



PREVALENCE OF INTERNET ADDICTION AND ITS ASSOCIATION WITH PSYCHOPATHOLOGY AMONG THE ADOLESCENTS IN A SELECTED COLLEGE OF GUWAHATI, ASSAM

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ABSTRACT

A non-experimental descriptive study was conducted to assess the prevalence of Internet Addiction and its association with psychopathology among the adolescents in a selected college of Guwahati, Assam. The objectives of the study were to assess the prevalence of internet addiction, to find out association between the internet addiction and its psychopathology, to find out the association between the internet addiction and selected demographic variables. The adolescents who were studying in class XI who were selected from Lalit Chandra Bharali College, Maligaon, Guwahati by convenient sampling technique. Total 50 samples were selected. Structured questionnaire were used to collect the data and analyzed according to the objectives of the study. Using both descriptive and inferential statistics the study finding shows that the 6% of adolescents were normally addicted to internet, 38% were mild addicted, majority of the adolescents i.e 54% were moderately addicted and 2% were severely addicted. The study findings revealed that there is no significant association between internet addiction and its psychopathology and also no significant association between the internet addiction and selected demographic variables such as age, gender, monthly income, residential place, purpose of using internet, mode of access, duration of use, duration of use within 24 hours and exposure to internet. Association of internet addiction and its psychopathology, internet addiction and selected demographic variables was analyzed by chi square test with degree of freedom at $P < 0.05$ level of significance.

Keyword: Prevalence, Internet addiction, Psychopathology, Adolescents

INTRODUCTION

To make communication easier, quicker and to facilitate safe exchange of information internet was developed. The use of internet in a healthy manner is defined as achieving a desired goal within an appropriate time period without experiencing intellectual or behavioural discomfort.^[1]

The term "Internet Addiction" was proposed by Dr. Ivan Goldberg in 1995 for pathological compulsive internet use. Griffith considered it a subset of behaviour addiction and any behaviour that meets the 6 "core components" of addiction-salience mood modification, tolerance, withdrawal, conflict and relapse. Young link excessive internet use most closely to pathological gambling, a disorder of impulsive control in DSM- IV and adapted the DSM IV criteria to relate the internet use, in the Internet Addiction Test developed by her. According to her, various types

of internet addiction are cyber- sexual addiction, cyber- relationship addiction, net compulsion, information overload and computer addiction.^[2]

The warning signs of internet addiction includes the following ^[3]

- Pre occupation with the internet (through about previous online activity or anticipation of the next online session)
- Use of the internet in increasing amounts of time in order to achieve satisfaction
- Repeated, unsuccessful efforts to control, cut back or stop internet use.
- Feelings of restlessness, moodies, depression, or irritability while attempting to cut down the use of internet.
- Online longer than originally intended.
- Feeling guilty and defensive about internet use
- Feeling of euphoria while performing internet based activities
- Physical symptoms of internet addiction

Internet or computer addiction can also caused physical discomfort such as :-

- carpel tunnel syndrome
- Dry eyes or strained vision
- Back ache, neck ache, severe headache
- Sleep disturbance
- Pronounced weight gain or loss^[3]

Worldwide scenario

According to report published in 30th June, 2014 the worldwide internet user base was around billion in which 1.4 billion users are from Asia. The highest internet addiction i.e, 45.7% is from Asian countries. There have been explosive growth of internet users worldwide ^[4].

Indian scenario

According to report published in 17th November, 2017 the prevalence of internet addiction varies from 1.5% - 25% in different population. A recent study reported a prevalence of 0.7% among Indian adolescents. Young individuals (i.e, age between 18-24 years old) were more vulnerable to become internet addicts than old individuals ^[4].

Assam scenario

A recent study reported a prevalence of 80.7% of the youths were internet addicted. Among these 80.7%, female addicts are 84.2% and male addicts are 71.4%. This study was revealed by the Guwahati Medical College Hospital (GMCH) in the Guwahati city, which has given a detailed report on the internet addiction and its relationships with depression, anxiety and stress ^[5].

MATERIAL AND METHODS

Descriptive non-experimental research design was used in this study. A non probability convenient sampling technique was used to select 50 adolescents between the age group of 17-20 years from the college Lalit Chandra Bharali College, Guwahati. Based on the objectives of the study, structured questionnaire Young's Internet Addiction Test and Dukes Health Profile have been developed for the purpose of gathering information to assess the internet addiction and its

psychopathology among the adolescents. Ethical approval was obtained from the Institutional Ethical Committee along with the formal written permission taken from the principal to conduct the research study on the selected college. Verbal and written consent was obtained from all the participants of the study after explaining the purpose and other details of the study. The subjects were assured of the confidentiality of the data collection. Based on the objectives of the study, collected data were complied and tabulated for analysis and interpretation. Data were coded and organised in a master sheet. Data are analyzed by using the statistical package for the social sciences (SPSS) version. Descriptive and inferential statistical like frequency table, percentage, mean, standard deviation, chi-square were used for analysis of data. The level of significance was set at 0.05 level to interpret the findings.

