

# A Study to Assess the Internet Addiction among Adolescents Studying in Dyal Singh Government Senior Secondary School, Mirjajan, District Gurdaspur, Punjab

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## Abstract

**Aim:** The aim of the study was to assess the level of internet addiction among adolescents and to find out the association between the level of internet addiction among adolescents studying in Government Senior Secondary School, Mirjajan, and their selected demographic variables and to distribute pamphlets related to conscious use of internet.

**Methodology:** The descriptive study was conducted in Dyal Singh Government Smart Senior Secondary School. The study accessible population was adolescents selected by simple random sampling technique. Data were collected from adolescents by modified Internet Addiction Test. Data were analyzed by descriptive and inferential statistics through bar and pie diagrams.

**Results:** It shows that 55.0% of adolescents were having moderate internet addiction, 21.7% of adolescents were having mild internet addiction, 16.7% of them were normal users, and only 6.7% of them were having severe internet addiction. Chi-square value between level of internet addiction and sociodemographic variables including occupation of mother with  $P = 0.001$ , occupation of father with  $P = 0.780$ , education of mother with  $P = 0.052$ , and education of father with  $P = 0.003$  was found to be statistically significant at the level of 0.05.

**Conclusion:** The findings of the present study revealed that majority of the adolescents were having moderate internet addiction and there was a significant association between the level of internet addiction with occupation and education of parents.

**Keywords:** Adolescents, Descriptive study, Internet Addiction

## INTRODUCTION

Adolescence can be defined as the period between puberty and adulthood, usually between the ages of 11 and 18 years. Events during this period greatly influence a person's development and can determine their attitudes and behavior in later life. Adolescence can be divided into three substages: Early, middle, and late.<sup>[1]</sup> One of the most important functions of adolescence is to find one's own identity and view of life, without inner conflict and the need to always act within

acceptable moral standards, abide by parental authority, or meet peer expectations.<sup>[2]</sup> Because teenagers are often in conflict with authority and cultural and moral norms of society, certain developmental effects can trigger a series of defense mechanisms.<sup>[1]</sup>

In the past few years, smart phones have become an integral part of our lives. The number of mobile cellular subscription is constantly increasing every year. Around 26 published survey reports suggest that 50% of teens and 27% of parents feel that they are addicted to mobiles. The recent studies also reported the increase in number of mobile phone dependence, this could increase internet addiction. Since the mid-1990s, internet addiction has been proposed as a new type of addiction and mental health problem, similar to alcoholism and compulsive gambling.<sup>[3]</sup>

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During adolescence, there is an increased risk of emotional crises, often accompanied by mood changes and periods of anxiety and depressive behavior, which adolescents attempt to fight through withdrawal, avoidance of any extensive social contact, aggressive reactions, and addictive behavior.<sup>[4,5]</sup> Adolescents are exceptionally vulnerable and receptive during this period and can become drawn to the internet as a form of release. Overtime, this can lead to an addiction. Adolescents are especially attracted to new technological methods of communication, which offer interaction with others and at the same time provide anonymity, impression of belonging to a community, and a sense of social acceptability.<sup>[5]</sup>

The internet as a global network connects millions of people throughout the world and enables users to exchange information, which remains available at any time and any place.<sup>[6]</sup>

A descriptive study was conducted to assess the level of IA and its impact among high school students in Mangalore. A conceptual framework was based on Roy's Adaptation Model. The tool consisted of a baseline pro forma, a modified form of IA test and a structured questionnaire developed during the study. Those tools were employed to assess the level of IA and its impact among adolescents of English medium high schools. The reliability of the tool was determined using a split half technique. The study revealed that majority (70.5%) of the adolescents were normal users, 23% had a mild addiction, 6% had a moderate addiction, and 0.5% had a severe addiction. The majority (73%) of samples had a mild impact, 16.5% had a moderate impact, and 10.5% had no impact. Some of their demographic variables such as age, class, and occupation of fathers have significant associations with both IA and impact of IA.<sup>[7]</sup>

As the internet increasingly becomes part of our lives, internet addiction disorder has received much attention. A high rate of comorbid mental disorders has also been reported, especially anxiety symptoms and social impairment.<sup>[8]</sup> As every innovation and technology has pros and cons, mobile use also has advantages and disadvantages. Ignorance of the disadvantages among students has led to a long way health hazards. Hence, the investigator feels that there is a need to assess the internet addiction among adolescents and to educate them to minimize or prevent the impact on one's health appeared. The internet was originally designed to facilitate communication and research activities. However, the dramatic increase in the use of the internet in recent years has led to pathological use.

