Internet Addiction and Mental Health Risks among Adolescents

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Abstract

The internet is good for people's mental health and wellbeing when used moderately. However, Internet use is regarded as problematic when it turns compulsive, interferes with everyday activities, and when the user has trouble controlling its usage. The current study looked into the connection between internet addiction and mental health risks such as sadness, anxiety, and stress among 260 internet addicted (108 male and 154 female) school/college students out of total 604 adolescents. Their age ranged from 11 to 19, and they were chosen at random to take a battery of psychometrically recognised tests, such as Internet Addiction Test and Depression Anxiety Stress Scale (DASS-21). Results of Pearson correlation coefficients revealed that internet addiction positively and significantly correlated with psychological risk factors like Depression, anxiety, and stress. The values of Pearson r documented as .282, .405 and .355 respectively. In addition, results of Regression analysis also showed that Internet addiction as a predictor of depression and anxiety.

Keywords- *Internet addiction, Mental Health, Adolescents, Stress, Anxiety, and Depression.*

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Introduction

Information and communication technologies advanced dramatically during the 20th century, but the 21st century is emerging as the Internet's boom era as massive amounts of information and communication platforms are available to us from across the globe. The Internet is an essential component of modern life, and as information technology (IT) progresses, it becomes a very much easier to use (Bozoglan, 2018). India has the second-highest usage rate in the entire world. Additionally, the country's internet penetration is growing rapidly. This is particularly true in urban India, where the majority of family members have multiple devices that they use to access the internet. The internet is therefore more likely to be used at a young age by students who live in country's urban areas (Balhara et al., 2018). Overuse of the Internet has been found to have an impact on a person's social, professional, and personal performance (Charlton and Danforth, 2007). Professionals in mental health treatment have been interested in Internet Addiction (IA), a relatively new and rapidly expanding clinical phenomenon (Saville et al., 2011). It includes a wide range of behaviours, including compulsive web surfing, online gambling, cyber-sexual (pornography) addiction, cyber-relationship (online relationships), cyber-bullying, and online gambling addiction (Mihajlov and Vejmelka, 2017; Young, 1998a).

Addiction is described as follows by Young (2004): Any type of addiction is typically characterised by an uncontrollable urge that is frequently followed by a loss of control, obsession with the usage, and persistence in the behaviour despite the problems it causes. Sleep disorders, neglecting household tasks, academic challenges, social isolation, and mood and behaviour changes (violence, irritation) were the effects of cyber-addiction that this study reported (Missaoui & Brahim, 2015). Bakarman (2017) discovered. The growing usage of the internet is linked to several psychological impacts like low self-esteem, poor motivation, and rejection fears. Depressed adolescents found it simple to chat to strangers, even ones with fabricated names. Social isolation results from a decrease in real relationships and interpersonal interaction. There were also shown to be strong associations between IAD and males, higher grades, and urban residency. Moreover, compared to its northern and western regions, eastern and central China's IAD prevalence was greater at 10.7% vs. 8.1%. (Li et al., 2018). Around 19% of Indians reports prevalence rate of problematic internet use, while 37% reported using the internet to control their mood. There were higher rates of problematic

internet use associated with males, elderly people, studying in upper grades, and owning a personal device. However, usage of the internet for academic objectives was associated with reduced problematic internet use, while use of the internet for social media, online gaming, and leisurely browsing was linked to problematic internet use (N=6291 students; Balhara et al., 2018). (N=310 office workers; Shrivastava et al., 2018) In Southern India, 9.2% of workers had "at-risk internet addiction," but there were no severe cases. 8.2% of Northern Indians ('mild internet addiction'; no severe cases) (Grover et al., 2019).

Internet addiction has a significant negative impact on both physical and psychological health. Various research have frequently mentioned it. Young adults and adolescents' productivity and academic performance are obviously affected by the effect on psychological health throughout these crucial years of life. Finally, Internet addiction is a serious issue that has a negative effect on mental health (Saikia et al. 2019).

