

## **An Evaluation of the Negative Effects of overuse of the Internet and Mental Health in Adolescents**

**K Vinod Kumar Reddy<sup>1</sup>, Dr. Amalanathan P<sup>2</sup>, Dr. Ulagammai M<sup>3</sup>, Dr. Prathima P<sup>4</sup>, Satheesh Varma M<sup>5</sup>**

<sup>1</sup>Assistant Professor, Computer Science and Engineering, Ravindra College of Engineering for Women, Kurnool, India.  
vinodssbr@gmail.com

<sup>2</sup>Associate Professor, Xavier Institute of Management and Entrepreneurship (XIME), Chennai Campus, Tamil Nadu, India.  
amalanathan@xime.org

<sup>3</sup>Associate Professor, EEE department, Saveetha Engineering college, Chennai, India.  
ulagammai161982@gmail.com

<sup>4</sup>Principal, Department of Obstetric and Gynecology Nursing, Sree Vidyanikethan College of Nursing, Tirupati, Andhra Pradesh, India.  
prathima\_1978@ymail.com

<sup>5</sup> Assistant Professor, School of Philosophy, Psychology and Scientific Heritage  
Chinmaya Vishwa Vidyapeeth, Ernakulam, Kerala, India  
satheesh.varma@cvv.ac.in

Received: 07- June -2023

Revised: 09- July -2023

Accepted: 03- August -2023

### **Abstract**

This paper has focused on the evaluation of the negative effects of the overuse of the internet and mental health in adolescents. In the evaluation of the negative effects of the overuse of the internet, the teenagers learned to adopt the positive and judicial way to use the internet that does not cause mental illness. Group experiment has been designed with different groups based on internet overuse. Secondary data analysis has been performed here as the data had collected from various journals. The negative effects result in mental illnesses such as Insomnia, depression, and anxiety following recommends less use of the internet and meditation. It has been found that the evaluation target the negative effects of the overuse of the internet and enables adolescents to reduce the use of the internet and improve mental health. It has also been found that the evaluation of overuse of the Internet has challenges that are faced through teenagers and the impact on their life of teenagers.

**Keywords:** Adolescents, mental health, depression, anxiety, Internet overuse, social media, suicidal tendency, mental disorder, physiological, physical level, Internet addiction.

### **Introduction**

The wide expansion of the use of the Internet has conquered several aspects of regular life. It has gained recognition in the informative, educational and entertaining, and health sectors for all ages and it specifically has a great impact on adolescents. In the present time, teenagers engage their time in online activity and it has become an important part of their life. They can use these services in respect of time, place, and location through online engagement. In recent times, it showed that the rate of internet usage among teenagers has grown high in a global manner. The use of the internet makes it a problematic issue to use the internet for a longer time in an intense manner. The change in the behavior of teenagers results in forms of stress and anxiety. The excessive use of the internet makes an undesirable change in the mental level resulting in mania or hypomania. Internet usage causes some undesirable changes in teenagers that cause some common symptoms in mood swings, tolerance, idol worship desire, and much more. The chemical reactions that cause changes in mental instability are exhibited and raised by the source of internet websites and information through adolescents' mental level. The use of the internet causes a negative impact on the daily life of teenagers through the disbalance of their interpersonal relationships, mood behavior, daily life activity, and physical activity. It also affects our biological cycle of eating routine, sleeping time, and so on. In addition to this, the prolonged usage of the internet in the life of adolescents causes physiological problems such as back pain, headache, tiredness, and migraine that are linked with the problems of

depression and anxiety. The use of the internet in the life of adolescents and health causes depression and loneliness while comparing their life with others.

### **Literature review**

#### **The Use of the Internet in the Life of Adolescents**

The Internet has become an integral and important part of the daily life of people. It is an irreplaceable and dependent entity that has a wide application in the daily lives of people and especially adolescents[1]. The use of the internet makes an indispensable tool for the activities such as shopping, communication, and study and provides a path to stay in touch with friends and family. It provides various connections among the lives of teenagers through social media platforms such as Facebook, Instagram, WhatsApp, and so on. These social media platforms provide a path of entertainment and information through connecting with individuals and providing them with relevant content.

