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# Internet Addiction Disorder and Mental Health in Adolescents

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#### Abstract

Internet use, especially social media has dramatically changed the way adolescents communicate, socialize, make and maintain friendships. Internet Addiction Disorder (IAD) is generally defined as an uncontrollable desire to use the Internet, leading to acute nervousness and aggression in the event of deprivation and progressive deterioration of social life. IAD is becoming a common mental health problem in adolescents. Worldwide, the prevalence of IAD in adolescents may vary from 1.98% to 35.8%. Sadness, feeling down, having a loss of interest in daily activities are some of the symptoms of IAD. Some possible treatments of IAD includes doing sport or spending more time with friends and developing healthy social networks.

**Keywords:** Internet addiction disorder; Depression; Anxiety; Mental health; Facebook depression; Social media

#### Introduction

Internet use, especially social media has dramatically changed the way adolescents communicate, socialize, make and maintain friendships. While there are benefits to live in a digital world, there are also risks involved. Nowadays most of the adolescent's lack skills of social development and they spend the majority of their free time in interacting via their screens. They are also lost in a world of unrealistic comparisons and cyberbullying, which creates feelings of shame and unworthiness. A study reported an increase in major depressive episodes from 8.7% in 2005 to 11.3% in 2014 in adolescents and from 8.8% to 9.6% in young adults. One report by the Royal Society for Public Health in the UK surveyed 1500 adolescents, to determine the effects of social media use on mental health issues such as anxiety, depression, self-esteem, and self-image. Their findings show that YouTube had the most positive impact, while Instagram, Facebook, Twitter, and Snapchat all had negative effects on mental health. Internet Addiction Disorder (IAD) is generally defined as an uncontrollable desire to use the Internet, leading to acute nervousness and aggression in the event of deprivation and progressive deterioration of social life. IAD is becoming a common mental health problem in adolescents. Worldwide, the prevalence of IAD in adolescents may vary from 1.98% to 35.8% [1-5].

### Discussion

## Understanding IAD and its impact

Mental health is the fifth greatest cause to the worldwide burden of disease with an economic cost approximated to be US \$2.5 trillion in 2010, and it is expected to double by 2030. World Health Organizations (WHO) Comprehensive Action Plan for 2013 to 2020 is developing information systems to support and strengthen population and level mental health and monitoring forms a main part.

The number of researches conducted on IAD reports that it is a mental health disorder, which features lack of patience, symptoms of isolation and emotional disturbances and interruption of social relationships [4].

Signs and symptoms of IAD are both emotional and physical. Some of the major emotional symptoms of IAD include depression, anxiety, mood swings and loneliness [5-8]. Physical symptoms of IAD include sudden gain or loss of weight, eye-sight problems, poor nutrition, neck pain, insomnia, headaches and backache [7,9] (an example can be found in Figure 1).

The most common assessment tools used to diagnose IAD includes Compulsive Internet Use Scale (CIUS), Young's Internet Addiction Test and Problematic Internet Use Questionnaire (PIUQ) [10].

Some of the common recommended treatments of IAD are reality therapy, art therapy, recreation therapy, equine therapy, dialectical behavior therapy (DBT), cognitive behavioral therapy (CBT), behavior modification and individual, group or family therapy [11].

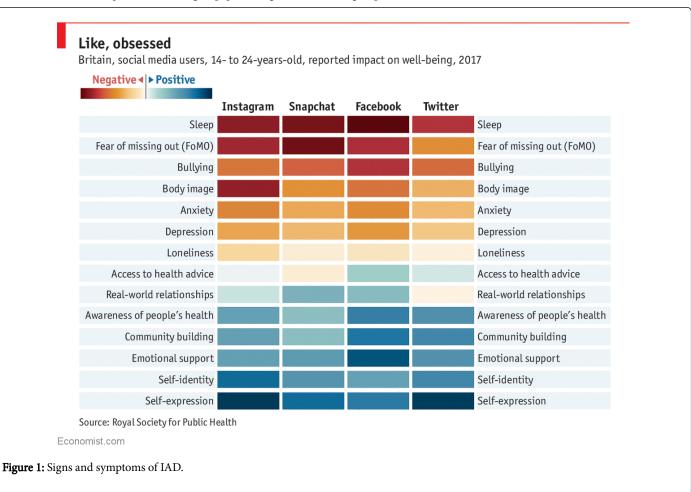
# IAD and mental health in adolescents

Adolescents who are addicted to the Internet are more likely to develop mental health problems than other adolescents, who are classified as normal Internet users. Sadness, feeling down, having a loss of interest in daily activities are some of the symptoms [11,12].

