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About the Editors

Lisa J. Crockett, PhD, is professor of psychology in the Department of Psychology at the University of Nebraska-Lincoln. Dr. Crockett has published widely on several topics related to adolescence and early adulthood, ranging from pubertal development to cultural processes that affect youth development and well-being. Her primary research interests relate to individual (pubertal development, self-regulation), contextual (parenting, peer relations, stress), and cultural factors contributing to adolescent risk behavior and psychological adjustment. Focal themes in her work are adolescent risk behavior, cultural differences in parenting, and risk and protective factors influencing Latino/a youth adjustment. Related to these themes, she has examined predictors of adolescent and young adult internalizing and externalizing behaviors, focusing on the roles of self-regulation and stress; ethnic differences in parenting and its relation to youth risk behaviors across multiple ethnic groups; and contextual variables that contribute to psychosocial adjustment among Latino/a youth, as well as cultural factors that support healthy development and resilience. Dr. Crockett's work has been funded by several national institutes (including the National Institute of Child Health and Human Development, National Institute of Mental Health, National Institute on Minority Health and Health Disparities, and National Institute on Alcohol Abuse and Alcoholism) and by the National Science Foundation. She has served as associate editor of the *Journal of Research on Adolescence* and as president of the Society for Research on Adolescence.

Gustavo Carlo, PhD, is professor in the School of Education and director of the Cultural Resiliency and Learning Center at the University of California, Irvine. Before arriving at UCI, Dr. Carlo was the Millsap Professor of Diversity and Multicultural Studies in Human Development and Family Science at the University of Missouri, Columbia. His primary research interest focuses on individual (sociocognitive and socioemotive traits), sociocultural (ethnic identity, cultural values, discrimination), and parenting correlates of prosocial and moral development and health in culturally diverse children and adolescents around the world (including Argentina, India, Netherlands, Nicaragua, Philippines, Spain, Taiwan, and Turkey). Many of his projects in the United States focus on Latino/a youth and families. He has published over 200 books, chapters, and research papers. He has received funding from various agencies (including the National Science Foundation, National Institute of Child Health and Human Development, National Institute for Occupational Safety and Health, and Templeton Foundation) and is associate editor of the *International Journal of Behavioral*

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John E. Schulenberg, PhD, is professor of developmental psychology in the Department of Psychology and research professor in the Institute for Social Research at the University of Michigan. Dr. Schulenberg has published widely on several topics concerning adolescence and the transition to adulthood, bringing a developmental perspective to understanding health risks and adjustment difficulties. As principal investigator of the National Institute on Drug Abuse (NIDA)-funded U.S. national Monitoring the Future panel study on the etiology and epidemiology of substance use from adolescence through middle adulthood, he focuses on individual and contextual risk factors, course, comorbidity, consequences, and historical variation across adolescence and adulthood. He collaborates in national and international interdisciplinary projects involving long-term studies to address key questions about life course pathways and connections. Dr. Schulenberg's work has been funded by several U.S. institutes and foundations (including NIDA, National Institute on Alcohol Abuse and Alcoholism, National Institute of Child Health and Human Development, National Institute of Mental Health, National Science Foundation, Robert Wood Johnson Foundation, Spencer Foundation, and William T. Grant Foundation). For these and other institutes and foundations, he has served on numerous advisory and review committees, including chairing the National Institutes of Health Psychosocial Development and Risk Prevention Study Section. He was a member of the National Academy of Medicine's consensus committee on health and well-being during the transition to adulthood that published *Investing in the Health and Well-Being of Young Adults* (2015). He is a fellow of the American Psychological Association and a previous president of the Society for Research on Adolescence.

Introduction: Adolescent and Young Adult Development in a Changing World

The time is ripe for a new synthesis of the developmental literature on adolescent and young adult development. It has been roughly a decade since the publication of the most recent handbooks on adolescent development and psychology (Jackson & Goossens, 2013; Lerner & Steinberg, 2009) and since the *Journal of Research on Adolescence* published its “Decade in Review” (Russell et al., 2011), and it has been 7 years since the most recent handbook on early adulthood was published (Arnett, 2015). A new synthesis on adolescence and early adulthood is timely, given the rapid increase in both the quantity and quality of relevant research and the recent challenges concerning racism, migration, pandemics, and climate change that have impacted youth globally, making it critical to gather the rapidly accumulating findings on development during these age periods. Furthermore, it is important that we examine the course of development across these adjacent periods and that we consider developmental trajectories; continuities and discontinuities; and the biological, psychological, and social changes that underlie them. Our goals for this handbook are to provide a synthesis of major areas of current and emerging research on topics related to adolescence and early adulthood, incorporate diversity, integrate research on adolescence and early adulthood, and move the science forward.