The use of the internet enables the life of adolescents in both ways, that is it affects the use of the internet in a positive and negative manner. The rise in technology makes a revolution in the digital world through 3G and 4G connections and the advent of cheap 3G and 4 G-enabled smartphones[2]. This technology along with cheaper smartphones brings easy access to many adolescents that cannot afford these smartphones' features and internet facilities. The advantage gained to teenagers is that the Internet becomes accessible to individuals across different groups related to social and economic sectors.

The use of the internet in the life of adolescents brought a change in the way of their study and its related techniques. The change in the ways of study changes from offline to online mode changes the approach of teenagers toward their subject study. The Internet causes the understanding and evaluation of the subjects in a better form and reduces the time to understand any topic through video lectures. It helps to gain the depth knowledge of any subject-related topic and other useful information for teenagers. The knowledge gained through the internet to adolescents helps to enhance their skills and develop depth knowledge about any topic.

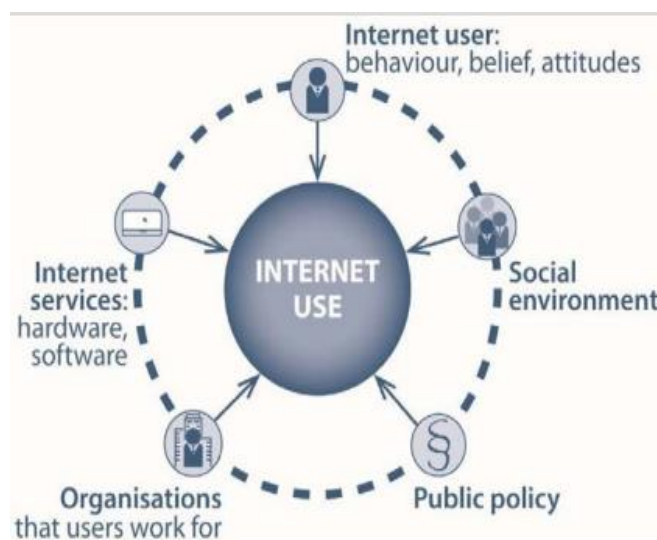
The usage of the internet also negatively affects the life of adolescents through negative content, unusual content, and vulgar content. This content makes a wrong impression in the mind of adolescents and potentially goes in the wrong direction[3]. It involves vulgar content from internet sources in the form of images, text, and majorly videos that shift the mind of adolescents in another direction and distracted them from their aim in life. It also affects the physical health of the adolescent's life through internet addiction.

#### **Challenges Faced by the Adolescents**

There were many challenges for the life of adolescents with the usage of the internet and its consequences that cause mental distress to them. Teenagers face challenges on a psychological level and physical levels that make it difficult to cope for adolescents. The adolescents go through mood disorder that results in symptoms of social anxiety and the level of supreme knowledge and the disturbance of personal relations and thinking between the parents and the adolescents[4]. The thought of the teenagers shows that nobody loves them nor cares about their aim and ambition in life. In this phase, adolescents face greater anxiety symptoms and perceptions that impact their life and their emotions are difficult to control. The relationship between the suicidal tendency and mental disorders of mental health with the function of social linkage made a disastrous change in the mood of adolescent's life. The mood swing problem is the main problem of adolescent's life that is faced by adolescents during their daily life activities and study.

The psychological distress increase in this phase causes an increase in the severity in the life of adolescents. The allergy to food found to be a challenging one for adolescents is associated with depression, anxiety problems, and aggressive behavior in adolescents. Another challenge faced for adolescents to cope with stress according to different situations. Psychological stress is found to increase that is so much more difficult to cope with and it occurs outdoors and experiences disagreements with the parents, teasing, and teasing that arises stress in them[5]. In addition to gender-based challenges in the phase of a teenager's life that females have great moods of depression and low sleep timing than males.

The males in this phase have less romantic relationships than females and the food allergy is higher in boys than girls. The social anxiety that arises in males and females with parental worry and level of control. Anxiety for teenagers relates to physical and mental development that is difficult to cope with and control with the environment and age difference factor. Another challenge faced is that not every male or female is fully developed on physical and mental levels and such that slow-learned teenagers cannot cope with normal teenagers[6]. It makes them alone and has a low confident personality and also makes them uncomfortable with leading a positive life.



