ORIGINAL RESEARCH PAPER

Education

KEY WORDS: Internet Addiction, Academic Stress, Academic Performance, Sec. School Students

EXAMINING THE EFFECT OF INTERNET ADDICTION & ACADEMIC STRESS ON ACADEMIC PERFORMANCE OF STUDENTS

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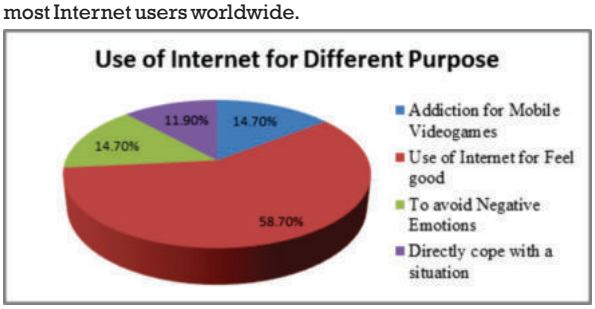
ABSTRACT

The internet has ingrained itself into peoples' daily lives. It is regarded as the media that is used the most extensively in worldwide. The development of the internet has altered many facets of daily life, including how people engage with one another and amuse themselves thanks to the plethora of social networking sites. The current investigation examines the effect of internet addiction & academic stress on academic performance of sec. school students. Method of current study was descriptive survey. 700 Sec. School students were chosen by Multistage random sampling technique. In order to gather the data, Internet Addiction Scale by Gulati, Kurisunkal & Bakliwal (2021) and Academic Stress Scale by Udai Kumar Sinha (2014) were used. For the Academic performance measure, the researcher had to depend upon the school examination record of the respective schools. Significant difference was observed in internet addiction & academic performance of sec. school students. Academic stress was also found significantly effecting the academic performance of sec. school students. Double interaction effect of internet addiction & academic stress on academic performance of students was also found significant.

INTRODUCTION

Nowadays, internet has permeated every area of society & is now a necessary component of peoples' everyday lives. It is regarded as the media that is used the most extensively worldwide. According to the World Health Organisation (2018), internet usage has surged internationally in recent decades & has become an essential part of modern life. Globally, there are over 4.6 billion internet users as of January 2021. Internet addiction means "an individual's inability to control his or her use of the internet, which eventually causes psychological, social, school, and/or work difficulties in a person's life". Every year, the number of people using the internet rises. Extended use of the internet, particularly by teens as a coping mechanism for scholastic stress, has resulted in internet addiction issues for certain users. As the internet becomes more widely used and accessible through many devices, internet addiction is becoming a major worry on a worldwide scale. The development of the internet has altered many facets of daily life, including how people engage with one another and amuse themselves thanks to the plethora of social networking sites. Global Internet users have increased at an exponential rate; there are already much more than 4 billion active users worldwide.

Compared to earlier generations, younger people often expend more time online. In India, the usage of technology and the internet is growing quickly. While having access to the internet may greatly help a society by facilitating better communication, providing information, and offering entertainment, some people may have negative effects from excessive or problematic use that affect their day-to-day activities. The usage of the Internet has increased dramatically both in India and globally. Acc. to reports, there were around 137 million Internet users in India in 2013 & in the near future, India may overtake China as the country with the most Internet users worldwide.



Consequences of high internet usage

In terms of psychiatric comorbidity, studies conducted in India have shown that individuals with problematic internet use have higher rates of anxiety and depression symptoms. To the authors' knowledge, however, only two studies have looked at internet addiction within specific Indian psychiatric populations. Two examples of young guys with internet addiction at a psychiatric facility were detailed in a case study report. 75 mental patients were assessed in the remaining study to assess internet addiction and problematic usage of videogames and mobile devices. The findings revealed far greater prevalence rates than those observed in the general population, with 28% of the sample having at least mild difficulties and 16% reporting at least severe severity of internet addiction. When the participants' motivations for using the internet and associated technologies were examined, 58.7% of the sample stated that they used it to "feel good," followed by 14.7% who used it to avoid feeling bad, with 14.7%, addiction to mobile gaming was also common and 11.9% who used it to deal with an issue head-on. Research conducted in India has indicated that 1.3% of the general population suffers from internet addiction. College populations have higher rates—11.8%, 8.8%, and 8%—while adolescent groups have lower rates—0.7%. India has a huge Internet user base, particularly among its younger demographic. Therefore, it was determined that an investigation on the Internet usage patterns of young adults in India was warranted.

