation in Mongolia. *Children, Youth and Environments*, *17*(1), 62–87.

Lansdown, G. (2011). *Every child's right to be heard: A resource guide on the UN Committee on the Rights of the Child General Comment No. 12*. London, England: UNICEF & Save the Children, Save the Children Fund.

Lansdown, G., & O'Kane, C. (2014). *A toolkit for monitoring and evaluating children's participation*. London, England: Save the Children.

Lund, R. (2007). At the interface of development studies and child research: Rethinking the participating child. *Children's Geographies*, *5*(2), 131–148.

Lundy, L. (2007). Voice is not enough: Conceptualising Article 12 of the United Nations Convention on the Rights of the Child. *British Educational Research Journal*, *33*(6), 927–942.

Narksompong, J., & Limjirakan, S. (2015). Youth participation in climate change for sustainable engagement. *Review of European Community & International Environmental Law*, *24* (2), 171–181.

Norris, A. E., Aroian, K. J., Warren, S., & Wirth, J. (2012). Interactive performance and focus groups with adolescents: The power of play. *Research in Nursing & Health*, *35*, 671–679.

O'Kane, C., & Karkara, R. (2007). Pushing the boundaries: Critical perspectives on the participation of children in South and Central Asia. *Children, Youth and Environments*, *17*(1), 136–147.

Oosterhoff, P., Bharadwaj, S., Burns, D., Raj, A. M., Nanda, R. B., & Narayanan, P. (2016). *Using participatory statistics to examine the impact of interventions to eradicate slavery: Lessons from the field* (CDI Practice Paper 16). Institute of Development Studies. Retrieved from http://www.ids.ac.uk/publication/using-participatory-statistics-to-examine-the-impact-.of-interventions-to-eradicate-slavery-lessons-from-the-field

Ozer, E.J., & Douglas, L. (2013). The impact of participatory research on urban teens: An experimental evaluation. *American Journal of Community Psychology*, *51*, 66–75.

Percy-Smith, B. (2010). Councils, consultations and community: Rethinking the spaces for children and young people's participation. *Children's Geographies*, *8*(2), 107–122.

Plan International. (2016). *Counting the invisible: Using data to transform the lives of girls and women by 2030*. London, England: Plan International. Retrieved from https://plan-international.org/publications/counting-invisible

Porter, G., & Abane, A. (2008). Increasing children's participation in African transport planning: Reflections on methodological issues in a child-centred research project. *Children's Geographies*, *6*(2), 151–167.

Powell, M. A., Taylor, N., Fitzgerald, R., Graham, A., & Anderson, D. (2013). *Ethical research involving children*. Florence, Italy: UNICEF Innocenti. Retrieved from http://childethics.com/

Protacio-de Castro, E., Zenaida-Camacho, A., Balanon, F., Ong, M. G., & Yacat, J. A. (2007). Walking the road together: Issues and challenges in facilitating children's participation in the Philippines. *Children, Youth and Environments*, *17*(1), 105–122.

Sabo Flores, K. (2008). *Youth participatory evaluation: Strategies for engaging young people*. San Francisco, CA: Wiley.

Save the Children. (2003). *So you want to consult with children? A toolkit of good practice*. London, England: International Save the Children Alliance.

Skelton, T. (2007). Children, young people, UNICEF and participation. *Children's Geographies*, *5*(1), 165–181.

Sutton, S. E. (2007). A social justice perspective on youth and community development: Theorizing the processes and outcomes of participation. *Children, Youth and Environments*, 17(2), 616–645.

United Nations Children's Fund (UNICEF). (2003). *State of the world's children*. New York, NY: UNICEF.

United Nations Children's Fund (UNICEF). (2012). *Evaluation of adolescents: Agents of Positive Change Programme, 2005–2011*. Amman, Jordan: UNICEF MENARO. Retrieved from http://www.addc.org.au/documents/resources/menaro_evaluation_of_adolescents-agents_of_positive_change_unicef_sida_kartini_jan15-12_1122.pdf

United Nations Children's Fund (UNICEF). (2013). *TAKE US SERIOUSLY! Engaging Children with Disabilities in Decisions Affecting their Lives*. New York: UNICEF.