FOUNDATIONAL PERSPECTIVES

As described in this section, our efforts with this handbook have been guided by six foundational perspectives on the field: (1) that adolescence and early adulthood need to be considered together given the fluid boundary between them and the interconnections across these periods; (2) that the field is advancing rapidly in terms of coverage, methodological and technological improvements, and the growing connection between observational science, intervention, and policy; (3) that development is a multilevel process based on the ongoing interplay between individual and context, and thus there is a need to take an interdisciplinary approach to examining the multiple levels of individuals and contexts involved; (4) that diversity of human experience is a basic fact that needs to be recognized in research to more fully understand the experience of minoritized groups and to address inclusiveness, social inequities, and injustice globally; (5) that the field needs to continue to move beyond problematizing adolescence and early adulthood to consider positive developmental outcomes and resilience in addition to psychopathology and health risks; and (6) that we need to envision where the science is going in order to address the major challenges to the optimal

development, health, and well-being of our young people. The coverage in this handbook and the approaches we encouraged in the chapters draw on these six foundational perspectives. Note that the chapter numbers in the following discussion all refer to this volume.

1. Adolescence and early adulthood need to be considered together, given the fluid boundary between them and the interconnections across these periods.

Although adolescence and early adulthood are often considered distinct developmental periods, the boundary between them is typically indistinct, both as defined by researchers and as experienced by youth. In part this is because the distinction between late adolescence and early adulthood depends largely on societal roles and expectations which are shaped by changing social institutions and cultural norms. Compared with adolescents, young adults are expected to be farther along in their preparation for and progress toward entering adult roles, and they should also show more adultlike judgment, responsibility, and self-reliance due to normative neurobiological and cognitive changes and societal expectations. However, youth of a given age differ dramatically in where they are in this process and where they stand in terms of the continuum from less adultlike to more adultlike. Some 19-year-olds are married with a full-time job, whereas others are in school and exploring a range of romantic relationships. Furthermore, individual youth experience different levels of “adulthood” in different domains of their lives—they may be advanced in some domains but less so in others—internal discrepancies that result in the subjective feeling of being “in between” (Arnett, 2000, 2015). Moreover, around the world, young adolescents (and even children) are often “pushed” into adultlike roles at much earlier ages owing to ecological and social pressures (Caldwell et al., 1998).

Because the boundary between adolescence and early adulthood is fuzzy at both the group and individual levels, it is important to explore that boundary, examine both similarities and differences between adolescents and young adults, and illuminate continuities across the two periods as well as discontinuities and turning points that spur a shift in developmental trajectory. Importantly, the course of development in early adulthood has many roots in adolescence (Elder, 1999; Schulenberg & Maggs, 2002; Staff et al., Chapter 18), and seeing such connections requires that we consider the two periods simultaneously. To lay the groundwork for future research on these issues, authors of the handbook chapters were encouraged to incorporate work on both adolescents and young adults, recognizing that this might be more feasible in some areas than in others. Most authors were able to do this, and some scholars reported findings on developmental changes across the two periods. There is, however, one caveat to this field of study—namely, there is often a disconnect between research on adolescents and young adults because many studies of young adults are based on samples of college students. This presents a challenge, as findings from less select populations (adolescents in secondary schools) are often compared with findings from more select populations (college and university students), muddying the interpretation of any differences identified.

2. The field is advancing rapidly in terms of coverage, methodological and technological improvements, and the growing connection between observational science, intervention, and policy.