Review related to Internet Addiction & Academic Stress

The Internet has grown in importance as a platform for social interaction, education, and information exchange throughout the last 20 years (Kaess, et al., 2014). In many nations around the world, internet addiction is quickly becoming into a significant mental health issue (Brand, et al., 2014). As of 2012, there were around 1.2 billion people living in India, of whom 205 million were Internet users (including urban & rural). Yadav et al. (2013) discovered that 11.8% of the Indian students were Internet Addicted; the amount of time spent online, chat rooms, the use of social networking sites as well as the presence of stress & anxiety, were predictors of internet addiction. Acc. to Lin and Yu (2008), women tended to see the Internet as a tool or piece of technology that can be used to complete tasks, whereas men tended to see it more as a "toy." Bernauy et al. (2009), "girls use the Internet less problematically than their boys. Razieh et al. (2012) showed that male students were more likely than female students to

be hooked to the internet". Anales et. al., (2009) showed that long-term Facebook use has been shown to negatively impact work performance and productivity. Extended periods of time spent on Facebook appear to have a negative impact on students' grades. Alam & Halder (2018) discovered a negative relationship in students' academic performance & academic stress. Singh and Barmola's research (2015) revealed that kids with severe and deep online addiction were found to have negative consequences on their mental and academic health, compared to students with moderate internet usage addiction. The research conducted by Khan, Altaf, and Kausar (2013) indicates that there is no significant variation in student performance at the start and end of the semester since students in the semester system are required to remain alert and engaged in their studies. Studies suggested that students will experience more academic stress towards the end of the semester than at the beginning. Ezekiel's (2021) research indicates that extreme school-related stress decreases our willingness to work and our general academic performance and can lead to a rise in dropout rates.

Variables Used

Dependent Variable

- Academic Performance

Independent Variables

- Internet Addiction (High & Low)
- Academic Stress (High & Low)

Objectives Of The Study

1. "To study the main effect of (a) internet addiction & (b) academic stress on academic performance of sec. school students.
2. To find out the double interaction effect of internet addiction and academic stress on academic performance among sec. school students".

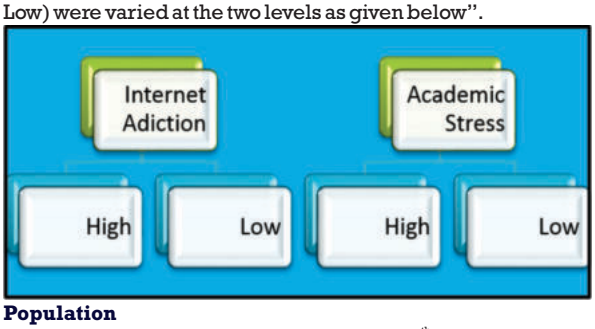
Hypotheses Of The Study

$\mathbf{H_{01}}$ "There is no significant main effect of (a) internet addiction & (b) academic stress on academic performance of sec. school students.

$\mathbf{H_{02}}$ There is no significant interaction effect of internet addiction and academic stress on academic performance among sec. school students."

Research Method & Research Design

"The **Descriptive Survey Method** was used for the current analysis. The 2×2 factorial randomized group design was used to analyze the data. All the independent variables i.e. Internet Addiction (High & Low) and Academic Stress (High & Low) were varied at the two levels as given below".



Population

All the Sec. School Students, studying in 9th class in various schools of Haryana constituted the target population.

Sample

"Multi-stage random sampling technique" was employed to select a sample of 700 (male & female) sec. school students from Rohtak and Sonepat Districts.

Tools Used

Academic Performance:

For the Academic performance measure, the researcher had to depend upon the school examination record of the respective school of their previous test scores.

Internet Addiction Scale by Gulati, Kurisunkal&Bakliwal (2021).

Scale for Assessing Academic Stress (SAAS) by Udai Kumar Sinha (2014).

Statistical Techniques

"Mean, SD, t-test & Two way ANOVA were employed to examine the main & interaction effect.

Data Analysis And Interpretation

"In order to analyse the data, the 2-Way ANOVA with 2×2 factorial design was calculated. It was decided that the hypotheses will be rejected or retained at 0.01 and 0.05 level of significance. In order to confirm the objectives & to check the null hypotheses, the current investigation has been analyzed shown below".

