

Benefits and Costs of Social Media in Adolescence

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In 2015, American adolescents aged 13 to 18 years reported using social media 1 hour and 11 minutes a day, 7 days a week. Social media are used for a variety of activities, including sharing information, interacting with peers, and developing a coherent identity. In this review of the research, we examine how social media are intertwined with adolescent development and assess both the costs and benefits of adolescent social media use. We include suggestions for further research and recommendations for clinicians, policy makers, and educators.

abstract

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The growth in interactive media platforms and their rapid adoption by young people is one indication of the compelling nature of social media tools, such as Instagram and Snapchat. Adolescents, who are already highly attuned to peer relationships, find the social component of many of these platforms especially compelling: 76% of teen-aged respondents in a recent Pew Research Center survey reported that they use social media.¹

In 2007, boyd and Ellison² coedited the first academic collection of research focused explicitly on social networking sites. Since then, hundreds of articles written by researchers from around the world in a multitude of disciplines have examined just 1 social network site (albeit the largest): Facebook.³ Researchers have continued to examine other platforms as they emerge. This article provides an overview of the research on the developmental implications of social media use and will focus on adolescents (ages 13 to 18 years). It summarizes the most relevant studies and reviews and concludes with recommendations for future research and recommendations for clinicians, policy makers, and educators.

CURRENT STATE

Social media tools are readily accessible on the Internet, and in the last several years, they have become even easier to access via applications (apps) on smartphones.^{1,4} On average, American youth receive their first mobile device around the time many begin the transition into adolescence.⁵ Well-understood psychological mechanisms, such as social comparison (ie, comparing oneself to others in either an upward or downward direction: that is, with those who are seen as better or worse than oneself, respectively), self-disclosure (sharing information

about the self with others), and impression management (acting to highlight positive aspects of the self and minimize characteristics that are perceived as unattractive)^{6,7} have been identified in studies of social media and are associated with adolescents' behavior, both positively and negatively.

Research has just begun to examine the influence of newer social media, such as Snapchat, Instagram, and Tumblr,⁷ on youth development. Although the field has not yet conclusively identified all the mechanisms at play, and causal research on the impact of social media is limited, trends are beginning to emerge. Below, we present greater detail on some of the benefits and costs of adolescent social media use.

BENEFITS OF SOCIAL MEDIA

By and large, extant research has found that youth use social media in the service of critical adolescent developmental tasks, such as identity development, aspirational development, and peer engagement.^{4,8} As adolescents seek intimacy with their peers and strive for autonomy, their online environments frequently reflect their off-line lives.⁹ In contrast to early online applications, which were seen as refuges from real life,¹⁰ today's online environments reflect, complement, and reinforce off-line relationships, practices, and processes.^{9,11}

The literature on social media and adolescents, as well as more extensive studies of emerging adults, reveals associations between time spent using social media and increased self-esteem, increased social capital (resources accessed through one's social relationships), safe identity exploration, social support, and more opportunity for self-disclosure.^{12,13} These processes are all critical to healthy growth and identity development.

A consistent finding is that adolescents use social media to develop and maintain friendships.¹ Nearly two-thirds of teenagers report that they make new friends through social media, and >90% use social media to connect with existing off-line friends every day.¹⁴ Adolescents also report that these media help them understand their friends' feelings and feel more connected to them.¹⁵ During a developmental stage when peer support and approval is critical, social media support these needs.¹⁴

Identity exploration, or the search for a coherent sense of self, takes place online as well as offline.¹⁶ Adolescents use social media for self-presentation through the ways they choose to represent themselves online by posting pictures and sharing aspects of their lives.⁸ In addition, youth use social media for impression management by attempting to use these media to control other people's perceptions of who they are and how they act.^{4,6} Such self-exploration can help youth to discover aspects of themselves; one study found that adolescents who communicated more online had greater self-concept clarity, which is the ability to understand who one is clearly and stably.¹⁷ Social media can thus provide a good forum to practice skills related to identity development, such as self-presentation and self-disclosure.