Major changes in technology have shaped research on adolescence in the past few decades. Advances in molecular genetics enabled scientists to study the effects of individual genes in

humans, which revolutionized the field of behavior genetics and led to the emerging field of epigenetics. The paradigm shift in behavior genetics is visible in recent research on genetic effects in adolescence (Neiderhiser & Chen, Chapter 3) and is guiding research on such topics as depression and aggression (Cicchetti, Chapter 30; Conley et al., Chapter 31; Dotterer et al., Chapter 32). A second change involves innovations in technology for studying the human brain, which sparked the neuroscience revolution. Neuroscience research has facilitated theoretical advances regarding brain structure and function throughout the lifespan and has resulted in a wealth of information about the adolescent brain (Steinberg, 2008), including the realization that some aspects of brain development continue into the 3rd decade of life (i.e., early adulthood; Guyer et al., Chapter 2). This knowledge has led to new explanations regarding the mechanisms underlying adolescent (and to some extent young adult) behavior, ranging from antisocial behavior (Dotterer et al., Chapter 32) and sleep disturbances (Telzer et al., 2013) to positive adjustment (Telzer et al., Chapter 38). In addition to these major trends, ongoing advances in quantitative and qualitative research methods have allowed researchers to study youth in increasingly rigorous and innovative ways.

Alongside these technological and methodological advances has been an increasing integration of science, intervention, and policy. This integration reflects a desire to use scientific findings to inform interventions and policies to support healthy development and improve human lives. It is exemplified in the ongoing emphasis on translational science at the National Institutes of Health in the United States and at private foundations (e.g., the W. T. Grant Foundation) and throughout the scientific world. In research on adolescents and young adults, this integration is illustrated by an increased emphasis on evidence-based interventions (Kim et al., Chapter 39; Conley et al., Chapter 31), social justice (Azmitia et al., Chapter 24; Lerner et al., Chapter 44; Rodriguez Vega & Yoshikawa, Chapter 41; Russell & Dorri, Chapter 23), and health and education policy (Park et al., Chapter 42; Coley & Carey, Chapter 43). Another example concerns the advances in brain research mentioned earlier: New information on adolescent brain development has influenced policies ranging from school opening times (Alfonsi et al., 2020) and driving restrictions (Steinberg, 2008) to the treatment of minors in the justice system (Brown et al., Chapter 40).

3. Development is a multilevel process based on the ongoing interplay between individual and context, and thus there is a need to take an interdisciplinary approach to examining the multiple levels of individuals and contexts involved.

Since the early days of the field of adolescence, theoretical perspectives have incorporated a multilevel view of development in which individual development is influenced by biological, psychological, and social factors. This view is reflected in the biopsychosocial perspective (Magnusson, 1988; Petersen & Taylor, 1980) and the broader field of developmental science (Cicchetti, Chapter 30; Lerner et al., Chapter 44). Scientists have also drawn on Bronfenbrenner's bioecological model, which views individual development as resulting from interactions between the person and a multilayered environmental system (Bronfenbrenner & Ceci, 1994). Related perspectives include life course theory (Elder, 1999), developmental psychopathology (Cicchetti, Chapter 30), and the integrative minority youth model (García Coll et al., 1996), which place individual development within a family system that is impacted by social institutions, social position, and societal events. Each of these perspectives implies multiple levels of analysis and interactions within and across levels. A multilevel systems approach is evident throughout the handbook.

Another core idea within a multilevel perspective is the notion that young people and the contexts they inhabit are constantly changing due in part to social change and historical events. This process was evident during the writing of this volume as COVID-19 swept the globe. The pandemic affected the lives of everyone on the planet, including adolescents and young adults. The consequences of the pandemic and its accompanying economic, educational, health, and political fallout will undoubtedly shape the trajectories of youth for years to come. At the same time, systemic racial, ethnic, and anti-immigrant biases exposed by the pandemic have become increasingly salient. Compounding the already complex interplay of societal and historical factors is the increasing global impact of mass migration and immigration, climate change, social media, and technology change (e.g., automation) along with the large number of adolescents and young adults living in poverty (Hamel & DiNucci, 2019; Hawkins, 2019). Across these sweeping secular and cohort changes, the trajectories of adolescents and young adults are in a constant state of flux, and diversity becomes increasingly challenging to define and operationalize.

4. Diversity of human experience is a basic fact that needs to be recognized in research to more fully understand the experience of minoritized groups and to address inclusiveness, social inequities, and injustice globally.