Table-1 "Summary of 2 Way ANOVA (2×2 Factorial Design) for Academic Performance of Sec. School Students with respect to their Internet Addiction & Academic Stress"

Dependent Variable: Academic Performance					
Source of Variance	Type III Sum of Squares	df	Mean Squares	F-ratios	Sig.
Corrected Model	59502	7	8500.425	26.746	.000
Intercept	2010600.173		2010600.173	6326.224	.000
Main Effect					
Internet Addiction (A)	5272.856	1	5272.856	16.591	.000
Academic Stress (B)	7121.530	1	7121.530	22.407	.000
Double Interaction Effect					
Interaction of Internet Addiction × Academic Stress (AxB)	18889.435	1	18889.435	59.434	.000
Error	150011.016	472	317.820		
Total	2268572.000	480	7580.950		
Corrected Total	209513.992	479			

Internet Addiction (A)

"Table-1 showed that F-ratio 16.591 for main effect of internet addiction on academic performance of students is significant at 0.01 level. Therefore, $\mathbf{H_{01(a)}}$ is rejected. So, it can be concluded that internet addiction has a significant effect on academic performance of students.

In order to investigate further the 't'-value was computed and has been given in Table-2".

Table-2 "Descriptive statistics related to the Academic Performance of Sec. School Students on the basis of Internet Addiction"

Dependent Variable	Groups	N	Mean	SD	't' value	Level of Significance
Academic Performance	High Internet Addiction	222	61.73	21.28	3.69	Significant at 0.01
	Low Internet Addiction	258	68.72	20.07		

Df: 478

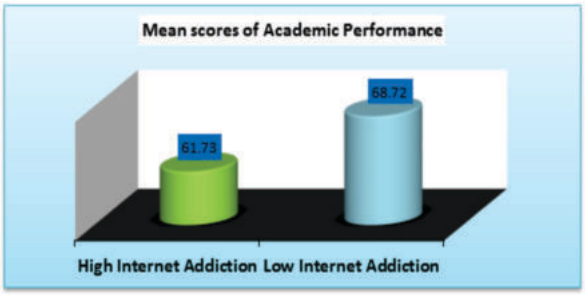


Fig. 1: "Mean Academic Performance Scores of Students on the basis of Internet Addiction"

Table-2 and fig. 1 depicted that the t-value (3.69) indicates a significant difference in academic performance of students with respect to of internet addiction at 0.01 level. In terms of means scores, it can be concluded that students with high internet addiction (61.73±21.28) possess lower academic performance as compared to students having low internet addiction (68.72±20.07). So, it can be quite clear that those students who have higher addiction of internet have less academic performance than those students who have lower internet addiction.

Academic Stress (B)

"The Table-1 indicated that F-ratio 22.407 for main effect of academic stress on academic performance of students is significant at 0.01 level. Therefore, $H_{01(b)}$ is rejected. So, it can be concluded that academic stress has a significant effect on academic performance of students. In order to investigate further the 't'-value was computed and has been given in Table-3".

Table-3 "Descriptive statistics related to the Academic Performance of Sec. School Students on the basis of Academic Stress"

Dependent Variable	Groups	N	Mean	SD	't' value	Level of Significance
Academic Performance	High Academic Stress	231	61.49	20.03	4.12	Significant at 0.01
	Low Academic Stress	249	69.20	21.06		

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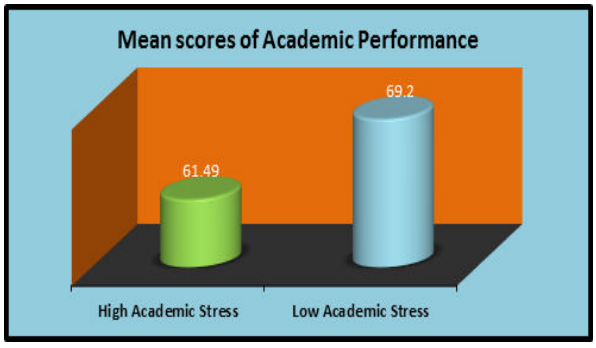

Fig. 2: "Mean Academic Performance Scores of Sec. School Students on the basis of Academic Stress"

Table-3 and fig. 2 indicated that the t-value (4.12) indicates a significant difference in academic performance of students with respect to academic stress at 0.01 level. Means scores concluded that students with high academic stress (61.49±20.03) got lower academic performance as compared to students having low academic stress (69.20±21.06). So, it can be concluded that those students who take higher stress for their academics possess less academic performance than those students who have lower academic stress.