RESULTS

Table 1 shows that 72% of the student belongs to the age group of 17- 18 years and 28% belongs to 19-20 years, 42% belongs to Male and 58% belongs to Female, 32% belongs to monthly income Rs10,000- 20,000 and 54% belongs to monthly income Rs21,000-30,000 and 14% belongs to monthly income above Rs30,000 and 22% belongs to Rural and 78% belongs to Urban, 12% using internet for entertainment, 76% using for social media, 6% using for gaming, 4% doing educational purpose, 2% doing online shopping. 88% mode of access was by mobile, 2% belongs to laptop, 10% belongs to tablet using 2% in the morning, 4% in afternoon, 34% in evening, 60% in night. 44% was using for 1-3 years duration , 56% using for 4-6 years and 42% using 2-4 hours ,36% using 5-8%, 2% using 9-12 hours within 24hours .Exposure to internet was by means mobile network and data card respectively 98% and 2% .

Table 1.
Frequency and percentage distribution of the sample according to demographic variables:
n = 50

Sl. No.	Demographic variables	Frequency	Percentage
1	Age		
	17- 18 years	36	72%
	19- 20 years	14	28%
2	Sex		
	Male	21	42%
	Female	29	58%
3	Monthly Income		
	Rs 10,000-20,000	16	32%
	Rs 21,000-30,000	27	54%
	Above Rs30,000	7	14%
4	Residential place		
	Rural	11	22%
	Urban	39	78%
5	Purpose of using internet		
	Entertainment	6	12%

	Social media	38	76%
	Gaming	3	6%
	Educational purpose	2	4%
	Online shopping	1	2%
6	Mode of access		
	Mobile	44	88%
	Laptop	1	2%
	Tablet	5	10%
	Cyber cafe	0	0%
7	Time of use internet		
	Morning	1	2%
	Afternoon	2	4%
	Evening	17	34%
	Night	30	60%
8	Duration		
	1-3 years	22	44%
	4-6 years	28	56%
	7-9 years	0	0%
9	Duration of use within 24 hours		
	2-4 hours	21	42%
	5-8 hours	28	36%
	9-12 hours	1	2%
	Above 12 hours	0	0%
10	Exposure to internet		
	Mobile network	49	98%
	Wifi	0	0%
	Data card	1	2%
	Broadband	0	0%

Figure 1 shows that normal addicted was 6%, where as 38% having Mild addiction, 54% have Moderately addicted and 2% have Severe addiction

Figure 1: Bar diagram showing the distribution of percentage of prevalence of internet addiction.