A major shift has occurred in the demographic characteristics of the youth population in the United States and elsewhere—a growth in minority and immigrant populations that is shifting the balance between “majority” and “minority.” Along with the demographic shift came a recognition of the need to consider diversity of all kinds to fully understand adolescent and young adult development. This recognition has stimulated a dramatic increase in research on minority youth and their interactions with social contexts, spurred in part by a new generation of scholars more sensitized to the importance of cultural variables in development. In addition to research on ethnic and racial diversity (White et al., Chapter 20; Witherspoon et al., Chapter 21; Yip et al., Chapter 22), research on other kinds of diversity (e.g., in gender and sexual orientation; Russell & Dorri, Chapter 23) and on intersections among types of diversity (i.e., intersectionality; Azmitia et al., Chapter 24) is underway. A third aspect of diversity that has received increased attention concerns differences in economic and sociopolitical conditions associated with geographic region, culture, and nation (Cooper et al., Chapter 26; Lansford et al., Chapter 13; Pereira et al., Chapter 27). In recent years, wars, persecution, and economic pressures have resulted in large-scale migrations and increased contact between immigrants and host populations, with profound implications for youth (Benner & Crosnoe, Chapter 17; Motti-Stefanidi, Chapter 25). The increased awareness of and attention to diversity among youth has changed not only what we study but also how we conduct our science (methodologically) and where we study adolescents and young adults (e.g., in their communities, schools, and neighborhoods), with more attention to their ecology and social environments.

5. The field needs to continue to move beyond problematizing adolescence and early adulthood to consider positive developmental outcomes and resilience in addition to psychopathology and health risks.

Traditionally, research on adolescents was guided primarily by concerns about risk and pathology (e.g., internalizing and externalizing disorders, substance use, teen pregnancy). For example, this view is apparent in Jessor’s problem behavior theory (Jessor et al., 1995),

which sought to explain behaviors that were viewed as risky and inappropriate for adolescents, including substance use, delinquency, and sex. A negative view of youth behavior was especially prominent in research on minority youth (Cabrera et al., 2012; García Coll et al., 1996; McLoyd, 1998). However, scholars have pointed to the normative nature of some risk behaviors (Tolman & McClelland, 2011) and the positive aspects of others (Crosnoe, 2011; Maggs et al., Chapter 33; Schulenberg & Maggs, 2002). More recently, “risk” behavior has been normalized, such that increases in risk behavior during adolescence are attributed in part to normative patterns of brain maturation (Guyer et al., Chapter 2; Liew et al., Chapter 6; Steinberg, 2008). Of course, concerns regarding psychopathology, externalizing behaviors, and health risks during adolescence and early adulthood remain.

An even larger shift has been the increased attention to positive and healthy aspects of youth development, including their physical and psychological well-being, prosocial behavior (Padilla-Walker & Van der Graaff, Chapter 34; Telzer et al., Chapter 38), and civic engagement (Wray-Lake & Ballard, Chapter 35). Such efforts shift the focus to young people’s potential for thriving and their significant contributions to their families, communities, and society. A related trend has been an increased emphasis on resilience—the fact that many adolescents and young adults show favorable outcomes despite adversity (Cicchetti, Chapter 30; Cooper et al., Chapter 26). This emphasis on positive development paves the way to identify mechanisms and resources (e.g., interventions, policy programs) to help more youth cope with adversity—an important step toward improving their well-being (Kim et al., Chapter 39).

6. We need to envision where the science is going in order to address the major challenges concerning the optimal development, health, and well-being of our young people.

The future of our science is up to us, the growing collective of researchers who study adolescence and early adulthood. Scholars working within a given area know the gaps, the challenges to progress, and the steps needed to remedy the myriad theoretical, methodological, and practical problems of illuminating the lives and development of diverse youth. Of course, disagreements about gaps and next steps abound, and such disagreements serve to fuel scientific progress. However, the future of our science does not simply happen; instead, the future depends on active researchers moving the science forward. Each scientist will have a shared, as well as a unique perspective on the future direction of science, and each scientist will build on the foundation set by previous generations of scientists. Ultimately, we all are driven by the desire to better understand and improve the developmental course and well-being of adolescents and young adults.

