

## Internet Addiction among High School Students of Rural Area: A Descriptive Cross Sectional Study

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### Abstract

There is rapid growth in the usage of internet globally mainly in urban areas. Usage has been rising exponentially. In Asia around 50% of them use internet with rise in 1.7% between 2000-19. This study was conducted to explore the level of internet addiction among high school students of rural area *Methodology:* it's a cross sectional study conducted in the rural field practice of Dr BR Ambedkar medical College, Bangalore among high school students with the sample size of 206. Data was collected using pretested semi structured questionnaire and Young's internet addiction scale. Data was analysed for frequencies and percentages *Results:* Age group of study subjects ranged from 13-18 years of age. Maximum belonged to Hindu religion and were studying SSLC. Most common gadget used was laptop and purpose was for social networking. In our study only 0.5% had severe level of internet addiction and more than 90% were normal without internet addiction.

**Keywords:** Internet Addiction; Young's Scale; Addiction.

### Introduction

There is rapid growth in the usage of internet globally mainly in urban areas. Usage has been rising exponentially. In Asia around 50% of them use internet with rise in 1.7% between 2000-19 [1].

Addiction is a term used generally for substance use. Dr. Ivan Goldberg coined the term internet addiction for pathological compulsive internet use. Young linked excessive use of internet to pathological gambling. Various types of internet addiction described are cybersexual addiction, cyber relationship addiction, net-compulsions, information overload, and computer addiction [2,3].

With development in technology, number of

online access system like wi-fi & broadband have increased also the number of hours spent on internet usage by youths has also increased. Though internet access has provided widescale opportunities for collecting information excess undisciplined usage of internet has led to its addiction [4,5].

Internet addiction is said to be associated with psychiatric disorders like alcohol abuse, attention deficit and hyperactivity, depression, and anxiety. Increase in stress level in the curriculum is also said to be the reason for increase in internet addiction among students [6].

Studies have shown that stress is experienced by all students but the amount of stress is high among medical and dental students [7,8,9].

Youngs internet addiction test is a widely used instrument for assessing internet addiction with good reliability. This study was conducted to understand the level of internet addiction among school students

### Methodology

A cross-sectional descriptive study was conducted in rural field practice area of department of Community Medicine, Dr BR Ambedkar Medical College Bangalore. The study was conducted for a period of two months between October and November 2017. All the areas under the purview of rural field practice area of Dr BR Ambedkar medical college were listed and one area was selected randomly. In the selected area all the schools were listed before initiating the study. Total students in high school were 250. All the students who were available during our study and consented to participate were included. Follow up visit was not done to include students who were not present during our visit. Total students included in our study was 206. Required data was collected using pretested semi structured questionnaire. Questionnaire had of two parts: part I: questions related to socio-demographic information and part 2: information related to internet use, and Young's internet addiction test scale was used to assess internet addiction. This scale has 20 items, with scoring for these items range from 20 to 100. Prior permission from head of the institutions was taken before initiating study. Data was entered in Microsoft excel and analysed for frequencies and percentages.

### Results

Table 1: Among 206 study subjects half of the subjects were in the age group of 13-15 years and half of them belong to age group of 16-18 years (47.1% and 51.9%). Though the number of males were more than females the difference was marginal i.e 53.8% and 45.2% of males and females respectively. More than 3/4th of study subjects belonged to Hindu religion and very few belonged to other religions like muslim and Christian which was around 3.4%. Around half of study subjects were studying in high school (59.6%) and about 1/3rd of them were in 1st and 2nd PUC (40.4%) respectively.

**Table 1:** Socio demographic characteristics of study subjects

Socio demographic characteristics		Number	Percentage
Age in years	13-15	98	47.1
	16-18	108	51.9
Gender	Male	94	45.2
	Female	112	53.8
Religion	Hindu	199	95.7
	Muslim	5	2.4
	Others	2	1.0
Year of study	SSLC	124	59.6
	1st PUC	37	17.8
	2nd PUC	45	21.6

Table 2: Among 206 study subjects more than 90% of them used internet for around less than or equal to 4 years and very few used it for more than 4 years (6.8%). Around 2/3rd of study subjects used internet before 15years of age and they were more among males compared to females (51.4% and 31.6%). Maximum of them used internet for less than 4 hours and very few for more than 5 hours per day (97.6% and 2.4%). Most common gadget used to assess internet in our study was laptop/desktop (83.5%) and very few (16.5%) used mobile phone/desktop/tab. Around 87.4% of them spent less than 300 rupees per month to have access to internet and very few spent more than 300 rupees per month (6.3%)