United Nations Children's Fund (UNICEF). (2017). *UNICEF Child Friendly Cities and Communities Initiative: Toolkit for National Committees*. Geneva: UNICEF, Retrieved from http://childfriendlycities.org/building-a-cfc/tools/toolkit-national-committees-new/.

United Nations Development Program (UNDP). (2016). *Youth as partners for the implementation of the SDGs*. Bureau for Policy and Programme Support, United Nations Development Programme. Retrieved from http://www.undp.org/content/undp/en/home/librarypage/results/fast_facts/fast-facts--youth-as-partners-for-the-implementation-of-the-sdgs.html

Vaughn, N., Jacoby, S., Williams, T., Guerra, T., Thomas, N., & Richmond, T. (2013). Digital animation as a method to disseminate research findings to the community using a community-based participatory approach. *American Journal of Community Psychology*, *51*, 30–42.

Veitch, H., & Corazon Buala, M. (2007). Negotiating minimum standards for children's participation in consultations. *Children, Youth and Environments*, *17*(1), 43–61.

West, A., Xue Mei, C., Ye, Z., Chun Na, Z., & Qiang, C. (2007). From performance to practice: Changing the meaning of child participation in China. *Children, Youth and Environments*, *17*(1), 14–32.

Wridt, P. (2010). A qualitative GIS approach to mapping urban neighborhoods with children to promote physical activity and child-friendly community planning. *Environment and Planning B: Planning and Design*, *37*(1), 129–147.

Wridt, P. (2015). *Child Friendly Places: Global evaluation of a participatory, child rights approach to intergenerational assessment, planning and local development*. New York, NY: Children's Environments Research Group. Retrieved from http://cergnyc.org/files/2015/04/CFP-Evaluation-Report-FINAL-1.pdf

Wridt, P., Atmakur-Javdekar, S., & Hart, R. (2015). Spatializing children's rights: A comparison of two case studies from urban India. *Children, Youth and Environments*, *25*(2), 33–85.

Zeldin, S., Bestul, L., & Powers, J. (2012). *Youth-Adult Partnerships in Evaluation (Y-AP/E): A resource guide for translating research into practice*. Ithaca, NY: ACT for Youth Center of Excellence, Cornell University.

Conclusions

ADOLESCENT DEVELOPMENT RESEARCH AND ITS IMPACT ON GLOBAL POLICY

Jennifer E. Lansford and Prerna Banati

Over the era of the Millennium Development Goals, there were remarkable achievements in improving child well-being across the world. These achievements include striking reductions in infant and child mortality, an impressive start concerning interventions in early childhood development, an increase in the number of children completing primary school, improvements in access to safe drinking water, and reductions in absolute poverty and deprivation (United Nations Children's Fund [UNICEF], 2015). However, progress is still lagging in key dimensions of child well-being, especially for adolescents ages 10–19 who have been left behind by many of the international efforts to reach the most deprived children (UNICEF, 2012).

Of 1.2 billion adolescents in the world today, 90% live in low- and middle-income countries (UNICEF, 2012). These adolescents face many challenges. In particular, enrollment in secondary schools is still low in many parts of the world, with illiteracy rates approaching 30% in the least developed countries; adolescents not in school are more vulnerable to trafficking, recruitment into armed conflict, and child labor. Many adolescent girls marry and begin bearing children at a young age, contributing to the perpetuation of poverty and health problems (with complications of pregnancy and early childbearing the second leading cause of death for adolescent girls globally; World Health Organization, 2014). Despite many challenges, adolescents are a resource to be cultivated through educational opportunities and vocational training to move them toward economic independence, through initiatives to improve reproductive health, and through positive interpersonal relationships to help them avoid risky behaviors and make positive decisions about their futures. Adolescence also presents an important period in learning that creates critical linkages with the next generation of parents. This volume has tackled the challenges and promise of adolescence by presenting cutting-edge research on adolescent social, emotional, behavioral, cognitive, and

physical development; promising programs from different countries to promote adolescents' positive development; and policies that can advance adolescents' rights within the framework of major international initiatives, such as the Convention on the Rights of the Child and Sustainable Development Goals.