From the beginning, one purpose of this handbook was to go beyond simply reviewing the current status of research on adolescence and early adulthood to envision the future trajectory of each topic in order to help set the course of the next generation of scholarship. We found it exciting and promising that contributors took on this challenge seriously and avidly. The result is that each chapter includes a section on future directions, with the author(s) building on their systematic review of the prior work to highlight the major knowledge gaps in that domain and provide thoughts on steps needed to meet their envisioned future of the science. It was clear to most authors that our science, stimulated by both theoretical and methodological advances, will continue to become more multilevel, focused on longitudinal approaches, and integrative of research, intervention, and policy. Many authors also highlight current conceptual and empirical deficiencies in sample and

topic coverage, especially the need for more inclusive theories and samples; coverage of topics concerning diversity and inequalities; emphasis on broader samples of young adults, particularly those who do not go on to college; and a global reach. Equally challenging is the need to conceptualize the vast diversity in lived experience among adolescents and young adults worldwide and to design studies that adequately capture that diversity. For example, some chapters point to the intersecting social identities and social positions that individuals embody and the need to understand youth from a multidimensional, intersectional perspective (e.g., Azmitia et al., Chapter 24; Russell & Dorri, Chapter 23). Other contributors consider gaps and future steps forward concerning technological innovation and new methods and measures (e.g., ecological momentary assessment, wearable data collection devices), which are dramatically changing how we collect data and how youth are impacted by technology (e.g., Underwood et al., Chapter 19).

OVERVIEW OF THE HANDBOOK

In keeping with these scientific trends and the biopsychosocial multilevel perspective intrinsic to developmental science, we sought to include chapters on biological, psychological, and social development along with chapters on social, interpersonal, and cultural contexts and processes that shape youth development. To capture the sociodemographic diversity of youth and their experiences, we devoted a section to youth with distinct cultural backgrounds and social identities, those with disabilities, and those in different geographic and cultural contexts. We also sought to provide a balanced perspective on risk by including chapters on psychopathology, externalizing behaviors, and health risks, along with chapters on positive social behaviors and on interventions and social policies that can improve health, well-being, and resilience. The concluding chapter (Lerner et al., Chapter 44) identifies broad trends in the science and implications for future research.

Part I. Biological Underpinnings

Adolescents and young adults are influenced by biological systems within the body (e.g., endocrine, nervous, circulatory) that in turn depend on the individual's genotype, epigenome, and current environmental stimuli. During adolescence, dramatic shifts in these systems, as well as in gene expression, propel the changes in physiology, appearance, emotional and cognitive processes, and behavior that characterize this period. Although much of this development occurs during adolescence, some changes continue into early adulthood, and others, although completed, continue to have important implications for functioning in adulthood. This section captures these interconnected biological changes and their implications for adolescent and young adult functioning. Chapter 1 by Dorn and Beltz provides an overview of pubertal changes and measures, followed by a systematic canvassing of research on the associations between puberty and psychosocial behaviors. In Chapter 2, Guyer et al. describe structural and functional changes in the brain during adolescence and early adulthood and their relationship to puberty, cognition, reward processing, and risk-taking behaviors. Chapter 3 by Neiderhiser and Chen covers genetic and environmental contributions to youth adjustment and interpersonal relationships, showing how the interplay between genes and environment differs with age and context. Chapter 4 by Adam et al. focuses on development of the hypothalamic–pituitary–adrenal axis as well as the implications of stressful experiences for adolescent and young adult outcomes. Together, these chapters

provide abundant evidence of the connections between biological processes and behavior as well as the impact of the environment on biological systems.

