

## **Internet Addiction, Mental Health and Academic Performance of School Students/Adolescents**

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### **ABSTRACT:**

Every student desires to perform well in schooling whether it is academic performance or others. Students' performance gets distorted by many factors like overburden, difficulty of subject etc. Information technology has put another kind of burden on students. It is interesting on one hand while distracting on the other hand. This is mainly use of internet among adolescents due increasing literacy of computer and its uses in day today life. Observing present scenario the current study is aimed to find out the effect of internet addiction on mental health and academic performance of students. The sample consisted of 100 high school students, age ranging, 14 to 16 years drawn randomly from English medium schools of Rishikesh & Haridwar (Uttarakhand). Findings of the present study revealed that there was a significant effect of internet addiction on academic performance and mental health of students/adolescents. Results further indicated that the students who were in the severe and profound groups of internet addiction were found to have detrimental effects on both in their academic performance and mental health rather than the students who were addicted to the internet usage moderately.

**Keywords:** *Internet Addictions, Academic Performance, Mental Health, High School Students.*

Internet being the most easily accessible media to adolescents nowadays in the name of academic and other purposes has compelled to use it more and more. This media has not only become a good source of information for knowledge but also for other purposes like social interactions, gaming, entertainments and etc. Human nature being more tilted to enjoyment has increased use of internet. At the beginning it seems interesting later it becomes habit and last it may become addiction. And if one talks about adolescents who are more prone to fall prey of such distraction lead to create trouble for their schooling. The capacity of the Internet for socialization is a primary reason for the excessive amount of time people spend having real-time interactions using e-mail, discussion forums, chat rooms, and online games (Grohol, 2005). There are no universally accepted definitions for the captioned condition, but investigators seem to agree that it involves problematic computer usage that is time-consuming and causes distress or impairs functioning in important life domains.

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Several etiological models have been proposed, from the diverse perspectives of learning theory, cognitive behavioral theory, social learning, reward deficiency, culture, genetics and neurobiology. Controversies abound, ranging from conceptual (whether behavioral addictions are true addictions), technical (which component of Internet use is a person 'addicted' to), and practical (how should Internet addiction be diagnosed, if it exists at all). However, using various instruments and populations, Internet addiction has been suggested as having a prevalence of 0.3 to 38%, with a young male preponderance. Several screening, diagnostic, and severity assessment instruments are now available, but few have been subjected to rigorous psychometric testing. Psychiatric co-morbidity is common. Treatment modalities lack a firm evidence base, but antidepressants, mood stabilizers, and cognitive behavioral therapy and other psychotherapies have been used. Recently, the American Psychiatric Association recommended including Internet addiction in its forthcoming 5th edition of the Diagnostic and Statistical Manual of Mental Disorders, but only as an appendix and not in the main body of the addictive disorders. This appears to be a fairly balanced and cautious approach, which can hopefully give rise to more meaningful research in this important but controversial area (Chakraborty et al., 2010). User participation at sites such as Blogger.com, MySpace.com, and Wikipedia.org increased by 525%, 318%, and 275% respectively (Walker, 2006). However, the networking capabilities of the Internet can cause social isolation and functional impairment of daily activities (Shapira et al., 2003). Broadly speaking, addiction is defined as a "compulsive, uncontrollable dependence on a substance, habit, or practice to such a degree that cessation causes severe emotional, mental, or physiological reactions (Louis, 1998). A perusal of the literature revealed various names for Internet addiction, including cyberspace addiction, Internet addiction disorder, online addiction, Net addiction, Internet addicted disorder, pathological Internet use, high Internet dependency, and others (Davis et al., 2002; Hur, 2006). Among these terms, Internet addiction is most popular (Thatcher and Goolam, 2005; Soule et al, 2003). The growing popularity of social networking sites (SNS) among the Internet users demands an introspection of personal and social behavior of human beings. Today 1.5 billion people across the world have their profiles in social networking sites. Everything looks nice when you create a profile on social networking site, but how you feel when someone starts blackmailing using your personal data. Your boss threatens to fire you for posting comments on SNS. You feel compulsive to check your profile during work hours. SNS becomes a reason for anxiety and addiction. It starts affecting personal relationship with spouse and family members. Such sites make private life and public life of an individual a digital document. How SNS affecting our social behaviour and relationships? Are we going towards a prosperous future or a darker world of SNS? (Das and Sahoo, 2012).