The Sustainable Development Goals guiding the international development agenda through 2030 were ratified by the United Nations General Assembly in 2015 and began a period of operationalization in 2016 (United Nations Development Program, 2016). Our hope is that this volume will accelerate implementation of the goals and provide actionable strategies for policymakers and practitioners working with adolescents. In the majority of contexts, policy and program responses to adolescents are fragmented and inconsistent. In particular, disconnects between national-level policies and local services, as well as lack of continuity with early childhood responses, present a significant challenge to ensuring a coherent approach for this age group. Increasingly, adolescent participation and demands for rights-based approaches are seen, and often unfortunately conflated with violence (e.g., as in the Arab spring). As a principle, this volume has adopted a positive framing of adolescence, representing young people as opportunities rather than threats, and a valued investment at both individual and societal levels, contributing to a positive shift in discourses concerning young people.

Historically, research focused on adolescent development has been conducted primarily in high-income countries in North America and Western Europe (Henrich et al., 2010), neglecting developmental issues that are unique to the majority of the world's adolescents who live in low- and middle-income countries. This volume seeks to address some of these gaps (e.g., child marriage, child soldiers). In addition, this volume also advances the field by integrating basic science with attention to applications in practice and policy. The volume blends scientific knowledge on adolescent development with practical information based on program experiences from the field to inform understanding of how to promote adolescents' positive development throughout the world, especially for the most vulnerable youth.

Takeaway Messages From the Chapters

Before turning to integrative themes that cut across chapters in this volume, we provide a brief overview of major takeaway messages from each of the individual chapters, organized as they are in the volume.

DOMAINS OF ADOLESCENT DEVELOPMENT

Sawyer and Patton (Chapter 2) make a case for taking a multifactorial approach to understanding adolescent health by attending to both physical and mental health,

including factors related to nutrition and sexual and reproductive health. They describe a "triple dividend" from promoting adolescent health that results in better health during adolescence, better health as adolescents become adults, and better health in the next generation as the healthy adolescents become parents themselves. Relations between health and education are bidirectional over time, with good health promoting better learning, and a quality education promoting better health.

Lee, Hollarek, and Krabbendam (Chapter 3) describe how structural and functional developments in the brain during adolescence affect cognition and social behaviors during this developmental period. Adolescents are highly sensitive to social rewards and affective cues, making them particularly susceptible to peer influences. Cognitive control continues to improve into adulthood. It is important to recognize that these aspects of neurocognitive development contribute to heightened risk-taking during adolescence, but not all risk-taking is negative. Being willing to take risks increases adolescents' willingness to try new things, and being able to think creatively gives them flexibility in generating new solutions to problems and envisioning their lives in the future.

In contrast to early characterizations of adolescence as a time of storm and stress with a focus on conflict and risky behaviors, Lerner et al. (Chapter 4) describe research on positive youth development, adopting a strength-based approach to adolescence. The Five Cs model of positive youth development characterizes thriving in terms of competence (academic, vocational, and social), confidence (self-worth and self-efficacy), character (morality, integrity), connection (positive social relationships), and caring (concern for others). Around the world, youth-serving organizations are increasingly trying to promote youth thriving in these areas.

Daiute (Chapter 5) argues that rapid changes in technology have led to new opportunities that may necessitate reconceptualizing civic engagement and political development for the twenty-first century. Voting, citizenship, and mainstream institutions are not always the most appropriate basis for adolescents' civic engagement in the dynamic and often violent environments where they live. Research, policy, and practice should move toward understanding how adolescents develop motivation, resources, and strategies not only to participate in traditional civic engagement activities, like voting and volunteering, but also how they make sense of and intervene in extremely challenging circumstances, such as in recent mass displacements or life in refugee camps.

SOCIAL RELATIONSHIPS

Bornstein and Putnick (Chapter 6) offer a global perspective on relationships between adolescents and their parents. Developmental goals differ across countries in ways that affect how parent–adolescent relationships change over time (e.g., with respect to granting more autonomy over the course of adolescence vs. retaining parental control). Parent–adolescent relationships are bidirectional, with

parents' behaviors and beliefs affecting adolescents, and adolescents' behaviors eliciting particular kinds of parenting. Across countries, some aspects of parenting appear to be universal (e.g., elements of warmth and control), yet many beliefs and behaviors also differ across cultures.