Part II. Cognition, Emotion, and Social Cognition

A second set of changes fundamental to individual functioning are developments in cognitive processing, emotion processing, and social cognition. Chapter 5 by Keating et al. focuses on cognition during adolescence and early adulthood—an area of recent advances due to the growing recognition that there are dramatic neural-based changes in metacognitions, social cognitions, deductive reasoning, and executive functioning. In Chapter 6, Liew et al. take a multilevel perspective, integrating neurobiological, sociocultural, and ecological processes to understand emotion regulation in context and its implications for psychopathology. In Chapter 7, Edelson and Reyna provide an alternative perspective on risk-taking behavior, highlighting the importance of motivation and distinct forms of cognitive processing in decisions involving risk. Chapter 8 by Lapsley et al. focuses on recent conceptual advances and research that speaks to the role of various personality correlates (e.g., attachment, autobiographical memory, temperament), early life experiences, and parenting in the development of moral cognitions in adolescence and early adulthood. Identity formation is a longstanding mainstay in the literature on adolescent development, and Chapter 9 by Meeus provides a historical perspective on identity research. Chapter 10 by Mulvey et al. provides a critical synthesis of work on the global social problems of prejudice, bias, and social exclusion as well as the ingroup/outgroup dynamics among youth in the United States and Europe. These chapters show how fundamental cognitive, emotional, and social cognitive processes, influenced by biology, environment, and culture, allow adolescents and young adults to conceptualize themselves and to interact with others in an increasingly complex social ecology.

Part III. Social Contexts of Development

As noted earlier, models of human development conceptualize individual development as a product of interactions between the person and an environment consisting of multiple levels or systems, some proximal and others more distal, that also influence each other (Bronfenbrenner & Ceci, 1994). The most impactful contexts are those where the individual interacts directly with people and objects on a regular basis. For contemporary adolescents and young adults, these contexts typically include the family, peers, school, and workplace, as well as electronic media. Chapter 11 by Updegraff and Perez-Brena discusses the family as a complex, dynamic system that includes siblings, grandparents, and other extended family members who all interact with and influence youth. Chapter 12 by Hussong et al. combines information on sociodemographic changes in U.S. families and key theories of parenting to provide an integrative framework on parenting and its impact on psychosocial functioning in adolescence. In Chapter 13, Lansford et al. examine cross-cultural similarities and differences in parenting behaviors and parent–child relationships during adolescence and early adulthood, a time when parenting responsibilities change.

Turning to other developmental contexts, Chapter 14 by Veenstra and Laninga-Wijnen focuses on the prominence of peers, with special attention to social network research, showing how embedded the peer context is in all aspects of development during adolescence. Chapter 15 by Connolly et al. tracks the development of romantic feelings and relationships from preadolescence to early adulthood and discusses the implications of different sexual and relationship patterns for well-being. Chapter 16 by Halpern offers

a balanced perspective on sexual behavior, emphasizing the normality of sex and the importance of sexual health while also acknowledging the risk of negative consequences. Likewise, the contexts of school, work, and electronic media are central for many adolescents and young adults. Chapter 17 by Benner and Crosnoe, on schools and education, considers the formal and informal role that schools play in the lives of these youth. In Chapter 18, Staff et al. take a historical and developmental perspective on work during adolescence and early adulthood, showing the longer term links between youth employment and work/school outcomes in early adulthood. Finally, Chapter 19 by Underwood et al. summarizes the research across multiple and fast-advancing social media technologies, which have become powerful socializing influences in the lives of many contemporary adolescents and young adults.

Part IV. Diversity in Adolescence and the Transition to Adulthood

Diversity is a core characteristic of humanity—a basic fact of life. Physical, linguistic, and cultural (e.g., ethnic, racial) diversity might be easily recognized, but other forms of diversity (e.g., sexual orientation, autism) might be less easy to see. Although diversity reflects the richness of human experience and is something to celebrate, too often it is framed as different, other, foreign, and unwelcome, resulting in discrimination and stigma, with negative consequences for physical, mental, and behavioral health. At the same time, marginalized individuals often make use of cultural practices and resources that contribute to their resilience and growth. Several chapters in this section highlight the experiences of adolescents and young adults from ethnic, racial, and cultural minority groups, discussing challenges confronting these groups as well as protective factors that contribute to resilience. Chapter 20 by White et al. discusses how multiple dimensions of schools and neighborhoods (e.g., ethnic composition, perceptions of safety) affect Latinx youth functioning. Chapter 21 by Witherspoon et al. focuses on the multiple systemic (e.g., ideologies, policies, laws) and contextual (e.g., institutions, schools, communities) structures that intersect with families, peers, and persons to impact the daily lives of Black and African American youth, which have been the focus of recent social and global movements. In Chapter 22, Yip et al. describe the sociodemographic characteristics of Asian American youth and rebut the myth of the model minority, which they argue has been harmful to Asian Americans as well as other minoritized groups. Chapter 23 by Russell and Dorri examines the interpersonal and contextual sources of stigma and minority stress affecting sexual and gender minority youth and calls for policies and actions that support, rather than undermine, youth well-being. In a similar vein, Chapter 24 by Azmitia et al. provides a historical account of intersectionality and synthesizes the growing research on its implications for adolescents and young adults.

