



Internet Use and Depression

Issue Brief



Created with support from the
Palix Foundation

The goal of this issue brief is to explore the relationship between media and mental health, as described by research from across disciplines. It focuses on Internet as the medium and depression as the health outcome.

Because this issue brief attempts to capture how typical or average Internet use interacts with depression, articles focusing on youth experiencing problematic, excessive, compulsive, or addictive Internet use behaviors were excluded. Internet addiction is explored further in our Internet Addiction Issue Brief.

ABOUT DEPRESSION AND YOUTH

The World Health Organization defines depression as “a common mental disorder, characterized by sadness, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, feelings of tiredness, and poor concentration.”¹ Depression is not typically diagnosed in young children, but risk for depression increases with age. According to the National Institute of Mental Health, 11% of youth in the United States will be diagnosed with a depressive disorder by age 18,² and according to the Canadian Mental Health Association, an estimated 3.2 million youth between the ages of 12 and 19 are at risk for developing depression.³ Depression can vary in severity, ranging from minor depression to dysthymic disorder to major depressive disorder. Adolescents are particularly vulnerable, and left unchecked, depression can persist into adulthood, or worse: It can lead to suicide, which is the second leading cause of death in youth ages 10 to 24.⁴

While there are many well-defined risk factors that increase a young person's chance of developing this condition, one emerging topic of concern is the role that Internet use may play. Some of the studies reviewed to support the claim that young people who spend more time online are more likely to be depressed. However, it is unclear whether Internet use leads to depression, or

whether youth with depression turn to the Internet to cope. With 95% of American teens⁵ and 99% of Canadian teens online,⁶ exploring the Internet's relationship with mental health is a crucial endeavor. In this issue brief, we will explore these possibilities by highlighting selected articles from the past two decades.

CAN INTERNET USE LEAD TO DEPRESSION IN YOUTH?

Internet and Depression as a Field of Study

The study of depression and the Internet began in the late 1990s. As the Internet has become more prevalent in our lives, it has drawn the attention of researchers from across disciplines, all of whom are attempting to define the relationship between Internet use and depression, and whether that relationship is causal. Even in the relatively early days of home Internet access, researchers were asking whether the Internet had the potential to affect youth mental health. In 1998, Kraut performed a longitudinal study⁷ surveying adolescents over a period of 1 to 2 years; results suggested that increased Internet use was associated with an increase in depression. However, Kraut followed up with several of the original participants in 2002, and determined that these negative effects disappeared over time.⁸

Long-Term Effects Emerge

Some studies analyzing data from large representative samples looked at overall time spent online (without differentiating between activities online) and found patterns over the long term, but these patterns didn't always align. A 2013 study⁹ examined data from the National Annenberg Survey of Youth (ages 14-24, over the span of one year) and found that, in general, youth who spent a significant amount of time online were more likely to be depressed. Using data from the Nicotine Dependence in Teens (NDIT) survey, a Quebec

study¹⁰ found that young men who were depressed at age 20 were more likely to engage in computer use at age 24. Another study, though, found no link found between Internet use and psychosocial issues.¹¹

There is some evidence, too, that the effects are related to the amount of time spent online: It found that both heavy Internet users and non-Internet users (as opposed to those who use the Internet a moderate amount) were at risk for increased depression.¹²

Outcomes Vary Based on Type of Online Interaction

Other studies took a different approach and measured participants' distinct activities online. Many of these found that the way individuals used the Internet affected their depression-related outcomes.

Using the Internet as a means of connecting with others was shown in several cases to be protective. A 2010 longitudinal study that focused on adults¹³ (the national sample included ages 13-101, with 85% over the age of 19) found that individuals searching for health information online were more likely to suffer from depression, whereas those who spent time online communicating with friends and family had decreased depression. Another study found that youth who spent more time playing games were more depressed than youth who used the Internet to chat with friends.¹⁴

Other more narrowly defined research studies focused on exposure to and engagement in malicious activities online. For example, researchers have found that youth who receive unwanted sexual advances online¹⁵ or who are the target of online racism¹⁶ are more likely to suffer from depression. Likewise, engaging in cyberbullying has the potential to increase depression in the victim—but also in the bully.¹⁷

Social Networking Sites

More recently, the controversial concept of “Facebook Depression” has been a popular topic in both research communities and mainstream media. In 2011, the American Academy of Pediatrics¹⁸ released a clinical report discussing the negative health outcomes of online social networking, referring to recent research.¹⁹⁻²¹ Response to this clinical report was mixed^{22,23}, in part because one of the cited studies found that youth who used the Internet to communicate had *decreased* depression,²⁰ which did not align with the report's overall recommendations.