**Table 2:** Distribution of subjects according to pattern of internet use

Pattern of use		Male	Female	Total
Years of internet use	1-4	91	34.9%	192
		44.2%		93.2%
	5-8	3	11	14
		1.5%	5.3%	6.8%
Age of first use of internet	Not used at all	4	8	12
		1.9%	3.9%	5.8%
	9-15 years	106	65	171
51.4%		31.6%	83.0%	
16-19 years	10	13	23	
	4.8%	6.3%	11.2%	
Internet usage per day in hours	0- 4	90	111	201
		43.7%	53.9%	97.6%
	5-10	4	1	5
		1.9%	0.5%	2.4%
Gadget used to access internet	Desktop	0	9	9
		0.0%	4.4%	4.4%
	Laptop	86	86	172
		41.7%	41.7%	83.5%
	Mobile	7	5	12
3.4%		2.4%	5.8%	
Others	1	12	13	

Expense on internet use in rupees		0.5%	5.8%	6.3%
	<300	83 40.3%	97 47.1%	180 87.4%
	300- 600	9 4.4%	4 1.9%	13 6.3%

Table 3: Study subjects were assessed for purpose of internet use like social networking, email, entertainment, search engine etc. Among females internet was used most often for social networking, search engine, news and online shopping (51%, 48.1%, 47.6% and 46.6%) compared to other purposes like watching videos, games and music. Overall utilisation of internet for all the purposes was used often by females compared to males.

**Table 3:** Distribution according to the purpose of usage of internet

Purpose of use		Males	Females	Total
Social networking	Often	84 40.8%	105 51.0%	189 91.8%
	Rarely	10 4.9%	7 3.4%	17 8.3%
E-mail	Often	74 35.9%	87 42.2%	161 78.2%
	Rarely	20 9.7%	25 12.2%	45 21.9%
Search engine	Often	86 41.7%	99 48.1%	185 89.8%
	Rarely	8 3.9%	4 6.3%	12 10.2%
Watching Videos	Often	73 35.4%	77 37.4%	150 72.8%
	Rarely	21 10.2%	35 17.0%	47 27.2%
Games	Often	72 35.0%	81 39.3%	153 74.3%
	Rarely	22 10.7%	31 15.1%	53 25.8%
News site	Often	85 41.3%	98 47.6%	183 88.8%
	Rarely	9 4.4%	14 6.8%	23 11.2%
Music	Often	70 34.0%	77 37.4%	147 71.4%
	Rarely	24 11.7%	33 17.0%	57 28.7%
Online shopping	Often	86 42.2%	95 46.6%	181 88.7%
	Rarely	8 3.9%	15 7.3%	23 11.1%

Table 4: Youngs internet addiction scale was used to assess the level of internet addiction among high school students. According to Youngs scale score of

0-30 points considered as normal level of internet usage, 31-49 as mild level of internet usage, 50-79 and 80-100 as moderate and severe dependence on internet respectively. In our study more than 3/4th of study subjects were under category of normal usage (97.1%) and very few belonged to mild/moderate category and severe dependence on internet respectively (2.4% and 0.5%).

**Table 4:** Grading of students according to young’s internet addiction test scale

IAT grading	Males N (%)	Females N (%)	Total N (%)
None/normal usage	91 44.2%	109 52.9%	200 97.1%
Mild/moderate	2 1.0%	3 1.5%	5 2.4%
Severe	1 0.5%	0 0.0%	1 0.5%

### Discussion

In our study the study subjects were in the age group of 13-18 years of age and proportion of male and female subjects were almost equal. maximum number of study subjects belonged to Hindu religion. Findings of our study were similar to the study done by Sowndarya T among school students of Mangaluru [10].

In present study maximum number of students used internet for less than 4 years and few for more than 4 years. While very few percentage of study subjects never used internet at al (5.8%), around 3/4th of them had access to internet before 15 years of age (83%). More than 90% of them used internet for about 4 hours and only around 2.4% used it for more than 4 hours per day. In our study variety of gadgets were used to access internet like laptop, mobile, desktop etc but the most common gadget used was laptop (83.5%). Around 2/3rd of them spent less than 300 rupees per month to access internet (87.4%) and very few spent more than that. Findings of our study in terms of years and hours of internet usage and expenditure per month was similar to findings of study in Davangere, Karnataka. The most common gadget used in there study was mobile phones and in our study it was laptop. Both the gadgets depict gadgets of personal use. Internet usage is more on personal gadgets/ used for personal use than the gadget which are used/shared among others.

The purpose of usage of internet usage mentioned in our study include Social networking, Email, Search engine, Watching Videos, Games,

News site, Music, Online shopping. Which included combination of social network, academic, entertainment but a study done in Davangere showed maximum utilized internet for social networking. Various studies across different parts of country have found male preponderance of internet addiction suggesting increasing access of internet to males compared to males but its not the same in our study [11].

### Conclusion

Number of study subjects with internet addiction were very low. This may be due to their location or freedom/accessibility/due to affordability to use internet itself.

*Conflict of interest:* NONE

*Source of support:* NIL

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