Recent researches at colleges and universities have suggested that some college students' academic performance might be impaired by heavier use of the Internet. Heavier recreational Internet use was shown to be correlated highly with impaired academic performance. Loneliness, staying up late, tiredness, and missing class were also inter-correlated with self-reports of Internet-caused impairment. Self-reported Internet dependency and impaired academic performance were both associated with greater use of all Internet applications, but particularly with much greater use of synchronous communication applications such as chat rooms and

MUDs, as opposed to asynchronous applications such as email and Usenet newsgroups (Kubey et al., 2001). In a study impact of internet literacy, internet addiction symptoms, and internet activities on academic performance examines the interrelationships among Internet literacy, Internet addiction symptoms, Internet activities, and academic performance. Regression results show that adolescent Internet addicts tended to be male, in low-income families, and not confident in locating, browsing, and accessing information from multiple resources, but that they were technologically savvy and frequent users of social networking sites (SNS) and online games for leisure. Contrary to what was hypothesized, Internet literacy, especially in publishing and technology, increases-not decreases-the likelihood of someone getting addicted to the Internet. As expected, Internet activities, especially SNS and online games, were significantly and positively linked to Internet addiction as well as to all Internet addiction symptoms. This finding suggests that leisure-oriented Internet activities can be much more addictive than other applications such as communicating by e-mail or browsing WebPages. Furthermore, the higher subjects scored on tool and social-structural literacy, the better their academic performance would be; however, technical literacy skills, such as publishing and technology literacy, were not significant predictors for academic performance. This indicates that adolescents who can locate, browse, and access different information resources and who are knowledgeable about the context under which the information was created performed better both in overall grades and in academic competence (Louis and Paul, 2012). Although computers and the internet, indispensable tools in people's lives today, facilitate life on the one hand, they have brought new risks with them on the other. The results show a significant negative correlation between academic self-efficacy and problematic internet use, while the relation between problematic internet use and academic procrastination was not statistically significant. Furthermore, academic self-efficacy was determined to be a significant predictor of problematic internet use. The results also show a significant difference in problematic internet use in terms of students' programs, though levels of problematic internet use did not differ in terms of sex or ownership of a computer (Hatice, 2011).

It is found of the 987 adolescents who took part in the study, 681 (68.9%) were female and 306 (31.1%) were males. The mean age of adolescents was 16.82 years. Of the total, about 74.5% were moderate (average) users. Using Young's original criteria, 0.7% were found to be addicts. Those with excessive use internet had high scores on anxiety, depression, and anxiety depression.

Internet addiction may be harmful from students' mental health point of view as well. Shu and Chieh-Ju (2007) compared Internet addicts and non-addicts in Taiwanese high school. The analytical results revealed that Internet addicts spent almost twice as many hours on line on average than the non-addicts. Notably, surfing with a social/entertainment motivation and gratification was positively correlated with Internet addiction. Furthermore, Internet addicts obtained markedly higher overall PIUST scores and scored higher than non-addicts on four subscales (tolerance; compulsive use and withdrawal; related problems, including family, school, health, and other problems; interpersonal and financial problems). While Internet addicts perceived the Internet to have significantly more negative influences on daily routines, school