French and Cheung (Chapter 7) review research on adolescents' peer relationships, including dyadic friendships as well as larger peer networks and crowds. Peer relationships can be an important source of support and positive influence for adolescents, and adolescents who are rejected by their peers are at risk for a number of negative outcomes. However, peer relationships can also be a source of risk because more risky behavior (e.g., substance use, delinquency) occurs in the presence of peers than alone or in the presence of family members. A key question is how to structure adolescent activity and time use to promote positive social adjustment of adolescents. Cultural groups differ in the amount of discretionary free time adolescents have to spend with peers and in the amount of autonomy they are granted in choosing their friends and activities with them, differences that may become even more pronounced as adolescents begin associating with mixed-gender peer groups or romantic partners.

Scales and Roehlkepartain (Chapter 8) make a case for the importance of nonfamily adults in the lives of adolescents and present findings from a study of over 30,000 youth in 30 countries that young people are not experiencing enough relationships with nonfamily adults that are characterized by care, challenge, support, power sharing, and expansion of opportunities. Young people who do experience high-quality developmental relationships with adults outside their families are significantly better off on a variety of well-being indicators, including positive identity, workforce readiness, educational attainment, spiritual development, and sexual responsibility. Nonfamily adults represent a vast, largely untapped resource for youth development and well-being globally. Implementing policies and practices to measure, track, and build those developmental relationships may be a relatively low-cost way to promote youth well-being and broader social cohesion, as well as to efficiently multiply the positive impact of existing international aid and humanitarian investments in education, health care, problem prevention, and workforce readiness that strengthen youth and the societies in which they live.

RISKS AND OPPORTUNITIES

Around the world, one fourth of girls are married by the time they reach 18, putting them at risk for abuse, exploitation, early pregnancy, and perpetuating intergenerational cycles of poverty. Sundaram, Travers, and Branson (Chapter 9) describe challenges and opportunities in ending child marriage. Outlawing child marriage is not enough without educational and policy efforts to ensure that individuals and communities know about the laws and are able to enforce them. Cash transfers conditional on keeping daughters unmarried and in school, for example, have

been one strategy to eliminate root causes of child marriage (poverty and lack of education).

Betancourt, Zuilkowski, Coles, Collet, and Jambai (Chapter 10) describe the situation of adolescents in areas affected by war, who are sometimes recruited into conflict as child soldiers and who are also vulnerable from witnessing and participating in violence, being separated from family and friends, and often subjected to sexual abuse and other types of trauma. To address the rights and needs of adolescents in conflict situations, they describe a SAFE model that focuses on: *s*afety/freedom from harm; *a*ccess to basic physiological needs and health care; *f*amily and connection to others; and *e*ducation/economic security. Adolescents are not only victims, though; they also have a potentially important role as peace builders and voices for change.

Motti-Stefanidi (Chapter 11) reviews research on the development of immigrant youth and presents a set of recommendations for how to benefit youth and the societies to which they immigrate. Prejudice and discrimination contribute to radicalization, but providing immigrant youth with opportunities to become integrated in school and to access economic resources contributes to positive social, behavioral, and psychological adjustment. Immigrant youth who retain connections with their culture of origin (in terms of language, values, traditions, and so forth) yet who also embrace their culture of destination (e.g., learning the new language, making friends from the new culture) have better adjustment than youth who are not bicultural.

Sustainable Development Goal 4 aims to achieve universal completion of primary and secondary education by 2030, but one sixth of lower secondary school age adolescents and one third of upper secondary school age adolescents are not in school, suggesting the need for large-scale interventions to attain universal education. Singh and Mukherjee (Chapter 12) delineate push, pull, and opt-out factors that account for why adolescents leave school, referring to adversities in schools that push them out, social and economic factors such as early marriage or the need to work to support the family that pull adolescents out of school, or personal characteristics such as lack of motivation that lead adolescents to opt out of school. To increase school enrollment, it would be necessary to address the specific reasons that adolescents have for *not* being in school.

