Book Review on *Adolescents in the Internet Age*

Eva N. Patrikakou

Adolescence is a period of rapid neurobiological development, when a dynamic maturational process takes place and leads into positive or negative outcomes (Dahl et al., 2018). While early life experiences have long been recognized for their importance in further development, affecting practice and policy, adolescence has yet to be recognized for its compelling impact on an individual's formative years. Increasingly, neuroscientists view the teenage years as a crucial, sensitive period of brain development that offers a unique opportunity to enhance cognitive, social, and emotional growth and learning (Fuhrmann et al., 2015). In their 2019 report, the *National Academies of Sciences, Engineering, and Medicine* emphasized that "adolescence offers great promise" and neurological changes that take place during this stage can lead to "positive, life-shaping development" and, equally important, "recovery from past adversity" (p. 1). Being able to support adolescent development in a proactive and positive way has also been recently underlined by indications of the stressful impact of isolation on and protective mediating factors for youth, brought about by restrictions imposed due to the COVID-19 pandemic (Romm et al., 2021).

Adolescents in the Internet Age, authored by father and son, professors Robert Strom and Paris Strom, offers a framework to address important dimensions of adolescent development, especially for educators and other professionals involved in the educational process. Interestingly, the authors characterize these dimensions as "expectations" (p. xvii). By their definition in the preface, the term also involves perceptions, which can serve as a critical mediator among student, parent, and teacher expectations. The book is structured in four parts—four "expectations": identity, cognitive, social, and health—and each part includes three chapters.

The chapters in the first part provide background information on ways various theories have historically viewed adolescent development. Authors point to the contradictory ways theorists have accounted for changes that take place during this developmental phase, assisting the reader to get a broader picture of theoretical underpinnings. In addition, raising contemporary considerations such as generational complexities, as well as "Goals in a Hurried Environment" and "Critical Thinking and Decision-making," alerts those closely working with students to realities faced by teenagers nowadays. It is important to note that the topic of creative thinking and problem solving is extensively discussed in Chapter 6 in the second part of the book.

Another notable contribution of the first part of *Adolescents in the Internet Age* is the crucial element of career exploration. The exploratory questions included in Chapter 3 are a useful tool for students and families. The complexity of postsecondary options makes the collaboration amongst students, teachers, parents, and school counselors an essential one. Expanding the chapter to include the school counselors' role and ways to integrate their contribution would have further promoted the collaborative nature of career exploration, especially considering that career counseling is one of the three main foci of the National Model by the American School Counselor Association (2019).

In the second part, authors delve into cognitive expectations, exploring pertinent aspects of making today's classroom relevant to current conditions and demands. The rapid and expansive technological advances, use of online media, and affordability of mobile technology have precipitously affected the educational process, with parents and teachers struggling to find optimal and meaningful integration of technology (Patrikakou, 2016). Chapter 4 details multiple aspects of cognitive development, including perspectives on intelligence and cognitive theories. The discussion is largely contextualized within the constructivism paradigm, reflecting the authors' personal theoretical choice, and provides a rich description primarily of Piaget's theory, as well as social and cyber constructivism. This chapter also highlights insights from neuroscience, a field which, along with the developmental science of adolescence, has increasingly called for viewing this stage of development as an "opportunity during which we can have especially strong positive impacts on trajectories of health, education, social, and economic success across the lifespan (Dahl et al., 2018, p. 447).

Chapter 5 directly relates to the book's title, rightfully shedding light on media literacy and meaningful ways to integrate it in order to maximize learning benefits. Turning attention to fostering *digital wisdom* (Prensky, 2009) instead of spending time on limiting technology use or denouncing its ever-expanding applications is time well spent. Part II concludes with Chapter 6 which, as

previously mentioned, expands on the nature and meaning of creative thinking. The authors also highlight the importance of collaborative teamwork and offer specific student behaviors to be fostered to support collaboration vis a vis more traditionally expected behaviors.

Part III of *Adolescents in the Internet Age* is devoted to social expectations. Specifically, Chapter 7 focuses on socialization and the importance of peer relationships. Important aspects of adolescent social development are presented and serve as a critical reminder to readers who will work with this age group. For example, ways to enhance teenagers' sense and need of belonging should be part of every educator's planning regardless of content area. The chapter should have been enhanced with information about ways internet use has more broadly affected adolescent peer and social interactions. Also valuable would have been the inclusion of specific ways to maximize the benefits of media use in order to build and maintain meaningful relationships, while being cognizant of the pitfalls of such mediums. The integration of how technology and media use affects various aspects discussed in other chapters of this book will be an important enhancement in subsequent editions.

Chapter 8 addresses ways to gauge risks and teenage risk-taking. The common expectation when discussing risks in adolescence might be a discussion of risky behaviors such as drug or alcohol use. The authors take a different, interesting angle discussing primarily academic, growth-oriented risks students should be encouraged to take with the support of teachers and parents. The difference in approaches between U.S. and Asian parents and teachers is used to highlight one of the notable points of this chapter, namely clarifying the value of praise and cautioning against unconditional praise or the common mistake of conflating praise with the absence of constructive criticism.