performance, teacher and parental relation than non-addicts, both Internet addicts and non-addicts viewed Internet use as enhancing peer relations. Moreover, students with personalities characterized by dependence, shyness, depression and low self-esteem had a high tendency to become addicted. Internet addiction not only may influence academic performance and mental health of students but also may become a reason for suicidal ideation among them. The relationship of Internet addiction to depression and suicidal ideation, it was examined among 1573 participants of high-school students living in a city who completed the self-reported measures of the Internet Addiction Scale. A correlation survey design was employed. Among the samples, 1.6% was diagnosed as Internet addicts, while 38.0% was classified as possible Internet addicts. The prevalence of Internet addiction did not vary with gender. The levels of depression and suicide ideation were highest in the Internet-addicts group. Future studies should investigate the direct relationship between psychological health problems and Internet dependency (Kyunghee et al., 2006). The severity of Internet addiction was evaluated using Young's Internet addiction test. The proportions of boys who were classified as Internet addicts and possible Internet addicts were 2.5% and 53.7%, respectively. For girls, the corresponding proportions were 1.9% and 38.9%, respectively. The prevalence of EDS was 11.2% (boys, 11.2%; girls, 11.1%). When Internet addicts were compared with non-addicts, they consisted of more boys, drank alcohol more, and considered their own health condition as poor. But smoking was not related with Internet addiction. The prevalence rate of EDS for Internet addicts was 37.7%, whereas that for possible Internet addicts and non-addicts was 13.9% and 7.4%, respectively. The prevalence of insomnia, witnessed snoring, apnea, teeth grinding, and nightmares was highest in Internet addicts, middle in possible addicts, and lowest in non-addicts. With adjustment for duration of Internet use, duration of sleep time, age, gender, smoking, taking painkillers due to headache, insomnia symptoms, witnessed apnea, and nightmares, the odds of EDS were 5.2-fold greater (95% confidence interval [CI]: 2.7–10.2) in Internet addicts and 1.9-fold greater (95%CI: 1.4–2.6) in possible Internet addicts compared to non-addicts. Internet addiction is strongly associated with EDS in adolescents. Clinicians should consider examining Internet addiction in adolescent cases of EDS (Kwisook et al., 2009). Problematic Internet addiction or excessive Internet use is characterized by excessive or poorly controlled preoccupations, urges, or behaviours regarding computer use and Internet access that lead to impairment or distress. Currently, there is no recognition of internet addiction within the spectrum of addictive disorders and, therefore, no corresponding diagnosis. It has, however, been proposed for inclusion in the next version of the Diagnostic and Statistical Manual of Mental Disorder (DSM). A review of published literature between 2000–2009 in Medline and PubMed using the term internet addiction surveyed in the United States and Europe have indicated prevalence rate between 1.5% and 8.2%, although the diagnostic criteria and assessment questionnaires used for diagnosis vary between countries. Cross-sectional studies on samples of patients report high co morbidity of Internet addiction with psychiatric disorders, especially affective disorders (including depression), anxiety disorders (generalized anxiety disorder, social anxiety disorder), and attention deficit hyperactivity disorder (ADHD). Several factors are predictive of problematic Internet use, including personality traits, parenting and familial factors,

alcohol use, and social anxiety. Although Internet-addicted individuals have difficulty suppressing their excessive online behaviours in real life, little is known about the pathophysiological and cognitive mechanisms responsible for Internet addiction. Due to the lack of methodologically adequate research, it is currently impossible to recommend any evidence-based treatment of Internet addiction (Weinstein and Lejoyeux, 2010). Several authors think Internet addiction is a separate disorder that merits inclusion in DSM-V. There is considerable controversy about this opinion. To assess the prevalence of Internet addiction in a representative sample of high school students attending secondary institutions in the district of Cremona and to assess any difference concerning variables such as gender, age, place of residence and kind of school attended. The majority of respondents were classified as normal users of the Internet ( $n = 2386$ , 94.19%), with 127 (5.01%) moderately addicted and 20 (0.79%) seriously addicted. Significant differences in gender and in kinds of school were found. No statistical differences were revealed in age and urban or rural conditions. This study has confirmed the general use of the Internet among youngest people, the emergence of Internet addiction and the male preponderance of this phenomenon (Roberto & Emilia, 2012). Internet addiction is a newly emergent disorder. It has been found to be associated with a variety of psychiatric disorders. Information about such coexisting psychiatric disorders is essential to understand the mechanism of Internet addiction. In a described the updated results for such disorders of Internet addiction which include substance use disorder, attention-deficit hyperactivity disorder, depression, hostility, and social anxiety disorder. It also provides a discussion for possible mechanisms accounting for the coexistence of psychiatric disorders and Internet addiction. The review might suggest that combined psychiatric disorders mentioned above should be evaluated and treated to prevent their deteriorating effect on the prognosis of Internet addiction. On the other hand, Internet addiction should be paid more attention to when treating people with these coexisting psychiatric disorders of Internet addiction. Additionally, it also suggests future necessary research directions that could provide further important information for the understanding of this issue (Koa et al., 2012). This study was designed to investigate the prevalence of Problematic Internet Use (PIU) and to investigate the potential risk factors for PIU among high school students in China. A cross-sectional study was conducted. Generalized mixed-model regression revealed that there was no gender difference between PIUs and non-PIUs. High study-related stress, having social friends, poor relations with teachers and students and conflictive family relationships were risk factors for PIU. Students who spent more time on-line were more likely to develop PIU. The habits of and purposes for Internet usage were diverse, influencing the susceptibility to PIU. PIU is common among high school students and risk factors are found at home and at school. Teachers and parents should pay close attention to these risk factors. Effective measures are needed to prevent the spread of this problem (Wang et al., 2011). A considerable body of research indicates that social support plays an integral role in determining students' successful adjustment to college. Unlike previous research that has evaluated face-to-face support interventions that occur during students' first semester at college, study reports on a student-centered social media site designed to enhance students' perceptions of social support prior to their arrival on campus. Results indicated that site usage increased students' perceptions