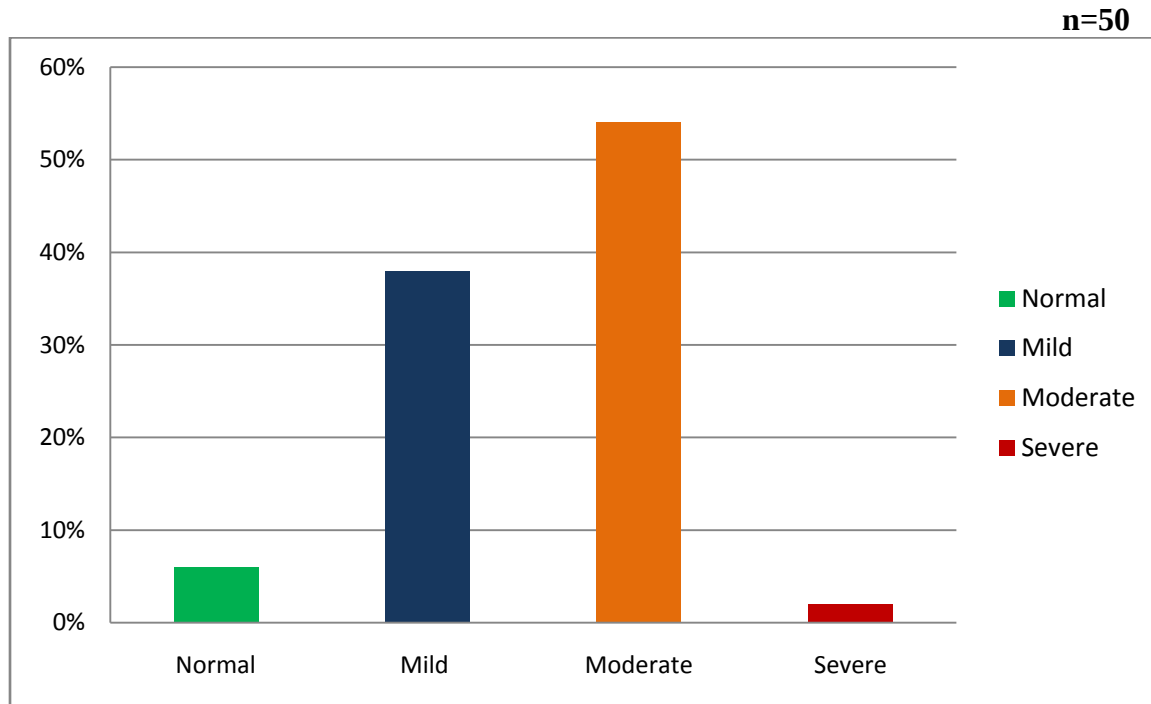


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Table 2. Association between internet addiction with psychopathology.

n=50

Psychopathology		Prevalence			Chi square	Table value	Remarks
		Mild	Moderate	Severe			
Physical Score	Health	22	27	1	0.0046	3.84	*NS
Mental Score	Health	22	27	1	0.0046	3.84	*NS
Social Score	Health	22	27	1	0.0046	3.84	*NS
General Score	Health	22	27	1	0.0004	3.84	*NS

Perceived Health Score	22	27	1	0	3.84	*NS
Self –esteem Score	22	27	1	0.0019	3.84	*NS
Anxiety score	22	27	1	0.535	3.84	*NS
Depression Score	22	27	1	0	3.84	*NS
Anxiety-depression Score	22	27	1	0	3.84	*NS
Pain Score	22	27	1	0	3.84	*NS
Disability Score	22	27	1	0.0046	3.84	*NS

df=1

*At 0.05 level of significant.

*NS – Not Significant

Table 2 shows that there is no significant correlation between the internet addiction and its psychopathology

Table 3. Association of internet addiction with selected demographic variables such as age, gender, residential place, purpose of use, mode of access, time of use, duration of use, duration of use within 24 hours, exposure to internet.

n=50

Variables	Prevalence				Total	Chi square X	df	Table value (p value)	Remarks
	Normal	Mild	Moderate	Severe					
Age									
17-18 year	2	15	20	0	37	0.1298	1	3.84	*NS
19-20 year	1	6	5	1	13				
Total	3	21	25	1	50				

Gender									
Male	1	10	10	1	21	0.00042	1	3.84	*NS
Female	2	11	15	0	29				
Total	3	21	25	1	50				
Monthly Income									
Rs10,000-20,000	3	6	7	0	16	1.506	2	5.99	*NS
Rs21,000-30,000	0	2	3	0	27				
Above Rs 30,000	0	13	15	1	7				
Total	3	21	25	1	50				
Residential Place									
Rural	0	6	3	1	10	0.171	1	3.84	*NS
Urban	3	14	23	0	40				
Total	3	20	26	1	50				
Purpose of using internet									
Entertainment									
Social media	0	2	5	0	7	2.151	4	9.49	*NS
Gaming									
Educational purposes	2	15	18	1	36				
Online shopping	0	2	1	0	3				
Total	0	1	2	0	3				
	1	0	0	0	1				
	3	20	26	1	50				
Mode of access									
Mobile	2	18	23	0	43	1.375	3	7.82	*NS
Laptop	0	0	1	0	1				
Tablet	1	2	2	1	6				
Total	3	0	26	1	50				

Time of use									
Morning	0	0	1	0	1	1.6324	3	7.82	*NS
Afternoon	0	0	1	0	1				
Evening	2	6	9	0	17				
Night	1	14	15	1	31				
Total	3	20	26	1	50				
Duration of use									
1-3 Years									*NS
4-6 Years	3	8	11	0	22	0.33	1	3.84	
Total	0	12	15	1	28				
	3	20	26	1	50				
Duration of use within 24 hours									
2-4 hours									*NS
5-8 hours	2	8	10	1	20	0.0133	3	7.82	
Total	1	12	16	0	30				
	3	20	26	1	50				
Exposure to internet									
Mobile network		20	25	1	49	1.35	3	7.82	*NS
Wifi		0	0	1	0				
Data card	0	0	1	0	1				
Broadband	0	0	0	0	0				
Total	0	20	26	2	50				
	3								

The study was conducted to find out the association between the internet addiction and selected demographic variables like age, gender, monthly income, residential place, purpose of using internet, mode of access, time of use, duration of internet use, duration of use within a day, exposure to internet use. The table 3 shows that there is no significant association between internet addiction and selected demographic variables.