Koller, Santana, and Raffaelli (Chapter 13) stress the importance of research on street-involved youth as a way to count the uncounted, as they are often excluded from national censuses and other reports. Because poverty is the most common reason for adolescents' street involvement, antipoverty programs (e.g., such as cash transfer initiatives, feeding programs, and universal free education), as well as child protection programs, will be critical for helping these vulnerable youth. At the same time, because street-involved youth are often responsible for themselves, enlisting them directly as active contributors to solutions rather than as passive recipients of assistance programs will be important for promoting their rights and more informed decision-making.

Hussong and Smith (Chapter 14) focus on alcohol, tobacco, and other drug use as a global phenomenon, with many individuals initiating use during the teen years. Parents are a proximal influence in the development, maintenance, and prevention of adolescent substance use, and programs that include parents as a core component are often more effective than those that target youth only. Although studies testing the efficacy of parenting programs to prevent adolescent substance use are rare in low-income countries, studies from middle- and high-income countries provide evidence of similarities in familial risk factors for substance use. This overlap suggests that existing programs in high-income countries may provide a reasonable basis for global program development, though tailoring for local context (e.g., nature of drugs abused, cultural variation in normative parenting, intersection of parenting programs with other service sectors) is likely critical to eventual program success.

INTERVENTIONS AND POLICIES

Camilletti and Banati (Chapter 15) take an economic perspective in building a strong case for why it is important to invest in adolescents not only because it is the right thing to do for humanitarian purposes and to advance adolescents' rights but also because it makes financial sense for nations to do so. Investing in adolescents' education and livelihoods pays dividends as adolescents become adults and also into the next generation. Cost–benefit and cost-effectiveness analyses of interventions contribute to evidence-based policymaking because they provide a way to quantify costs of interventions relative to the impact they make. Interventions that are demonstrated to provide good returns on investments are more likely to be supported by policymakers, which can lead to scaling up of beneficial programs.

Verma (Chapter 16) outlines the need for integrative social protection programs to ensure that adolescents are able to realize their rights to protection from abuse and access to education, health care, and participation in meaningful economic activities. Economic pressures often lead to situations that make adolescents vulnerable, such as marrying off a young daughter or sending adolescents to work in dangerous jobs. Early marriage; physical, psychological, and sexual abuse; sibling care and orphanhood; child labor; and conflicts with armed forces or groups all pose long-term developmental risks and necessitate social protection programs to enable adolescents to reach their full potential. Income security and access to education and health care are all essential components of social protection programs.

As poignantly described by adolescents themselves in the foreword to this volume and reviewed scientifically by Sherr (Chapter 17), mental health problems are a pressing issue for adolescents around the world, with estimates that up to 20% of children and adolescents have mental health problems and that half of adult disorders begin in adolescence. The majority of mental health problems go untreated, especially in low- and middle-income countries. Interventions developed

in high-income countries may not transfer well to settings with different economic standards, health care infrastructures, and social and cultural norms. Stigma remains a barrier to effective treatment in many settings.

Brunelle, Brussoni, Herrington, Matsuba, and Pratt (Chapter 18) describe adolescents' needs with respect to public spaces and natural landscapes. Adolescents have special spatial needs, so designing public spaces in a way that supports adolescents' physical and psychosocial development will help adolescents engage in civic life and with natural environments. Designing spaces for adolescents benefits from attention to issues of safety, provisions for cultural norms related to gender, and attempts to include adolescents in public life rather than alienate them by relegating them to marginalized spaces outside of the societal mainstream.

Pettifor and Subramaniam (Chapter 19) review evidence for the effectiveness of programs designed to decrease risk of HIV/AIDS and other sexually transmitted infections and to improve reproductive health. Effective programs range from school-based sexuality education programs to voluntary male medical circumcision. A theme that cuts across successful programs is that they attend to contextual features of adolescents' environments that put them at risk. For example, programs that address issues related to gender and power in sexual relationships are five times more effective than those that do not at lowering rates of unintended pregnancy and sexually transmitted infections.