Other chapters in this section focus on the experiences of youth with other unique statuses or identities. Chapter 25 by Motti-Stefanidi examines how the attitudes of immigrant youth and their nonimmigrant “majority” peers shape their interactions and choices in the countries they inhabit. Chapter 26 by Cooper et al. adopts a resilience perspective on rural youth, noting the distinct challenges facing these youth as well as resources and protective processes that support positive adaptation. Chapter 27 by Pereira et al. emphasizes the impact of social and economic conditions on Latin American youth development, considering both risk and protective factors for youth well-being. Similarly, youth with autism spectrum disorder (ASD) experience particular challenges during adolescence and especially in the transition to adulthood, and Chapter 28 by Volkmar and Solomon summarizes those

challenges in developmental perspective and considers effective programs. Likewise, Chapter 29 by Beal et al., on youth in the foster care system, shows that adolescents in protective custody and out-of-home care experience more challenges than others in navigating developmental tasks in adolescence and early adulthood, although there are important factors that promote resilience.

Part V. Challenges to Healthy Development

Risk taking tends to increase during adolescence and then subside with the transition to adulthood for multiple reasons, including neurobiological changes involved in social–emotional and cognitive control as well as broader social role and context changes (Steinberg, 2008). The increase in risk taking can be functional, supporting progress in various developmental tasks (Crosnoe, 2011; Schulenberg & Maggs, 2002). At the same time, risk taking can create challenges to health and optimal development. In addition, adolescents and young adults show increased vulnerability to many mental health problems that may relate to brain development and stress as well as to the myriad challenges of adapting to the social and psychological changes of these periods. The opening chapter, Chapter 30 by Cicchetti, provides a broad overview of developmental psychopathology, placing psychopathology and resilience in the context of developmental continuities and discontinuities across multiple levels. In Chapter 31, Conley et al. focus on internalizing difficulties, ranging from transient distress to depression and anxiety disorders, and detail these difficulties along with associated risk and protective factors in developmental context, concluding with a consideration of effective interventions. Chapter 32 by Dotterer et al. takes a multilevel perspective on the development of externalizing behavior, including attention to childhood risk factors as well as factors in late adolescence and early adulthood that contribute to desistance. Chapter 33 by Maggs et al., the last in this section, provides a developmental and historical perspective on substance use and use disorders across adolescence and early adulthood, placing the causes, course, and consequences in developmental context.

Part VI. Positive Youth Development

A major scientific movement in the past decade has been the increased focus on positive youth development. This handbook presents several chapters that highlight the development of distinct forms of positive youth functioning, reflecting a growing scientific interest in understanding health and well-being. The first chapter in this section, Chapter 34 by Padilla-Walker and Van der Graaff, summarizes new conceptualizations of prosocial development (e.g., empathy, helping behaviors) and the growing body of longitudinal research in this area. Chapter 35 by Wray-Lake and Ballard, on civic engagement, extends the work on prosocial behaviors to understand the predictors of such actions at the community and societal levels. Religious and spiritual development have been relatively neglected in prior research, and Chapter 36 by Hardy and Nelson introduces new models designed to help us understand the roles of religious and spiritual beliefs in youth behaviors. Chapter 37 by King and Mangan summarizes the several decades of work on multiple dimensions of positive youth outcomes and their developmental trajectories. Chapter 38 by Telzer et al., the last chapter in this section, focuses on a recent advance in the study of positive youth development—work on biological and neurological mechanisms—which opens up challenging new directions for future research.