Researchers like Akin and Skender (2011), Ostovar et al. (2016), and Nassehi et al. (2016) have shown that there is a strong association between internet addiction and many psychological variables like depression, anxiety, stress, and loneliness. The findings of these studies demonstrated a correlation between increased Internet use and a rise in stress, anxiety, and cell phone dependence. Studies show that students with internet addiction have lower levels of social interaction with friends and family and higher levels of stress and anxiety. Such behaviour may also result in issues with education, the economy, culture, and society. These issues lead to stress, anxiety, and depression (Mansourian et al., 2014). It has been discovered that internet addiction is linked to a number of psychological disorders. Studies have shown this association. Significantly greater use of IA was also discovered among the students of medical science. In the upcoming years, the occurrence of IA may rise even more as the internet becomes more accessible, affordable, and filled with high-quality psychologically addictive content. A substantial link between IA and sadness, anxiety, and stress has been found by research. (Saikia et al., 2019; Javaeed et al., 2019). Research has shown a connection between IA and mental health issues, and it has been discovered that stress, worry, and sadness are all symptoms of internet addiction. The results showed that students' excessive internet use causes anxiety, depression, and other mental health problems that have a negative impact on their academic performance. (Shawi et al., Jaafar et al., and Lebni et al., 2020, 2021, and 2021, respectively)

Objectives:

1. To study the connection between adolescents' mental health risks (depression, anxiety, and stress) and IA.
2. To explore whether measures of mental health risks significantly predict internet addiction among adolescents.

Hypotheses:

1. Internet addiction would be positively related to mental health risks among adolescents.
2. Measure of Mental health risks would predict internet addiction among adolescents.

Methods

Participants:

Sample of the study consisted of 260 internet addicted (108 male and 154 female) school/college students out of total 604 adolescents. Their age ranged 11 to 19 years. The sample was drawn from two districts (Haryana).

Tools

'Depression Anxiety and Stress Scale-21' (DASS-21)

The 21-question DASS-21 (Lovibond & Lovibond 1995) measures three distinct dimensions of negative emotional states, such as stress, depression, and anxiety. Seven questions are included for each of the three emotional subscales. On a Likert scale with a maximum score of 4, each item is scored from always (zero) to never (4). Statements from one to seven assess depression, statements from 8–14 assess anxiety, and statements 15–21 measure stress. The total score of this measure might be anything between 0 and 42. The original DASS-21's internal consistency was outstanding (α= 0.93), and its subscales for depression, anxiety, and stress were all found to range from satisfactory to high (Henry and Crawford 2005). Additionally, the DASS-21's internal consistency, convergent validity, and concurrent validity fell within the satisfactory to outstanding ranges.

Internet Addiction Test (IAT)

The Internet Addiction Test (IAT) was developed by Young and Rogers in 1998. Six dimensions are divided among the instrument's 20 items (i.e., salience, excessive use, neglect of work, anticipation, self-control, and neglect of social relationships). On a Likert scale of 1 (rarely) to 5 (always), each response is scored. The scores range from 20 to 100 (A Score between 20-49 reflects average use of the internet; a score between 50-79 would be interpreted as having occasional or ongoing problems when using the Internet; a score between 80-100 reflects Internet usage has a significant impact on problems) (Ghamari et al., 2011). More Internet dependence is evident from the higher score. Additionally, this questionnaire has been employed by other IA researchers, and its psychometric characteristics in regard to the component structure have been good but vary (Khazaal et al., 2008; Widyanto & McMurran 2004). Each subscale's items had high to moderate dependability based on Cronbach's alpha values.

Results and Discussion

Table -1

Relationship among internet addiction and depression, anxiety, and stress

Variables	Internet Addiction	Depression	Anxiety	Stress
Internet Addiction	1	.382**	.405**	.355**
Depression		1	-.666**	.629**
Anxiety			1	.658**
Stress				1

**. Significant at the 0.01 level (2-tailed).

*. Significant at the 0.05 level (2-tailed).