Internet Addiction & Academic Stress (AxB)

"As evident from Table-1 that F-ratio (59.434) for the interaction of internet addiction and academic stress is significant at 0.01 level. Therefore, $\mathbf{H_{02}}$ is rejected. It may therefore be said that there is significant interaction effect of internet addiction and academic stress on academic performance of sec. school students. "t" test was further employed to find out the significance of difference in mean scores of Academic Performance for different groups. The results for the same have been presented in the Table-4."

Table - 4 "'t'-values for Mean Scores of Academic Performance of Sec. School Students for Different Groups of Internet addiction and Academic stress (A×B)"

Groups	N		Mean		S.D.		't'-values
A1B1 vs A2B1	119	112	52.13	71.43	18.46	16.59	8.39**
A1B2 vs A2B2	103	146	72.83	66.65	18.84	22.20	2.36*
A1B1 vs A2B2	119	146	52.13	66.65	18.46	22.20	5.83**
A1B2 vs A2B1	103	112	72.83	71.43	18.84	16.59	0.567 (NS)
A1B1 vs A1B2	119	103	52.13	72.83	18.46	18.84	8.24**
A2B1 vs A2B2	112	146	71.43	66.65	16.59	22.20	1.98*

"** Significant at 0.01 level * Significant at 0.05 level NS= Not Significant"

A_1 = High Internet Addiction A_2= Low Internet Addiction
B_1= High Academic Stress B_2= Low Academic Stress

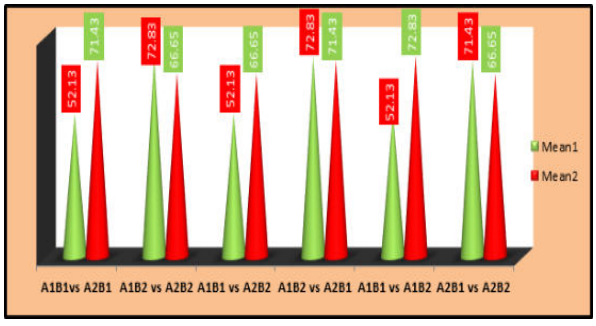

Fig. 3: "Mean Scores for Interaction Effect of Internet Addiction and Academic Stress on Academic Performance of Sec. School Students"

Table-4 discloses that the t-value (8.39) for the students with high internet addiction with high level of academic stress (A_1B_1) and students having low internet addiction with high level of academic stress (A_2B_1) is found significant at 0.01 level. Mean scores makes it clear that students with high internet addiction with high level of academic stress (52.13) have lower academic performance as compared to students having low internet addiction with high level of academic stress (71.43). The t-value (2.36) for students with high internet addiction with low level of academic stress (A_1B_2) and students having low internet addiction with low level of academic stress (A_2B_2) is found significant at 0.01 level. While comparing average scores, it can be seen that students with high internet addiction with low level of academic stress (72.83) possess higher academic performance than students having low internet addiction with low level of academic stress (66.65). The t-value (5.83) for students with high internet addiction with high level of academic stress (A_1B_1) and students having low internet addiction with low level of academic stress (A_2B_2) is found significant at 0.01 level. While comparing mean scores, it can be concluded that students having high internet addiction with high level of academic stress (52.13) have lower academic performance as compare

to students having low internet addiction with low level of academic stress (66.65). The t-value (0.567) for students with high internet addiction with low level of academic stress (A_1B_2) and students having low internet addiction with high level of academic stress (A_2B_1) is not found significant at 0.01 level. The t-value (8.24) for students having high internet addiction with high level of academic stress (A_1B_1) and students having low internet addiction with low level of academic stress (A_1B_2) is found significant at 0.01 level. Comparison of mean scores concludes that students with high internet addiction with high level of academic stress (52.13) have lower academic performance than students having low internet addiction with low level of academic stress (72.83). The t-value (1.98) for students having low internet addiction with high level of academic stress (A_2B_1) and students having low internet addiction with low level of academic stress (A_2B_2) is found significant at 0.05 level. Mean scores represents that students having low internet addiction with high level of academic stress (71.43) possess higher academic performance than students having low internet addiction with low level of academic stress (66.65).

CONCLUSION

1. It was found that those students who spent more time on internet have significantly less academic performance.
2. The students who take higher stress for their academics exhibited significant less academic performance.
3. Students having high internet addiction with high level of academic stress have lower academic performance.
4. It was also found that students having high internet addiction with low level of academic stress possess higher academic performance.
5. Students having high internet addiction with high level of academic stress have lower academic performance.
6. No significant difference was seen in students having low internet addiction with high level of academic stress.

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