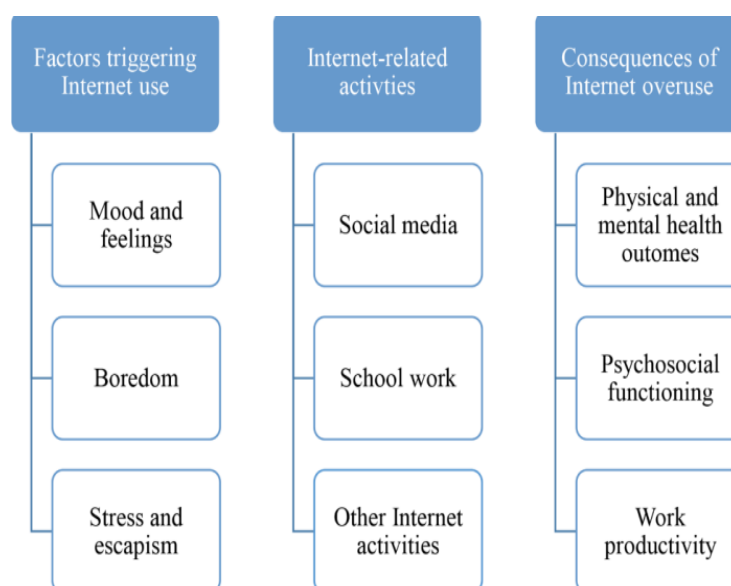
**Figure 1: Effects of Internet Use in adolescent life**

(Source: PLOS)

### **Impact of internet overuse on the Health of Adolescents**

The impact of the over usage of internet causes an adverse effect on the life of teenagers that also affects the health of teenagers and their daily activity. The use of the internet has some benefits and also some harmful effects that cause different impacts on the health of teens. The use of the internet causes teens to create online identities and allow a channel of communication all over the world through different social media networks. The network provides adolescents support with valuable quantity and helps them to experience the remedy of chronic disease and disabilities through information sharing[7]. Social media for entertainment also make a comfortable place for expressing their ideas and creativity. Social media also make a positive impact on the interaction with the different personality and their specific field to choose the better career sector regard of their idol experience and struggle.

The overuse of the internet and social media platform make them addicted to the internet and from this, it adversely causes a harmful effect on the health of teenagers life. The addiction to smartphones in the life of teens causes irregular routine of their daily eating habit and sleeping routines that results in bad effects on their health. The impact of this activity causes a negative effect on physical and mental levels. The random eating of teenagers make them internally weak and arises a lot of diseases such as insomnia, ulcer, digestion-related problem, and so on. This impact falls on the adolescent life through physical means such as disease through eating habits and it also makes a change in mental health as the change in behavior psychology in terms of suicidal tendency, low self-esteem, confusion about career perspective, depression, and anxiety problem [8]. The negative impact of overuse of the internet on mental health is associated with negative effects on academic performance, cognitive control, and the function of social and emotional. Perspective. The mental effect of the disorder leads to the symptoms of hyperactivity disorder (ADHD) that are concerned with the deficiency of attention towards any matter [9]. The youth go on playing games that affect their mental condition in a very bad manner. The prolonged use of a smartphone or any other social media platform makes them addictive as well as causes a lack of interaction in the social community in the life of Teenagers.



**Figure 2: Factor affecting Internet use and its overuse consequences**

(Source: PLOS)

## Methodology

This research paper uses the structured methodology that is used for managing complex data. This structural methodology also helps to produce the accessible structure for the data on the negative effects of the overuse of the internet and mental health in adolescents. This paper also includes the philosophy of positivism that is used to adhere to the knowledge through observation that is used for gaining knowledge of the overuse of the internet and its complications in the mental health of teenagers. The qualitative approach used in this research paper for analyzing the evaluation of the negative effects of internet overuse and its effect on the mental health of teenagers. This research paper also develops the hypothesis according to the data analysis[10]. This paper also uses a deductive approach that is used for the analysis of the overuse of the internet and its effect on mental health. The descriptive design approach focuses on the information that describes the issues and challenges in the overuse of the internet and its impact on mental health. The secondary resources used in this research paper are collected from Google Scholar, Semantic Scholar, ProQuest, PubMed, and so on[11]. This research paper uses the technique of data analysis strategy for the negative effect of internet overuse on the mental condition of adolescents. This paper also uses the probability sampling technique that helps the researcher to select resources randomly for the study. This approach shows the evaluation involved for the negative effects and impacts of the overuse of the internet concerned with the mental health problem of adolescents. This paper also involves the thematic analysis of the impact of the overuse of the internet on the mental health of the teenage child. This paper also uses for the quality assessment of the negative effect of overuse of the internet.