In addition, social media tools have been found to be beneficial for youth who may have learning difficulties or those struggling with their sexual identity. Research confirms that by increasing the likelihood that these adolescents can find like-minded youth, online social media tools may help them feel less lonely and more confident.^{17,18}

COSTS OF SOCIAL MEDIA

The use of social media during adolescence can also negatively

impact health and development. Although the majority of adolescents report that social media are a positive contribution to their lives,¹⁹ more negative associations with social media have also been documented in the research literature. These include cyberbullying, depression, social anxiety, and exposure to developmentally inappropriate content.⁸

Cyberbullying has received a great deal of attention in both the popular press and academic research.²⁰ The Pew Research Center report noted that 1 in 4 adolescents report digital “drama,” a word that adolescents seem to relate to more than the term “cyberbullying.”²¹ Research found that online bullying, often displayed through social media, is associated with more depressive symptoms than traditional bullying.²¹ One reason for this may be the public and enduring nature of online posts. A recent study found that risky online self-presentation increased the likelihood of receiving negative online feedback on social media.²²

Because teenagers have nearly unlimited access to peers through mobile technologies, social media use may result in changing sleep cycles for adolescents, which may contribute to depression. Teenagers who report having mobile devices in their bedrooms and leaving them on at night sleep less than those who turn them off.²³ Lack of sleep is related to depressive symptoms, loss of memory, problems at school, motor vehicle crashes, and other serious issues.²⁴

Research on traditional media such as television and magazines has

identified problematic implications for adolescents (especially female adolescents) around issues such as self-esteem, gender stereotypes, self-objectification, and impossible body standards.²⁵ Similarly, a longitudinal study found that frequency of social media use played a role in the relationship between mass media and an objectified self-concept (eg, judging oneself on the basis of how one is perceived by others).²⁶ Given the interactive nature of social media, these relations may be magnified because peers amplify social media content, providing additional social validation. One study found that 54% of 18 year olds’ public social media profiles contained or more references to a high-risk behavior, such as sexual activity, substance abuse, or violence.²⁷ Exposure to inappropriate content and the ability to display and consequently receive endorsement through peer validation of risky behaviors (such as drinking alcohol) may entice some adolescents to make poor decisions about what to share on social media.

Finally, it is important to remember that most social media platforms are owned by for-profit companies, which often advertise, collect information, and sell data. This direct channel to adolescents, outside the eyes and ears of adults, means commercial interests can take precedence over prosocial and developmentally appropriate interests.⁴ Advertisers for sexual content, alcohol, and many other unhealthy products can also easily reach children and adolescents through these new media.²⁸

FUTURE RESEARCH

We recommend that future researchers consider the following questions:

- What factors mediate and moderate relations between social media and outcomes (both positive and negative)?
- How do social media relate to and impact identity development?
- What risk factors are associated with problematic social media use, and what interventions are most successful in addressing problematic activities?
- From a developmental perspective, what is the best age to begin using social media, and under what restrictions (if any)?

RECOMMENDATIONS

Clinicians and Providers

- Ask children and their parents about media use, including mobile phones and social media, to build awareness of social media practices and their outcomes.
- Encourage parents to talk to their children about their social media use, create their own social media profiles, and help guide their children.

Policy Makers

- Encourage industry to consider developmental concerns when introducing new social media that is marketed to adolescents.
- Fund programs that promote digital literacy in the classroom.

Educators

- Teach digital literacy from kindergarten through 12th grade.