A study conducted in Southern Taiwan provided details about factors predictive for incidence and remission of IAD in adolescents. The study examined family function, gender life satisfaction, personality, mental health, self-esteem and interact activities. The results reported low-self-esteem, lower self-image, less social interaction in adolescents suffering from IAD [13,14].

Adolescents suffering from IAD also develop the tendency of media multitasking (presence on lot of social media accounts to support the low self-esteem), which is associated with symptoms of depression and social anxiety [15,16]. A research examined the effect of the social networking site Facebook versus Face-To-Face support networks

(personal interaction with friends) on depression among college students. The outcome points out that group practicing face-to-face interaction has better social bonding and less depression versus the group which was more active on Facebook [17-22].



Another study on IAD discussed a popular term called "Facebook Depression". The study suggested that use of social networking website particularly Facebook may increase self-esteem and well-being in adolescents, if the feedback provided by the viewers is positive. When the feedback is negative, the self-esteem decreases, thus impacting an individual's study results, health, work and personal relationships. In addition, the study mentioned that it can cause Facebook Depression [23-26].

The best possible treatment for IAD in adolescents is sport or physical exercise. It allows adolescents to interact more with friends and to overcome the IAD. A study discussed the influence of sports on IAD in adolescents. It reported that IAD in adolescents caused problems for physical health, mental health and social health respectively and recommended that sports could play a positive role in improving health of adolescents with IAD [16].

Another research among Korean adolescents suggested that in IAD treatment program need sport and physical activity. It has physical and psychological benefits unlike other intervention strategies like art or recreation therapies. Based on this research study it was concluded that physical exercise programs or sports should be combined with other treatments for adolescents suffering IAD [27-30].

IAD in adolescents has negative outcomes in social, physical and psychological levels, including academic/work failure, physical

problems, psychological problems, delinquency/crimes, etc. Involvement in sports and spending time with family and friends could help adolescents in overcoming IAD eventually [31].

### Conclusion

Obsessive use of the Internet leads to IAD and evidences are mounting that IAD has a negative impact on mental health of adolescents. It has negative implications such as sadness, feeling down, having a loss of interest in daily activities, distraction from normal exercises and other physical play as well as social interaction with friends. Adolescents who have high IAD, are more likely to suffer from emotional and mental stress, depression or social anxiety. However, the researchers have already uncovered some ways to treat the IAD, such as doing sport or spending more time with friends and developing healthy social networks.

### References

- Bahrainian SA, Alizadeh KH, Raeisoon MR, Gorji OH, Khazaee A (2014) Relationship of Internet addiction with self-esteem and depression in university students. Journal of Preventive Medicine and Hygiene 55: 86.
- Anderson KJ (2001) Internet use among college students: An exploratory study. Journal of American College Health 50: 21-26.