## Discussion

It has been discussed from the current finding on the evaluation of the negative effects of overuse of the internet and mental health in adolescents. The results are overwhelming and demonstrate that the state of mental health of teenagers that there is impairment of the mental health increased emotional stress, the feeling of helplessness, and social and personal fear that evolve into mental illness conditions such as depression, anxiety, and symptoms of post-traumatic stress[12]. The increase in the cases of mental health problems for the overuse of the internet leads to unhealthy behavior such as mood swings, and low self-esteem.

The Internet has become an important element for entertainment, education, and interaction among the community. It also signifies the negative effects of the means of communication through the research. It also impacts the problems that occur with internet use in various sectors such as physical, mental, and psychological mental levels among different people of different ages. The primary objective of the review was to examine and

concern the problems arising with the usage of the internet. It shows that the finding that the internet affects the efficiency and timetable of sleeping in various ways. It is to be found that the higher the use of the internet through different sources, the worse the condition of sleep for an adolescent. Furthermore, problems arise with the use of the internet that is associated with the intake of sleep medication.

Several findings showed that the effect of internet use creates problems with sleep efficacy. It includes the sleep quantity and quality in regards to the relation between the use of the internet and sleep habit. It showed that the higher the use, the more serious the condition of the sleep. The finding also found that the problematic use of the internet, the users likely to demonstrate sleep latency for a longer time results in less sleep. The finding found the sleep disorder of Insomnia that is observed with the use of the internet. It shows that the more time on the internet is associated with insomnia. The more adolescents spend more than 5 hours on in terms of internet use, the more the symptoms of insomnia arise [13]. Adolescents that suffer from sleep disorder problems have developed several serious mental issues such as anxiety and depression. It also shows that the use of the internet causes emotional difficulties and this led to the use of medication for a longer period. The finding also comes with the use of the internet between males and females that the use of internet use problem is higher for females concerning males. The finding found on the contradiction basis found that females are more likely to experience mood disorders that result in the effect of their sleep due to hormonal fluctuation during the phase of teenagers. It was found that the combination of parents' economic condition and low-level education was related to the high score of internet use and negative result in sleep.

### **Findings**

It has been found from the discussion of the negative effects of overuse of the Internet and mental health in adolescents that the overuse of the Internet has a negative impact on the life of adolescents and their health in an adverse way. It was found under the thematic areas of the negative effect of the overuse of the internet on teenager's life. It also includes the use of the internet, challenges faced through teenagers, and the impact of the overuse of the internet on teenager's life [14]. The use of the internet on discussion on the overuse of the internet includes psychological stress, anxiety problem, and depression problem. It also involves the negative impact n the adolescent's life of the excessive use of the internet. It has also been found that the internet has become an integral part of human life. It also includes the activities of shopping, ticket booking, education, communication, business, marketing, and a lot more. It also has a great impact on the screen time of different social media portals such as Facebook, Whatsapp, Instagram, and so on [15]. It also found that the use of the internet causes some issues that have faced through teenagers from different stages. The thought develops in the mind of teenagers that they do not get love for the amount of their part. It is the stage of a lot of emotional challenges in personal life and social life. The psychological stress massively increases in the life of adolescents for fighting the challenges of choosing a right career path in their academic life.

### **Conclusion**

From the above finding and discussion, it is concluded that the overuse of the internet in the life of teenagers has an adverse impact on their health on the psychological and physical levels. The use of the internet has increased health problems and causes negative effects on mental and physical levels. The use of the internet in the life of teenagers is increased and it causes a lot of serious problems such as depression, anxiety, and insomnia problems[16]. It also signifies the overuse of the internet has a different impact on women than men. It shows the sleep rate of females is less than the sleep time of males. It also shows that males in this phase have fewer romantic relationships than females and food allergy is higher in boys than girls. Females have more behavior of mood swings than males. In the phase of adolescence, the development of physical body structure and voice creates individual differences among the different male and female groups. The overuse of the internet causes a serious impact on the health of teens such as chronic disease and disabilities The overuse of internet and the social media platform make teenagers addicted to the internet social media portal and decreases their efficiency level The negative impact of the internet for its overuse is associated with mental health as changes in behavior, suicidal tendencies, low self-esteem, and confusion toward career perspective It is to be concluded that the right and judicial use of the internet keeps us knowledgeable and updated in the present life and also keeps mental and physical health in definite proportion.