that they would have a diverse social support network during their first semester at college, even when controlling for other potent predictors (David et al., 2012). In a study related to facebook and disorders has revealed more facebook friends predicted more clinical symptoms of bipolar mania, narcissism and histrionic personality disorder but fewer symptoms of dysthymia and schizoid personality disorder. Technology-related attitudes and anxieties significantly predicted clinical symptoms of the disorders. After factoring out attitudes and anxiety, Facebook and selected technology uses predicted clinical symptoms with Facebook use, impression management and friendship being the best predictors. The results showed both positive and negative aspects of technology including social media as well as apparently detrimental effects of a preference for multitasking (Rosen et al., 2013). Cyberbullying has become a common occurrence among adolescents worldwide. A study investigated the epidemiological characteristics and risk factors of cyberbullying, utilizing a sample of 1,438 high school students from central China. Findings revealed that cyberbullying among high school students in the heartland of central China is relatively common with 34.84% (N = 501) of participants reported having bullied someone and 56.88% (N = 818) reported having been bullied by online. Significant gender differences were found, suggesting that boys are more likely to be involved in cyberbullying both as perpetrators and victims. Students with lower academic achievement were more likely to be perpetrators online than were students with better academic achievement. Students who spend more time on online, have access to the internet in their bedrooms, have themselves experienced traditional bullying as victims, and are frequently involved in instant-messaging and other forms of online entertainment are more likely to experience cyberbullying. Increased parent and teacher supervision reduced students' involvement in cyberbullying. Implications for intervention are explored (Zongkui et al., 2013). The term Internet addiction encompasses a broad range of activities which in isolation have rarely been studied for their clinical relevance. This study looks at whether video game addiction and Internet addiction can be regarded as distinct nosological entities and whether there is a differential impact on those affected. It also aims to describe the type of activities that contribute most to the addiction. Methods: Data was collected in a school survey of Grade 7 to 10 students (M = 14.5 years; n = 4 436). Besides video game addiction (CSAS-II) and Internet addiction (CIUS), indicators of media consumption, functional level, well-being, burden for significant others and psychological strain were collected. Results: Internet and video game addiction can be regarded as two distinct sociological entities. This differentiation is supported by differences in socio-demographic variables and measures of validation. The subjective suffering seems to be higher among adolescent video game addicts than Internet addicts. Girls with an Internet addiction cite social networks almost exclusively as the cause of their problem while boys also name pornography. Discussion: In research on Internet addiction, a greater differentiation is needed regarding the underlying activities (Florian, 2013).

### OBJECTIVES

1. To study the effect of internet addiction on academic performance of school students/ adolescents.

2. To study the effect of internet addiction on mental health of school students/ adolescents.

### **HYPOTHESES**

1. There would be significant effect of internet addiction on academic performance of school students/ adolescents.
2. There would be significant effect of internet addiction on mental health of school students/ adolescents.

### **METHODOLOGY**

Sample: The sample for the present investigation consisted of 120 school students/adolescents (60 males and 60 females), age ranging 14 to 16 years randomly selected from English medium schools at Rishikesh & Haridwar (Uttarakhand) respectively.

### **Research Design and Data Analysis**

The present investigation is a quantitative assessment to study the effect of internet addiction on academic performance and mental health of school students/ adolescents. F-test is used to assess the effect of internet addiction on academic performance and mental health of high school students.