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REFERENCES

1. Lenhart A, Duggan M, Perrin A, et al. Teens, social media & technology overview 2015. Available at: www.pewinternet.org/files/2015/04/PI_TeensandTech_Update2015_0409151.pdf. Accessed March 15, 2016
2. boyd dm, Ellison NB. Social network sites: definition, history, and scholarship. *J Comput Mediat Commun*. 2007;13(1):210–230
3. Wilson RE, Gosling SD, Graham LT. A review of Facebook research in the social sciences. *Perspect Psychol Sci*. 2012;7(3):203–220
4. Uhls YT. *Media Moms and Digital Dads: A Fact Not Fear Approach to Parenting in the Digital Age*. New York, NY: Bibliomotion, Inc; 2015
5. Growing Wireless. Kids wireless use facts. Available at: www.growingwireless.com/get-the-facts/quick-facts. Accessed September 10, 2016
6. Bartsch M, Subrahmanyam K. Technology and self-presentation. In: Rosen LD, Cheever NA, Carrier LM, eds. *The Wiley Handbook of Psychology, Technology, and Society*. Hoboken, NJ: Wiley-Blackwell; 2015:339–357
7. Lup K, Trub L, Rosenthal L. Instagram #instasad?: exploring associations among Instagram use, depressive symptoms, negative social comparison, and strangers followed. *Cyberpsychol Behav Soc Netw*. 2015;18(5):247–252
8. Subrahmanyam K, Smahel D. *Digital Youth: The Role of Media in Development*. New York, NY: Springer; 2011
9. Schwartz HA, Eichstaedt JC, Kern ML, et al. Personality, gender, and age in the language of social media: the open-vocabulary approach. *PLoS One*. 2013;8(9):e73791
10. Turkle S. *Life on the Screen*. New York, NY: Simon and Schuster; 1997
11. Reich SM, Subrahmanyam K, Espinoza G. Friending, IM'ing, and hanging out face-to-face: overlap in adolescents' online and offline social networks. *Dev Psychol*. 2012;48(2):356–368
12. Best P, Manktelow R, Taylor B. Online communication, social media and adolescent well-being: a systematic narrative review. *Child Youth Serv Rev*. 2014;41:27–36
13. Ellison NB, Steinfield C, Lampe C. Connection strategies: social capital implications of Facebook-enabled communication practices. *New Media Soc*. 2011;13(6):873–892
14. Lenhart A. Chapter 4: Social Media and Friendships. Available at: <http://www.pewinternet.org/2015/08/06/chapter-4-social-media-and-friendships/>. Accessed 2016
15. Borca G, Bina M, Keller PS, Gilbert LR, Begotti T. Internet use and developmental tasks: adolescents' point of view. *Comput Human Behav*. 2015;52:49–58
16. Subrahmanyam K, Smahel D, Greenfield P. Connecting developmental constructions to the internet: identity presentation and sexual exploration in online teen chat rooms. *Dev Psychol*. 2006;42(3):395–406
17. Hillier L, Harrison L. Building realities less limited than their own: young people practicing same-sex attraction on the Internet. *Sexualities*. 2007;10(1):82–100
18. Korchmaros JD, Ybarra ML, Mitchell KJ. Adolescent online romantic relationship initiation: differences by sexual and gender identification. *J Adolesc*. 2015;40:54–64
19. Rideout VJ. Social media, social life: how teens view their digital lives. Available at: <https://www.commonensemedia.org/research/social-media-social-life-how-teens-view-their-digital-lives>. Accessed March 15, 2016
20. Uhls YT. Cyberbullying has a broader impact than traditional bullying. In: *Opposing Viewpoints*. Farmington Hills, MI: Greenhaven Press; 2012
21. Bazelon E. *Sticks and Stones: Defeating the Culture of Bullying and Rediscovering the Power of Character and Empathy*. New York, NY: Random House; 2014
22. Koutamanis M, Vossen HGM, Valkenberg PM. Adolescents' comments in social media: why do adolescents receive negative feedback and who is most at risk? *Comput Human Behav*. 2015;53:486–494
23. National Sleep Foundation. 2014 sleep in America poll – sleep in the modern family. *Sleep Health*. 2015;1(2):e13
24. Lemola S, Perkinson-Gloor N, Brand S, Dewald-Kaufmann JF, Grob A. Adolescents' electronic media use at night, sleep disturbance, and depressive symptoms in the smartphone age. *J Youth Adolesc*. 2015;44(2):405–418
25. Common Sense Media. *Children, Teens, Media, and Body Image: A Common Sense Media Research Brief*. San Francisco, CA: Common Sense Media; 2015
26. Vandenbosch L, Eggermont S. The interrelated roles of mass media and social media in adolescents' development of an objectified self-concept: a longitudinal study. *Commun Res*. 2016;43(8):1116–1140
27. Moreno MA, Parks MR, Zimmerman FJ, Brito TE, Christakis DA. Display of health risk behaviors on MySpace by adolescents: prevalence and associations. *Arch Pediatr Adolesc Med*. 2009;163(1):27–34
28. Winpenny EM, Marteau TM, Nolte E. Exposure of children and adolescents to alcohol marketing on social media web sites. *Alcohol Alcohol*. 2014;49(2):154–159

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