- Freeman R (2009) The Internet: A web of disconnection. Pacifica Graduate Institute.
- 4. Goldberg I (1996) Internet addiction disorder.
- Hurley K (2018) Is Social Media Messing with Your Teen's Mental Health? Vertical Health LLC., PSYCOM.
- Akin A, Iskender M (2011) Internet addiction and depression, anxiety and stress. International Online Journal of Educational Sciences 3: 138-148.
- 7. Gregory C (2019) Internet Addiction Disorder. PSYCOM.
- Kuss DJ, Lopez-Fernandez O (2016) Internet addiction and problematic internet use: A systematic review of clinical research. World Journal of Psychiatry 6: 143.
- Tao R, Huang X, Wang J, Zhang H, Zhang Y, et al. (2010) Proposed diagnostic criteria for internet addiction. Addiction 105: 556-564.
- King DL, Delfabbro PH (2014) Internet gaming disorder treatment: a review of definitions of diagnosis and treatment outcome. Journal of Clinical Psychology 70: 942-955.
- 11. Cunningham JA, Gulliver A, Farrer L, Bennett K, Carron-Arthur B (2014) Internet interventions for mental health and addictions: current findings and future directions. Current Psychiatry Reports 16: 521.
- Greydanus DE, Greydanus MM (2012) Internet use, misuse, and addiction in adolescents: current issues and challenges.
- Ko CH, Yen JY, Yen CF, Lin HC, Yang MJ (2007) Factors predictive for incidence and remission of internet addiction in young adolescents: a prospective study. Cyber Psychology & Behavior 10: 545-551.
- 14. Caplan SE (2006) Relations among loneliness, social anxiety, and problematic internet use. Cyber Psychology & Behavior 10: 234-242.
- Becker MW, Alzahabi R, Hopwood CJ (2013) Media multitasking is associated with symptoms of depression and social anxiety. Cyberpsychology, Behavior, and Social Networking 16: 132-135.
- Zhang W (2012) The influence of sports about internet addiction on teenagers' health in different dimensions. In: Knowledge Discovery and Data Mining. Springer, Berlin, Heidelberg, pp: 739-744.
- Appel H, Gerlach AL, Crusius J (2016) The interplay between Facebook use, social comparison, envy, and depression. Current Opinion in Psychology 9: 44-49.
- 18. Southwick SM, Charney DS (2012) The science of resilience: implications for the prevention and treatment of depression. Science 338: 79-82.
- Lemola S, Perkinson-Gloor N, Brand S, Dewald-Kaufmann JF, Grob A
   (2015) Adolescents' electronic media use at night, sleep disturbance, and

- depressive symptoms in the smartphone age. Journal of Youth and Adolescence 44: 405-418.
- Bargh JA, McKenna KY (2004) The Internet and social life. Ann Rev Psychol 55: 573-590.
- Guntuku SC, Yaden DB, Kern ML, Ungar LH, Eichstaedt JC (2017)
   Detecting depression and mental illness on social media: an integrative
   review. Current Opinion in Behavioral Sciences 18: 43-49.
- 22. Wright KB, Rosenberg J, Egbert N, Ploeger NA, Bernard DR, et al. (2013)
  Communication competence, social support, and depression among college students: A model of Facebook and face-to-face support network influence. Journal of Health Communication 18: 41-57.
- Schmidt CW (2012) Trending now: using social media to predict and track disease outbreaks.
- 24. Conway M, O'Connor D (2016) Social media, big data, and mental health: current advances and ethical implications. Current Opinion in Psychology 9: 77-82.
- Lin LY, Sidani JE, Shensa A, Radovic A, Miller E, et al. (2016) Association between social media use and depression among US young adults. Depression and Anxiety 33: 323-331.
- Jelenchick LA, Eickhoff JC, Moreno MA (2013) "Facebook depression?" Social networking site use and depression in older adolescents. Journal of Adolescent Health 52: 128-130.
- Błachnio A, Przepiórka A, Pantic I (2015) Internet use, Facebook intrusion, and depression: results of a cross-sectional study. European Psychiatry 30: 681-684.
- Park JA, Park MH, Shin JH, Li B, Rolfe DT, et al. (2016) Effect of sports participation on internet addiction mediated by self-control: A case of Korean adolescents. Kasetsart Journal of Social Sciences 37: 164-169.
- Henchoz Y, Studer J, Deline S, N'Goran AA, Baggio S, et al. (2016) Video gaming disorder and sport and exercise in emerging adulthood: a longitudinal study. Behavioral Medicine 42: 105-111.
- Jolly M, Verbeke W (2018) Immune System Function and its Relation to Depression: How Exercise can Alter the Immune System Depression Dynamics. J Depress Anxiety 7: 325.
- Jiang Q (2019) Risk Factors and Clinical Assessment of Internet-Addicted Adolescents. In: Internet Addiction Among Cyberkids in China: Risk Factors and Intervention Strategies. Springer, Singapore, pp: 85-142.

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