## RESEARCH METHODOLOGY

To accomplish the objectives of the study, a quantitative research approach was adopted. This approach was appropriate for the study because it aims to assess the level of internet addiction among adolescents studying at Government Senior Secondary School, Mirjajan, District Gurdaspur, Punjab. Adolescents between the age group of 14 and 18 years

studying in the 10<sup>th</sup>, 11<sup>th</sup>, and 12<sup>th</sup> standard in Government Senior Secondary School, Mirjajan, district Gurdaspur, Punjab. Research variable was internet addiction. Sample is a small portion of the population selected for observation and analysis. Sixty samples were used in this study.

Sampling technique is a procedure which the researcher adopts in selecting the sample for the study. Simple random sampling technique (lottery method) was used to collect the samples. The roll numbers of the students were written on the slips and after preparing all the slips, they were folded in similar manner to hide the material written on the slips. In the presence of cosupervisor, the folded slips were put in the container. Investigator shuffled the container and then picked the slip and then again the container was shuffled before picking the next slip till the desired students from the class were selected without replacing the slips. The study included adolescents who are as follows:

- Between the age group of 14 and 18 years.
- Available at the time of data collection.

The study excluded adolescents who are as follows:

- Not between the age group of 14 and 18 years.
- Not willing to participate.

The main concern of the study was to assess the internet addiction among adolescents. The tool related to the assessment of level of internet addiction after extensive review of literature, consultation, and discussion with experts of psychiatry. Part A: It includes items for obtaining personal information's of subjects, that is, gender, age, class, type of family, number of siblings, education of father, education of mother, occupation of father, occupation of mother, and mode of internet access. Part B: A modified form of IAT by Kimberley and Young used to assess the level of IA. It consists of the 20-item questionnaire based on the 5-point Likert scale.

Permission was taken from concerned authority of selected school to conduct research study. A written consent was taken from students. Anonymity and confidentiality of the information were maintained during and after data collection.

## DATA COLLECTION PROCEDURE

Data collection was done in February 2019 Dyal Singh Government Senior Secondary School, Mirjajan, district Gurdaspur, Punjab. Before the data collection, permission was be taken from the principal of school for conducting the study. The aim and nature of the study was explained to the principal. Students were explained about objective, activities, and duration of their involvement. Written informed consent was taken from the subjects. The data were collected from February 5, 2019, to February 7, 2019. The responses from the students were collected by filling questionnaire. The Internet Addiction Test was used to assess the level of internet addiction among adolescents. The

investigator made sure that the students were comfortable to fill up the questionnaire. Instructions were given regarding filling of questionnaire and were asked to tick against each statement. They were encouraged to ask any doubt if they had and query raised were clarified. And then, they were also assured that their responses will be kept confidential and used for research purpose only. Adolescents have full authority to participate in research and withdraw from research at any time. Average time taken to fill the questionnaire ranged from 25 to 30 min.

Analysis of the data was done in accordance with the objectives using the descriptive and inferential statistics and findings were presented in the form of tables and figures. The final data transformed to SPSS 15.0 evaluation version and analyzed using appropriate descriptive and inferential statistics.

## RESULTS

Table 1 depicted sociodemographic profile of adolescents. Around 28.3% of adolescents were in the age of 15 years, 23.3% of adolescents were in the 16 and 18 years, and 16.7% of adolescents were in the age group of 14 years and rest 8.3% of adolescents were in the age group of 17 years. Out of 60 adolescents, 70% were male and 30% were female.

Equal proportion, that is, 33.3% of adolescents were from the 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> classes. Majority of adolescents live in nuclear family followed by 10% of them living in joint family.

According to religion, the highest percentage of them belongs to Sikh religion followed by 0% from Muslim religion.

As per number of siblings, 40.0% of adolescents were having one sibling and 1.7% of them were only child. About 100% of adolescents belong to rural area and none of them was from urban area.

As per occupation, majority (88.3%) of adolescents mother were self-employed, 11.7% of them were employed, and no one from them was unemployed. As per occupation of father, 53% were employed, 46% of them were self-employed, and no one from them was unemployed.

Around 60% of adolescents mothers were having primary education followed by 40% of them were having secondary education and no one among them was graduate and postgraduate. Around 73.3% of adolescents father was having secondary education followed by 26.7% of them were having primary education and no one among them was graduate and postgraduate.

With regard to source of internet access, 100% of adolescents were having internet access through mobile phone/tablet/I pad and no one among them was having internet access through personal computer and cyber.