EMPOWERMENT OF ADOLESCENTS

Akinsola and Petersen (Chapter 20) define capacity building as the process through which individuals, organizations, and societies obtain, strengthen, and maintain the capabilities to set and achieve their own development objectives over time. Education is the major source of capacity building around the world, but less formal opportunities and empowerment initiatives are available in other settings as well. Capacity building is closely tied to adolescents' participation in decisions that affect their lives in addition to planning, executing, and evaluating initiatives geared toward youth.

Sustainable Development Goal 5 is to achieve gender equality and empower all women and girls. Dettori and Gupta (Chapter 21) describe ways in which adolescent girls are more disadvantaged than boys in terms of health, education, safety, accessing economic resources, and opportunities for personal agency and leadership. They then outline a number of ways that disadvantages in each of these domains can be ameliorated to promote gender equity. The Sustainable Development Goals prioritize adolescent girls' physical health, protection from violence and exploitation, and school attendance as ways to promote their health and productive economic activity as adults.

Wridt (Chapter 22) sets forth recommendations for how to engage young people as active participants in program design research, monitoring, and evaluation. Her theory of change analysis provides a rationale for young people's

participation; barriers to their participation; implementation strategies often adopted by agencies to facilitate, enable, and promote young people's participation; approaches for engaging young people in meaningful ways; example interventions employed by international agencies, governments, and civil society organizations to facilitate young people's participation; and the potential outputs, outcomes, and impact of young people's participation. Facilitating young people's participation as stakeholders in local and national development is mandated as part of the Sustainable Development Goals and is especially crucial because youth are now the largest demographic group in the world.

Integrative Themes

Addressing poverty, access to education, and gender equity are important themes that cut across many of the chapters in this volume. Poverty is the root cause of many problems faced by adolescents, including street life, child marriage, involvement as soldiers in armed conflict, and dropping out of school, to name a few. Education is key to breaking intergenerational cycles of poverty and maximizing adolescents' full potential. Despite efforts to improve gender equity, in countries with low rates of secondary school enrollment, girls are still less likely to attend school than boys and more likely to face gender-based risks, such as child marriage. Sustainable Development Goals 1 (no poverty), 4 (quality education), and 5 (gender equity) tackle these challenges directly and will be critical to improving life for adolescents across a number of domains (addressing Goal 3: good health and well-being).

Another cross-cutting theme is the importance of supportive relationships for optimal adolescent development. These include relationships with parents, peers, and nonfamily adults; connection with others is an important aspect of thriving in models of positive youth development. Positive social relationships predict better mental and physical health as well as less risky behaviors. As romantic relationships develop in adolescence, communication skills and reproductive rights become important in preventing HIV and other sexually transmitted infections as well as unintended pregnancies. In situations where adolescents' social relationships may be compromised, such as for immigrant or refugee youth traveling without their families, special efforts must be taken to integrate adolescents into host countries to avoid marginalization and promote positive youth development.

Regardless of the substantive area of development being addressed, including adolescents themselves among the key stakeholders with an active voice and participation in the design, implementation, and evaluation of programs and policies affecting them is a clear priority. All adolescents are in need of social protections. However, rather than treating adolescents just as the beneficiaries of programs designed to protect them from harm and to improve their access to public spaces, decrease their substance use, or any number of other desired outcomes, programs will be more effective and uptake will be improved if adolescents participate

from the start. Adolescents' participation serves not only to improve a given program but also to build capacity at both individual and community levels, making adolescents better leaders in the future and helping communities function more collaboratively at solving problems they face.

Another theme is the need for more research, especially in low- and middle-income countries. The majority of basic science research on adolescent development has been conducted in high-income Western countries, and findings from these settings may not generalize to adolescents from low- and middle-income countries in diverse cultural contexts. Importing interventions developed in one context to a different context may result in a decrement in effectiveness, making it important to incorporate adaptations or develop new interventions. Monitoring and evaluation are essential to determining whether programs and interventions are having their desired effects so that modifications can be made if needed.

Additional Considerations

In developing the content of this volume, we sought to include key areas of basic research in adolescent development as well as issues in practice and policy that are especially critical for adolescents in low- and middle-income countries. Despite the range and diversity of included topics, it was not possible to include all possible topics. Here, we highlight three that are especially notable but acknowledge the importance of others as well.