According to table 1's findings, there is a substantial positive link between adolescent internet addiction (IA) and sadness, anxiety, and stress. The estimated "r" values for IA and depression (r=0.382, p0.01), IA and anxiety (r=0.405, p0.01), and IA and stress (r=0.355, p0.01) indicate that people with greater degree of IA also had greater degree of depression, anxiety, and stress. The results may be interpreted that as participants who has higher the risk of these mental or psychological risks such as depression, anxiety and stress are having more prone to Internet addiction. So hypothesis No. 1 accepted here that IA would be positively connected to mental health risks among adolescents. The present findings are in tune or consistent with the earlier findings of the studies of Akin & İskender, 2011, Ostovar et al., 2016 and Nassehi et al., 2016. People who experience difficulties with their personal lives, emotions, academics, or careers tend to get more anxious or depressed. They might utilise the internet more frequently in search of fun and excitement to get out of these difficult situations. This circumstance raises the possibility of a beneficial relationship between internet addiction and mental problems. This result of significant association between internet addiction and mental health problems is in line with the results of latest research studies (Javaeed et al., 2019, Lebni et al., 2020 and Shawi et al., 2021).

Table-2 Stepwise Multiple Regression Analysis

DV: Internet Addiction

Step	Variable	R	R^2	R^2-Change	B	DF	F	P
1	Anxiety	.405	.164	.164	.405	259	50.79	.001
2	Anxiety + Depression	.432	.187	.023	.202	258	29.62	.001

Table 2 displays the findings of a stepwise regression analysis for the dependent variable internet addiction among adolescents. The predictor variable anxiety accounts for 16% of variance (R^2= .164) in internet addiction. Anxiety is emerged as the main predictor for internet addiction and entered at step one in the equation. The predictor variable stress has

positive beta weight (β = .405). It shows that, students who have anxious also have addicted to internet. Multiple R for anxiety variable equals to .405. The F value for this variable is 50.79 (df =259) which is significant at .001 level of significance.

The next potent predictor of internet addiction is emerged as depression. Multiple R increased to .432 and R^2 increased to .187 with this depression in the equation after anxiety. The F being 29.62, (df =258) it is significant at .001 probability level. Anxiety and depression jointly account for 18% of variance (R^2 = .187) in internet addiction. The depression has positive beta weight (β = .202) that indicates disruption of normal lives or increase in the frequency of depression leads the overuse of internet. Thus the hypothesis No. 2 is accepted here that Measure of Mental health risks (Depression, Anxiety and Stress) would predict internet addiction among adolescents. These findings suggested that students who are Internet addicts may consistently utilise the internet while having anxiety and depression. Students who are addicted to the internet and suffer from depression may use online games and communication to avoid dealing with their emotions, or gaming may really be a helpful diversion that improves mood. But excessive usage of these activities, such as gaming, talking, and emailing, could contribute to internet addiction. Because these type of individuals feel happy while they are accessing the internet. They begin using the internet as a method to lessen their unhappiness as a result. They frequently consider when they will be able to use the internet once more. Consequently, they become addicted to surfing the internet to forget about their problems. This finding is supported Akin & İskender, 2011, Andreou & Svoli, 2013, Lebni et al., 2020

Conclusions

The results of the current study allow us to draw the conclusion that adolescents' excessive Internet use causes depression, anxiety, and impaired mental health, which has an impact on their academic as well overall performance. The covid-19 pandemic has generally had an impact on the prevalence of IA worldwide, particularly among students. Individuals engage in too many digital activities, and there isn't enough face-to-face interaction, which has driven up the value of digital entertainment. Therefore, it is advised that more supervision and control be applied to how adolescents use the Internet, and that they be made aware of the drawbacks of using this technology improperly or excessively.

The results of this research also show the importance of preventative measures, such as programmes for student education and counselling on how to use the Internet responsibly and effectively. The foundation for correct education can also be laid by addressing the challenges and issues that surround communication technologies, such as the Internet, as well as by encouraging parents and families to pay more attention to the appropriate and effective use of the Internet.

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