Part VII. Intervention and Policy

To support the healthy development and well-being of youth, intervention may be needed in the form of programs to deter risky behavior or to prevent or mitigate mental health problems. In addition, public policies are critical for supporting health, achievement, and well-being, but policies can either harm or protect adolescents and young adults and need to be informed by science to be effective. Chapter 39 by Kim et al., the first in this section, provides an overarching perspective on prevention science, including a systematic synthesis of empirical findings and meta-analytic results of preventive interventions aimed at adolescents and young adults, with attention to the major knowledge gaps. Chapter 40 by Brown et al., on juvenile justice, places offending in developmental context, particularly regarding brain development, and describes effective approaches to dealing with criminal offending during adolescence and early adulthood. Immigration has been the subject of much scrutiny and debate in recent years, and Chapter 41 by Rodriguez Vega and Yoshikawa considers the multiple purposes of immigration policies in U.S. historical context, suggesting that, despite some positive recent developments, current policies continue to put many immigrant youth and their families at risk. In Chapter 42, Park et al. review health care policies affecting youth, showing that while U.S. health care policies for adolescents are fairly comprehensive, those for young adults are piecemeal and incomplete, creating obstacles to care and allowing many youth to fall through the cracks. Chapter 43 by Coley and Carey makes a cogent argument that federal, state, and local policies need to be informed by science to be effective for youth, families, and communities and provides lessons and case studies on effectively translating the science for a broader audience and advocating for its use. Although much of the existing work is in the U.S. context, the implications go far beyond these borders and speak to the great need for more international research.

Part VIII. Past and Future Science of Adolescence and Early Adulthood

A central goal of this handbook was to highlight how far the field has come and envision where it needs to go. To place the numerous chapters within a broader historical and future context, Chapter 44 by Lerner et al. reflects on how the science has evolved to date, from the first *Handbook of Adolescent Psychology* (Adelson, 1980) to the present handbook, and provides general recommendations for future research on adolescence and early adulthood. As noted in this final chapter of the volume, the current era is an exciting time of dramatic changes in the scholarship of adolescence and early adulthood. Present-day society presents many complex challenges to conceptualizing and studying young people, but scholars are rising to the task.

CONTRIBUTORS

Chapter authors in this handbook are top scholars and rising stars in the field of adolescence and early adulthood. They span a variety of relevant disciplines, including developmental, clinical, and cultural psychology, as well as human development, sociology, public health, and medicine. Many bring a social justice perspective to their science, highlighting the point that social justice and rigorous science can and should go hand in hand. The authors each bring expertise on a specific topic relevant to this volume, and all were asked to expand their scope. For some, it was a challenge to bring in research on young adults and

consider both developmental periods. For others, especially those who wrote on emerging areas of research, the challenge was to weigh sparse or inconsistent findings to form a clear picture of what is known and what is not and to identify important trends in the science. All authors had the difficult task of synthesizing large amounts of information into a concise chapter. As editors of this handbook, it was extremely gratifying and humbling for us to reflect upon the shifting tides of scholarship portrayed in each chapter. In reviewing the hard work of the many scholars involved in this handbook, we were truly impressed with the recent scientific advancements and findings fueled by innovation and the ongoing desire to better represent, understand, and enhance the lives of all young people.

AUDIENCE

This handbook, which encapsulates the science of adolescence and early adulthood and emphasizes directions for future research, will be useful for scholars in psychology, sociology, public health, medicine, and related fields whose research focuses on youth. It will be especially useful for scholars who are interested in the field as a whole or who wish to learn about topics outside of their area of current expertise. In this regard, it may be especially relevant for early career scholars and graduate students who are expanding their knowledge base. The book will also be valuable to practitioners who wish to stay current in their understanding of the scientific literature in order to better serve young people. We hope that this volume will attract new researchers and inspire new research that leads ultimately to improvements in the lives of young people globally.

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This volume has been a collaborative effort from the beginning. Of course, it would have been impossible without the contributions of the chapter authors, and we are grateful for their expertise as well as their efforts, responsiveness to our suggestions, and persistence in meeting the goals and deadlines of this handbook. We want to express our deep appreciation to Katherine Lenz, reference project editor at the American Psychological Association (APA), for her professional, timely, and wise input and guidance in shepherding this handbook through the editorial process. She was with us every step of the way, always available to answer questions, problem solve, and keep things running smoothly. We also want to acknowledge APA, particularly Christopher Kelaheer, for inviting us to develop this handbook. Finally, as editors, we were grateful for the opportunity to learn more about the many impressive advances in our field and hope that this volume will help to move the science forward.

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