Although researchers have continued to explore the effects of social media on depression, there are not yet conclusive results. In 2013, another researcher focused specifically on Facebook, with results suggesting that using Facebook caused a decline in the overall well-being of young adults,²⁴ whereas another 2013 article²⁵ found that social networking sites do not lead to depression in young adults. More research is needed to understand the relationship between social networking and depression in youth.

DO YOUTH WITH DEPRESSION TURN TO THE INTERNET?

Given the contradictions in the existing research, a causal relationship between depression and Internet use is difficult to define. Youth use a variety of mechanisms to cope with depression, including avoidance coping,²⁶ and Internet use may fall in that category in some cases. This behavior—using the Internet as a way to escape problems or alleviate depressed mood—is also one of the criteria outlined in a commonly used Internet addiction diagnostic tool²⁷

The Internet may also be a way to deal with depressive feelings, rather than avoiding them—one study found that youth use media as a means of dealing with their depressive feelings,²⁸ and another found that Internet use might actually improve the well-being of introverted youth.²⁹ Another study, however, found no significant difference between Internet use by youth (aged 7-17) with or without Major Depressive Disorder.³⁰

The research in this area is still unclear, and further studies are needed to clarify the role the Internet plays in the lives of young people living with depression.

CONCLUSION

The research highlights several challenges for moving forward in this area. Given the ever-growing pervasiveness of the Internet in the lives of youth, in addition to the technological advancements of the past several years, the current state of the research may not reflect the contemporary media and technology landscape. Timeliness of the data collection is also a concern; some of the data can be years old, and may not capture modern technologies or use cases. As a result of these factors, we cannot conclusively determine causality between Internet use and depression.

Despite these limitations, however, the field shows promise; researchers are continuing to investigate whether a link exists between Internet use and depression, and whether defining such a link could help prevent or intervene on depression. One such example is the 2013 inclusion of *Internet Gaming Disorder* under the further considerations section of the latest edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5). With the American Psychiatric Association acknowledging that the Internet plays a major role in our lives and that the potential health outcomes require more research, the mental health community can start building a framework of consensus and look towards effective treatments for youth worldwide.