The third part of the book wraps up with Chapter 9 offering a discussion on moral development and ethical conduct. The readers benefit from an exposure to Kohlberg's and Gilligan's theories, along with issues and concerns each theory has raised. In addition to presenting academic integrity concerns, the authors also include internet ethics, such as monitoring online test-taking. Such issues have become even more pronounced with the prolonged periods of distance learning imposed by the recent pandemic. A closer examination of difficulties which stemmed from these online practices, as well as potential solutions to best address them will be an important part of any future discussion on such matters.

Part IV covers health expectations, including components of both physical and mental health. Chapter 10 outlines important elements of physical health such as obesity and sleep patterns, as well as risky aspects of sexual behaviors. With teenage obesity rates increasing, associated health issues such as diabetes

and other ailments occurring later in life comprise a public health matter. The chapter raises awareness on such matters as well as on the association between physical health and mental health aspects, which is critical for a collaborative effort to support teenagers in practicing healthy habits.

An important contribution of *Adolescents in the Internet Age* is the discussion in Chapter 11 regarding socioemotional behaviors. The Center for Disease Control and Prevention in the Youth Risk Behavior Survey (2019) indicates that experiences of violence, including bullying both at school and electronic, as well as forced sex, remain high among teenagers. The chapter's section on ways teachers and schools can address bullying with parents provides critical information and offers suggestions for working productively with families. In general, expanding on those parts of the book that offer opportunities for meaningful school–home collaboration will be important to enhance the book's call for collaborative behaviors and dispel the erroneous perception that parents become "irrelevant" once students reach adolescence. Chapter 11 also offers a refresher on the theoretical underpinnings of addressing behavioral patterns from Skinner to (recently deceased) Bandura that is helpful for educators to better understand classroom applications.

The last section of the book concludes with Chapter 12 with a discussion on particular aspects of emotional health, such as resilience and stress. According to the World Health Organization (2020), anxiety and depression are leading causes of illness amongst adolescents and contribute to self-harm, with suicide being the third leading cause of death in older adolescents (15–19 years). Authors highlight signs of stress, useful knowledge for educators working with teenagers, in hopes that when noticing such signs, teachers will reach out to their mental health colleagues and seek support for those students. The concept of resilience is also included in Chapter 12. Resilience is a critical ability that can assist teenagers to overcome adverse experiences and reach their full potential. According to Harvard's Center of the Developing Child, reducing adverse effects not only contributes to an individual's healthy development, but also to the prosperity of any society (2021). The Center provides an easy-to-understand scientific framework of toxic stress and the role of resilience, which could further enhance the contents of this chapter in future editions.

Overall, *Adolescents in the Internet Age*, although needing enhancement in various chapters, provides educators and other school professionals working in middle and high school settings with valuable information about several aspects, or "expectations," involved in the critical developmental stage of adolescence. The standardized format of each chapter concluding with sections on teacher applications, topics of reflection, and cooperative learning exercises adds predictability to its structure and makes it easier for readers to focus on the most pertinent concepts presented.

References

American School Counselor Association. (2019). *ASCA national model: A framework for school counseling programs* (4th ed.).

Centers for Disease Control and Prevention. (2019). *Nutrition, physical activity, and obesity data, trend and maps*. https://www.cdc.gov/nccdphp/dnpao/data-trends-maps/index.html

Centers for Disease Control and Prevention. (2019). *Youth Risk Behavior Survey*. https://www.cdc.gov/nccdphp/dnpao/data-trends-maps/index.html.

Center on the Developing Child at Harvard University. (2121). *Resilience*. https://developing-child.harvard.edu/science/key-concepts/resilience/

Dahl, E. E., Allen, N. B., Wilbrecht, L., & Suleiman, A. B. (2018). Importance of investing in adolescence from a developmental science perspective. *Nature, 554*, 441–450.

Fuhrmann, D., Knoll, L. J., & Blakemore, S. J. (2015). Adolescence as a sensitive period of brain development. *Trends in Cognitive Sciences, 19*, 558–566.

National Academies of Sciences, Engineering, and Medicine. (2019). *The promise of adolescence: Realizing opportunity for all youth*. https://doi.org/10.17226/25388

Patrikakou, E. N. (2016). Parent involvement, technology, and media: Now what? *School Community Journal, 26*(2), 9–24. https://www.adi.org/journal/2016fw/PatrikakouFall2016.pdf

Prensky, M. (2009). H. sapiens digital: From digital immigrants and digital natives to digital wisdom. Innovate: *Journal of Online Education, 5*(3). http://nsuworks.nova.edu/innovate/vol5/iss3/1

Romm, K. F., Park, Y. W., Hughes, J. L., & Gentzler, A. L. (2021). Risk and protective factors for changes in adolescent psychosocial adjustment during COVID-19. *Journal of Research on Adolescence, 31*, 546–559. https://doi.org/10.1111/jora.12667

Strom, P. S., & Strom, R. D. (2021). *Adolescents in the internet age: A team learning and teaching perspective* (3rd ed.). Information Age.

World Health Organization. (2020). *Adolescent mental health*. https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health

Eva Patrikakou is a professor at DePaul University's Department of Counseling and Special Education. Her research focuses on parent involvement and academic, social, and emotional learning, as well as on multitiered systems of support. Correspondence concerning this book review may be addressed to Dr. Patrikakou at epatrika@depaul.edu