## References

1. Kokka, I., Mourikis, I., Nicolaides, N.C., Darviri, C., Chrousos, G.P., Kanaka-Gantenbein, C. and Bacopoulou, F., 2021. Exploring the effects of problematic internet use on adolescent sleep: A systematic review. *International Journal of Environmental Research and Public Health*, 18(2), p.760.
2. El Asam, A., Samara, M. and Terry, P., 2019. Problematic Internet use and mental health among British Children and adolescents. *Addictive behaviors*, 90, pp.428-436.
3. Saikia, A.M., Das, J., Barman, P. and Bharali, M.D., 2019. Internet addiction and its relationships with depression, anxiety, and stress in urban adolescents of Kamrup District, Assam. *Journal of family & community medicine*, 26(2), p.108.
4. Machimbarrena, J.M., González-Cabrera, J., Ortega-Barón, J., Beranuy-Fargues, M., Álvarez-Bardón, A. and Tejero, B., 2019. Profiles of problematic internet use and its impact on adolescents' health-related quality of life. *International journal of environmental research and public health*, 16(20), p.3877.
5. Faltýnková, A., Blinka, L., Ševčíková, A. and Husarova, D., 2020. The associations between family-related factors and excessive internet use in adolescents. *International journal of environmental research and public health*, 17(5), p.1754.
6. Vazquez-Ortiz, M., Angier, E., Blumchen, K., Comberiati, P., Duca, B., DunnGalvin, A., Gore, C., Hox, V., Jensen, B., Pite, H. and Santos, A.F., 2020. Understanding the challenges faced by adolescents and young adults with allergic conditions: a systematic review. *Allergy*, 75(8), pp.1850-1880.
7. Patterson, S.P., Hilton, S., Flowers, P. and McDaid, L.M., 2019. What are the barriers and challenges faced by adolescents when searching for sexual health information on the internet? Implications for policy and practice from a qualitative study. *Sexually transmitted infections*, 95(6), pp.462-467.
8. Chung, S., Lee, J. and Lee, H.K., 2019. Personal factors, internet characteristics, and environmental factors contributing to adolescent internet addiction: A public health perspective. *International journal of environmental research and public health*, 16(23), p.4635.
9. Martins, M.V., Formiga, A., Santos, C., Sousa, D., Resende, C., Campos, R., Nogueira, N., Carvalho, P. and Ferreira, S., 2020. Adolescent Internet addiction—the role of parental control and adolescent behaviors. *International Journal of Pediatrics and Adolescent Medicine*, 7(3), pp.116-120.
10. Sedgwick, R., Epstein, S., Dutta, R. and Ougrin, D., 2019. Social media, internet use and suicide attempts in adolescents. *Current opinion in psychiatry*, 32(6), p.534.
11. Dienlin, T. and Johannes, N., 2022. The impact of digital technology use on adolescent well-being. *Dialogues in clinical neuroscience. International Journal of Pediatrics and Adolescent Medicine*, 7(3), pp.116-120.
12. Gusenbauer, M., 2019. Google Scholar to overshadow them all? Comparing the sizes of 12 academic search engines and bibliographic databases. *Scientometrics*, 118(1), pp.177-214.
13. Martins, M.V., Formiga, A., Santos, C., Sousa, D., Resende, C., Campos, R., Nogueira, N., Carvalho, P. and Ferreira, S., 2020. Adolescent Internet addiction—the role of parental control and adolescent behaviors.
14. Meherali, S., Punjani, N., Louie-Poon, S., Abdul Rahim, K., Das, J.K., Salam, R.A. and Lassi, Z.S., 2021. The mental health of children and adolescents amidst COVID-19 and past pandemics: a rapid systematic review. *International journal of environmental research and public health*, 18(7), p.3432.
15. Montag, C. and Elhai, J.D., 2020. Discussing digital technology overuse in children and adolescents during the COVID-19 pandemic and beyond: On the importance of considering Affective Neuroscience Theory. *Addictive behaviors report* 12, p.100313.
16. Vanita Suthar. (2022). Therapeutic Effects of Pomegranate (Punica Granatum). *Journal of Pharmaceutical Research and Innovation (JPRI)*, 2 (2), 23-28.