1. Organization WH. Depression. 2014; <http://www.who.int/topics/depression/en/>. Accessed June 1, 2014.
2. Health NIoM. Depression in Children and Adolescents (Fact Sheet). . <http://www.nimh.nih.gov/health/publications/depression-in-children-and-adolescents/index.shtml>. Accessed June 1, 2014.
3. Association. CMH. Fast Facts about Mental Illness. 2014; <http://www.cmha.ca/media/fast-facts-about-mental-illness/#.U53GMZRdUao>. Accessed June 1, 2014.
4. Organization WH. Suicide prevention (SUPRE). 2014; http://www.who.int/mental_health/prevention/suicide/suicideprevent/en/. Accessed June 1, 2014.
5. Madden M, Lenhart A, Duggan M, Cortesi S, Gasser U. *Teens and technology 2013*. Pew Internet & American Life Project; 2013.
6. Steeves V. Young Canadians in a Wired World, Phase III: Life Online. . 2014; http://mediasmarts.ca/sites/default/files/pdfs/publication-report/full/YCWWIII_Life_Online_FullReport.pdf. Accessed June 1, 2014.
7. Kraut R, Patterson M, Lundmark V, Kiesler S, Mukophadhyay T, Scherlis W. Internet paradox: A social technology that reduces social involvement and psychological well-being? *Am. Psychol.* 1998;53(9):1017.
8. Kraut R, Kiesler S, Boneva B, Cummings J, Helgeson V, Crawford A. Internet paradox revisited. *J. Soc. Iss.* 2002;58(1):49-74.
9. Romer D, Bagdasarov Z, More E. Older versus newer media and the well-being of United States youth: results from a national longitudinal panel. *J. Adolesc. Health.* May 2013;52(5):613-619.
10. Brunet J, Sabiston CM, O'Loughlin E, Chaiton M, Low NC, O'Loughlin JL. Symptoms of depression are longitudinally associated with sedentary behaviors among young men but not among young women. *Prev. Med.* Mar 2014;60:16-20.
11. Gross EF. Adolescent Internet use: What we expect, what teens report. *J. Appl. Dev. Psychol.* 2004;25(6):633-649.
12. Bélanger RE, Akre C, Berchtold A, Michaud P-A. A U-shaped association between intensity of Internet use and adolescent health. *Pediatrics.* 2011;127(2):e330-e335.
13. Bessièrè K, Pressman S, Kiesler S, Kraut R. Effects of internet use on health and depression: a longitudinal study. *J. Med. Internet Res.* 2010;12(1):e6.
14. Morgan C, Cotten SR. The relationship between Internet activities and depressive symptoms in a sample of college freshmen. *CyberPsychol. Behav.* 2003;6(2):133-142.
15. Ybarra ML, Leaf PJ, Diener-West M. Sex differences in youth-reported depressive symptomatology and unwanted internet sexual solicitation. *J. Med. Internet Res.* Feb 6 2004;6(1):e5.
16. Tynes BM, Giang MT, Williams DR, Thompson GN. Online racial discrimination and psychological adjustment among adolescents. *J. Adolesc. Health.* 2008;43(6):565-569.
17. Bonanno RA, Hymel S. Cyber bullying and internalizing difficulties: above and beyond the impact of traditional forms of bullying. *Journal of youth and adolescence.* May 2013;42(5):685-697.
18. O'Keeffe GS, Clarke-Pearson K, Council on C, Media. The impact of social media on children, adolescents, and families. *Pediatrics.* Apr 2011;127(4):800-804.
19. Morrison CM, Gore H. The relationship between excessive Internet use and depression: a questionnaire-based study of 1,319 young people and adults. *Psychopathology.* 2010;43(2):121-126.
20. Selfhout MH, Branje SJ, Delsing M, ter Bogt TF, Meeus WH. Different types of Internet use, depression, and social anxiety: The role of perceived friendship quality. *J. Adolesc.* 2009;32(4):819-833.
21. Davila J, Stroud CB, Starr LR, Miller MR, Yoneda A, Hershenberg R. Romantic and sexual activities, parent-adolescent stress, and depressive symptoms among early adolescent girls. *J. Adolesc.* 2009;32(4):909-924.
22. Davila J. The "Facebook Depression" Controversy. . 2011; <http://www.psychology.sunysb.edu/jdavila/webpage/facebook%20depression%20controversy.htm>. Accessed June 1, 2014.

23. Guernsey L. Garbled in Translation: Getting Media Research to the Press and Public. *Journal of Children and Media*. 2014;8(1):87-94.
24. Kross E, Verduyn P, Demiralp E, et al. Facebook use predicts declines in subjective well-being in young adults. *PLoS One*. 2013;8(8):e69841.
25. Jelenchick LA, Eickhoff JC, Moreno MA. "Facebook depression?" Social networking site use and depression in older adolescents. *J. Adolesc. Health*. 2013;52(1):128-130.
26. Horwitz AG, Hill RM, King CA. Specific coping behaviors in relation to adolescent depression and suicidal ideation. *J. Adolesc.* Oct 2011;34(5):1077-1085.
27. Young KS. Internet addiction: The emergence of a new clinical disorder. *CyberPsychol. Behav.* 1998;1(3):237-244.
28. Carpentier D, Brown JD, Bertocci M, Silk JS, Forbes EE, Dahl RE. Sad kids, sad media? Applying mood management theory to depressed adolescents' use of media. *Media Psychol.* 2008;11(1):143-166.
29. Campbell AJ, Cumming SR, Hughes I. Internet use by the socially fearful: addiction or therapy? *CyberPsychol. Behav.* 2006;9(1):69-81.
30. Primack BA, Silk JS, DeLozier CR, et al. Using ecological momentary assessment to determine media use by individuals with and without major depressive disorder. *Arch. Pediatr. Adolesc. Med.* 2011;165(4):360-365.