DISCUSSION

The present study was conducted to assess the prevalence of internet addiction and its association with psychopathology among the adolescents in a selected college of Guwahati, Assam. The data was collected on 5th April 2019. Descriptive Non-experimental research design with convenient sampling technique was under taken to select the sample on the basis of inclusion and exclusion criteria. During the course of literature review many books, articles and journals where searched.

The findings of the study were compared and contrasted with those of other study.

The study findings are supported by similar studies conducted by Babita kayastha, Ashmita Gurung and Rashmi Chawal (2018). They conducted a descriptive study on to assess the level of internet addiction among High school adolescents in Mangalore, 24th June 2018. The conceptual framework of the study has based on Roy's adaption model. The tool consisted of a baseline (Demographic) perform, a modified form of internet addiction test and a structured questionnaire developed during this study, was used to assess the level of internet addiction. The study revealed that 70.5% were Normal user, 23% had a Mild internet addiction, 6% had a Moderate addiction, and 0.5% had a Severe addiction.^[6]

In contrast a study has been conducted by Kentaro Kawabe, Fumie Horiuchi, Marina ochi, Yasunori Oka and Shu-ichi Ueno on prevalence and relation with mental states in adolescents in Toon, JAPAN (2016). The present study which was descriptive and correlational in design, was conducted in 2014 in Masaki, a town (population: 31,000) in suburban area of Ehime Prefecture, Japan. All junior high school students in the area (n=853; age 12-15 years) participated in the study. Participants answered Young's Internet Addiction Test (IAT) and the Japanese version of the general Health Questionnaire (GHQ). The participants were also asked to complete a questionnaire on their exposure or access to electronic device. The mean Score of total IAT was 32.4 ± 13.16 (male 31.4 ± 13.2 ; female 33.3 ± 13.9). Based on total IAT score 2.0% (male 2.1%, female 1.9%) and 21.7% of the total participants was classified as addicted and possibly addicted respectively. The mean IAT score was 81.1 ± 8.8 in the addicted, 49.8 ± 8.3 in the possibly addicted and 26.2 ± 5.7 in the non addicted groups.^[7]

Similar study was conducted by Vimal Arya, Harpreet Singh, Anil Kumar Malhotra, a study on Prevalence of internet addiction and its psychopathology with socio- demographic factors among MBBS students at medical college, Jhansi, Uttar Pradesh in 2018 402 participants are selected for the study. Young's internet addiction test was used to measure the prevalence of internet addiction among 402 participants. The socio-demographic profile was also obtained via a different questionnaire after obtaining the consent from the students themselves. Out of 402 respondents 21.89% demographic variables like Mothers education, type of phone used.^[25] were in the late adolescents age group and the rest were rest 20 years are having normal addiction. Most of them were from urban areas and majority belongs to upper socio economic class. But In this study there is no association between the internet addiction and socio demographic variables like purpose of use, mothers education, type of phone used.^[8]

Similar study was conducted Karma Tenzin, Thinley Dorji, Mongal and Gurung, Pelzon Dorji, Umesh Pradhan, et al on prevalence of internet addiction and associated psychological comorbidity among college students in Bhutan (2018). In this study, there is 823 randomly selected students where the mean age of the participants was 21.7 years and they have been using internet for about 5 years on an average. Smart phone was the most common mode of internet use 714(86.7%). Nearly 140(14%) used internet at odd hours from 11pm till morning of the following day while 609(75%) uses it for news and educational purposes, 722(87.7%), uses it for social media and 205(25.5%) uses for games. There is no significant association between internet addiction and mental well being, tablet/I-pad as mode of internet use, college computer lab as

mode of internet use, using internet mainly for social media. Two factors, viz, college computer laboratory mainly for news and educational purpose shows protective association^[9]

CONCLUSIONS

From the present study it is found that most of the adolescents who are going to college had moderate internet addiction. The Chi-square shows there is no significant association between internet addiction and its psychopathology and no significant association between internet association and demographic variables.

Thus from the present study it can be concluded that there is a need for to assess the prevalence of internet addiction and its association with psychopathology among the adolescents.

Conflict of interest: None

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