First, the role of technology is represented in some of the chapters (e.g., with respect to offering new opportunities for civic engagement), but a great deal more could be said about the positive and negative impacts of new technologies and the role of social media in adolescent development. Technology often is treated as a risk factor because it introduces new forms of potential victimization (e.g., cyberbullying; Kowalski et al., 2014) and leads to concerns that adolescents are spending too much time engaged in electronic communication to the possible detriment of other activities and their mental health (George et al., 2017). However, technology also offers the potential to access information about the world, connect with other people who are not in close geographic proximity, and voice opinions in safe spaces (for a review, see Best et al., 2014). In addition, new technology offers opportunities to scale up interventions in low-resource settings in which it would not be possible to intervene in other ways (Howitt et al., 2012).

Second, issues related to work and livelihoods are embedded throughout the volume, but child labor as well as preparing adolescents for meaningful work as adults are worthy of additional attention. Child labor outside the home, in family settings, and related to excessive household chores (more than 28 hours per week) can interfere with education and present risks for adolescent development (Putnick & Bornstein, 2016). However, families may need adolescents' labor to survive, and working to support the family, caring for younger siblings, and contributing

to the family's greater good can promote prosocial behaviors (de Guzman et al., 2005). Thus, understanding the role of labor in adolescent development requires attending to both risks and potential benefits.

Third, religion is an aspect of identity and culture that is often salient during adolescence (King & Roeser, 2009). On the one hand, religion and spirituality can be positive influences on adolescents' beliefs and behaviors; for example, adolescents for whom religion is important are less likely to use drugs and alcohol, less likely to engage in risky sexual behavior, and more likely to volunteer their time in community service (King & Roeser, 2009). On the other hand, religion can also serve as a force leading to radicalization of youth and violent acts carried out in the name of religion (Gürbüz, 2016). As in other domains of adolescent development, taking a holistic approach to understand both risks and benefits of religious involvement is important.

Future Directions for Research, Practice, and Policy

Although there is no universal agreement on a definition of adolescence, it can be considered as a developmental period between the onset of puberty and the transition to adulthood. Changing demographic and epidemiological patterns around the world have resulted in an expansion of the adolescent period, making it more central to the creation of well-being and human capital than in the past. Many models exist to conceptualize adolescent development. Taking a life course perspective is important to situate adolescence as an important stage between childhood and adulthood. Longitudinal data are needed to understand how experiences during childhood affect outcomes during adolescence and how experiences during adolescence shape future outcomes into adulthood. Adolescent development should also be situated within a social ecology framework. Numerous individual, institutional, and structural factors affect adolescents both directly and through their families and peers. It is important to treat adolescents holistically to ensure comprehensive treatment of their rights and human capabilities. Support to adolescents should be grounded in a rights-based framework that both acknowledges the assets of adolescents and protects them from risks.

In terms of research, scientific advancement has contributed to an expanded evidence base; however, much literature is still focused on high-income Western contexts. This leaves a gap in basic research addressing normative development during adolescence in a range of cultural contexts. Interdisciplinary approaches and collaborations between academic researchers and those working in applied settings provide much potential to fill research gaps. Further research is needed on challenges and opportunities of multisectoral programs for adolescents. Conceptual and measurement advances are particularly needed with respect to studying adolescent civic and social participation and engagement. Great

advances have been made in early childhood development (see Britto et al., 2013), and household surveys are increasingly being designed to capture the experiences of older adolescents, but 10- to 14-year-olds remain particularly understudied.

In terms of practice, a collective action model aligned to the Sustainable Development Goals is needed to respond effectively to challenges faced by adolescents today. These challenges often stem from the same root cause, so programs and practices that address underlying causes will be more effective than those that work just at the surface. For example, poverty and lack of education make adolescents vulnerable to recruitment into armed conflicts, child marriage, and mental and physical health problems. Thus, targeted poverty alleviation strategies have the potential to prevent a range of problematic outcomes to help adolescents reach their full potential.