**Tools: The following Questionnaires were administered for the present investigation:**

**MENTAL HEALTH SCALE** (Bhatia and Sharma, 1998): The M.H.S. measure a total of five dimensions of the mental health of the students' i.e. realistic, joyful living, autonomy, emotional stability and social maturity. It contains a total of 50 items (10 items in each dimension with some of positive and negative items). The respondents are to respond on a five point scale. The total score ranges from 50 to 250. Its' overall reliability is 0.89.

**INTERNET ADDICTION TEST** (Kimberly Young, 1998): The IAT is a reliable and valid measure of addictive use of Internet. It consists of 20 items. The respondents are to respond on a five point scale. According to Young's criteria, total IAT scores 20-39 represent average users (moderate) with complete control of their internet use (severe), scores 40-69 represent over-users (profound) with frequent problems caused by their internet use, and scores 70-100 represent internet addicts with significant problems caused by their internet use. The scale has shown an internal consistency of 0.93.

**ACADEMIC PERFORMANCE:** Academic performance is registered in form of marks (scores) taken from their overall academic subjects' evaluation as per the record in their examination department. This score range from 0 to 500

## RESULTS & DISCUSSION

The present study attempted to assess the effect of internet addiction on academic performance and mental health of performance of school students/adolescents.

The f-test is applied for the purpose of statistical interpretation to test the significant effect of internet addiction. Results & discussion of the present study are as follows:

**The following table (Table No-1) showing the effect of internet on academic performance of School students/Adolescents.**

**TABLE NO:-1**

Source of Variance	Df	MS (V)	f-value
Between Groups	2	273.66	3.33*
Within Groups	117	82.20	

\* Significant at 0.05 level.

Table No. 1 reveals the effect of internet addiction on academic performance of adolescents. There were three groups based on internet addiction in which first group is related to average users of internet and second and third severe and profound groups respectively. Results revealed that the Mean Square Variance MS (V) between groups was 273.66, the mean square variance within the groups was 82.20 and the f-value (3.33\*) was found to be significant at 0.05 level. Therefore, our first hypothesis is accepted which states that there would be a significant effect of internet addiction on the academic performance of adolescents/ school students. Thus it may be inferred from the findings that internet addiction did influence the academic performance of school students. Furthermore, it is results also indicate that the severe and profound groups of internet addiction were found to be more prone to having difficulties in the academic/scholastic performance.



The following table (Table No-2) showing the effect of internet on mental health of school students/Adolescents.

**TABLE NO:- 2**

Source of Variance	Df	MS (V)	F-value
			3.63*
Between Groups	2	311	
Within Groups	117	85.6	

\* Significant at 0.05 level.

Results summarised in Table No 2 indicate the effect of internet addiction on mental health of students. Results indicated that MS (V) for between and within groups was found to be 311 and 85.6 respectively. The MS (V) value at (f=3.63) further indicates that there would be significant effect of internet addiction on the mental health of adolescents/students. So our second hypothesis stands accepted. One can conclude from our findings that there is a significant effect of internet addiction on the mental health of students. One plausible explanation for the same could be that adolescents find the internet a much more accessible, convenient and easy mode of expressing their feelings and emotions than resorting to a face to face mode of communication.

## CONCLUSION

Findings of the present study revealed that there was a significant effect of internet addiction on academic performance and mental health of students/adolescents. Results further indicated that the students who were in the severe and profound groups of internet addiction were found to have detrimental effects both in their academic performance and mental health rather than the students who were addicted to the internet usage moderately. Therefore, one can conclude from the present investigation that internet usage can be beneficial to students in their academic set-up and may not cause potential harm to their mental health if used in moderation. However, more comprehensive research is needed on diverse sample to substantiate the same.

## RECOMMENDATIONS:

Research conducted across the globe strongly indicates that adolescence is a period of storm and stress and a stage of identity Vs. Role confusion. Taking that into consideration since the sample of our study (14-16 year school students) consisted of an age group that could be more prone to getting addicted to the internet and making wrong use of it, here are a few suggestions that can be used a precautionary measure to guard against the same:

- Contents of internet surfing need to be monitored by parents and significant others.
- Duration of the internet surfing must be predefined.
- Internet surfing must be encouraged in open place/s.
- Infected/unwanted sites must be blocked.

- Sites developers need to identify and define the age groups strictly.

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