In terms of policy, furthering adolescent development relies on effective multisectoral action. In low- and middle-income countries, national policies leave adolescents largely unprotected, although the Sustainable Development Goals aim to change this in a number of domains. Policy coherence is a challenge. Different sectors (e.g., education, health, welfare) do not always work together in ways that would address adolescents' needs holistically. Policy responses need to be embedded in an understanding of the contexts in which they are meant to effect change; attending to culture will help garner support from key stakeholders. Policies should address adolescents who are marginalized because of their immigrant status, sexual orientation, disabilities, or other factors, and they should address the needs of both girls and boys.

Conclusions

Understanding how programs and policies around the world can facilitate adolescents' resilience in the face of many challenges has the ultimate goal of promoting adolescents' health and livelihoods. As one example of how the multidisciplinary approach we have adopted would meet this goal, by using basic research on adolescents' physical health, mental health, and sexuality in conjunction with programs to promote adolescents' reproductive health and policies to eliminate child marriage, health threats such as HIV/AIDS can be reduced. Likewise, integrating understanding of poverty and education to inform policies related to schooling and microeconomic interventions (such as cash transfer programs) has the potential to improve economic livelihoods of adolescents and the next generation they will parent. A holistic approach to understanding adolescence contributes to multisectoral programming that can improve both health and livelihoods. Too often, individuals working in one country or region are unaware of similar efforts in other parts of the world, and individuals working to improve one aspect of

adolescent development are not mindful of the full range of barriers to effecting change in that specific domain. This volume advances the field by bringing together knowledge from individuals from different parts of the world who work on different aspects of adolescent development; the result is a holistic perspective that can be used to inform discussions about policies and practices to promote adolescents' health and livelihoods around the world.

References

Best, P., Manktelow, R., & Taylor, B. (2014). Online communication, social media and adolescent wellbeing: A systematic narrative review. *Children and Youth Services Review*, *41*, 27–36.

Britto, P. R., Engle, P. L., & Super, C. M. (Eds.). (2013). *Handbook of early childhood development research and its impact on global policy*. New York, NY: Oxford University Press.

de Guzman, M. R. T., Edwards, C. P., & Carlo, G. (2005). Prosocial behaviors in context: A study of the Gikuyu children of Ngecha, Kenya. *Journal of Applied Developmental Psychology*, *26*, 542–558.

George, M. J., Russell, M. A., Piontak, J. R., & Odgers, C. L. (2017). Concurrent and subsequent associations between daily digital technology use and high-risk adolescents' mental health symptoms. *Child Development.* doi:10.1111/cdev.12819. [Epub ahead of print]

Gürbüz, M. (2016). *The "glocal" effect: Rethinking religious nationalism and radicalization*. Washington, DC: Brookings Institution.

Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences*, *33*, 61–83.

Howitt, P., Darzi, A., Yang, G.-Z., Ashrafi, H., Atun, R., Barlow, J., . . . Wilson, E. (2012). Technologies for global health. *The Lancet*, *380*, 507–535.

King, P. E., & Roeser, R. (2009). Religion and spirituality in adolescent development. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (3rd ed.), *Vol. 1: Development, relationships and research methods* (pp. 435–478). Hoboken, NJ: Wiley.

Kowalski, R. M., Giumetti, G. W., Schroeder, A. N., & Lattanner, M. R. (2014). Bullying in the digital age: A critical review and meta-analysis of cyberbullying research among youth. *Psychological Bulletin*, *140*, 1073–1137.

Putnick, D. L., & Bornstein, M. H. (2016). Girls' and boys' labor and household chores in low- and middle-income countries. *Monographs of the Society for Research in Child Development*, *81*, 104–122.

United Nations Children's Fund (UNICEF). (2012). *Progress for children: A report card on adolescents*. New York, NY: UNICEF.

United Nations Children's Fund (UNICEF). (2015). *The Millennium Development Goals report*. New York, NY: UNICEF.

United Nations Development Program. (2016). *UNDP support to the implementation of the Sustainable Development Goals*. New York, NY: United Nations Development Program.

World Health Organization. (2014). *Adolescent pregnancy*. Retrieved from http://www.who.int/mediacentre/factsheets/fs364/en/

{INDEX}

Page numbers followed by *f* and *t* refer to figures and tables, respectively.