Table 2 describe the frequency and percentage of the level of internet addiction among adolescents. Results show that 55.0%

**Table 1:** Frequency and percentage distribution of sample characteristics (*n*=60)

Sociodemographic variables	Frequency	Percentage
Age (in years)		
14	10	16.7
15	17	28.3
16	14	23.3
17	5	8.3
18	14	23.3
Gender		
Male	42	70.0
Female	18	30.0
Class		
10 <sup>th</sup>	20	33.3
11 <sup>th</sup>	20	33.3
12 <sup>th</sup>	20	33.3
Type of family		
Nuclear	54	90.0
Joint	6	10.0
Religion		
Hindu	9	15.0
Muslim	0	0
Sikh	45	75.0
Others	6	10.0
Number of siblings		
Only child	1	1.7
One	24	40.0
Two	22	36.7
Three or more	13	21.7
Place of residency		
Rural	60	100
Urban	0	0
Occupation of mother		
Employed	7	11.7
Self-employed	53	88.3
Unemployed	0	0
Occupation of father		
Employed	32	53
Self-employed	28	46
Unemployed	0	0
Education of mother		
Primary education	36	60.0
Secondary education	24	40.0
Graduate	0	0
Postgraduate	0	0
Education of father		
Primary education	16	26.7
Secondary education	44	73.3
Graduate	0	0
Postgraduate	0	0
Mode of internet access		
Mobile/tablet/I pad	60	100
Personal computer	0	0
Cyber	0	0

of adolescents were having moderate internet addiction, 21.7% of adolescents were having mild internet addiction, 16.7% of them were normal users, and only 6.7% of them were having severe internet addiction.

Table 3 depicts the association of internet addiction with sociodemographic variables. Chi-square value between the level of internet addiction and sociodemographic variables including age, gender, class, number of siblings, type of family, place of residence, and mode of internet access was found to be statistically non-significant. Chi-square value between the level

**Table 2:** Frequency and percentage of level of internet addiction among adolescents ( $n=60$ )

Level of scoring	Frequency	Percentage	Mean and SD
Normal range (0–30)	10	16.7	23.7 5.314
Mild internet addiction (31–49)	13	21.7	47.38 0.87
Moderate internet addiction (50–79)	33	55.0	56.45 5.794
Severe internet addiction (80–100)	4	6.7	84.5 1.915

of internet addiction and sociodemographic variables including occupation of mother with  $P = 0.001$ , occupation of father with  $P = 0.780$ , education of mother with  $P = 0.052$ , and education of father with  $P = 0.003$  was found to be statistically significant at the level of 0.05. As calculated Chi-square value is more than the tabulated value, we accept the research hypothesis. This reveals that there was a significant association between the level of internet addiction with occupation of mother and father as well as education of mother and father.

**Table 3:** To find out association between internet addiction among adolescents and their selected sociodemographic variables ( $n=60$ )

Sociodemographic variables	Normal addiction	Internet addiction			$\chi^2$
		Mild addiction	Moderate addiction	Severe addiction	P value Df
Age (years)					
14	3	1	6	0	13.549
15	3	6	7	1	0.33
16	2	2	10	0	12 <sup>(NS)</sup>
17	1	2	2	0	
18	1	2	8	3	
Gender					
Male	6	6	25	4	4.327
Female	4	6	8	0	0.228 3 <sup>(NS)</sup>
Class					
10 <sup>th</sup>	4	6	10	0	9.822
11 <sup>th</sup>	3	4	13	0	0.132
12 <sup>th</sup>	3	3	10	4	6
Type of family					
Nuclear	10	11	29	4	0.544
Joint	0	2	4	0	0.132 <sup>(NS)</sup> 3
Religion					
Hindu	2	3	4	0	2.665
Muslim	0	0	0	0	0.132 <sup>(NS)</sup>
Sikh	7	9	26	3	3
Others	1	1	3	1	
Number of siblings					
Only child	1	0	0	0	6.292
One	3	5	14	2	0.710 <sup>(NS)</sup>
Two	3	5	13	1	9
Three or more	3	3	6	1	
Place of residency					
Rural	10	13	33	4	-
Urban	0	0	0	0	
Occupation of mother					
Employed	1	0	3	3	17.525
Self-employed	9	13	30	1	0.001 <sup>s</sup>
Unemployed	0	0	0	0	3
Occupation of father					
Employed	5	6	18	3	1.088
Self-employed	5	7	15	1	0.780 <sup>(s)</sup>
Unemployed	0	0	0	0	3
Education of mother					
Primary education	5	8	23	0	7.722
Secondary education	5	5	10	4	0.052 <sup>(s)</sup>
Graduate	0	0	0	0	3
Postgraduate	0	0	0	0	
Education of father					
Primary education	5	3	4	4	17.44
Secondary education	5	10	29	0	0.003 <sup>(s)</sup>
Graduate	0	0	0	0	3
Postgraduate	0	0	0	0	
Mode of internet access					
Mobile/tablet/I Pad	10	13	33	4	-
Personal computer	0	0	0	0	
Cyber	0	0	0	0	

## DISCUSSION

The results of the present study depicts that 55.0% of adolescents were having moderate internet addiction, 21.7% of adolescents were having mild internet addiction, 16.7% of them were normal users, and only 6.7% of them were having severe internet addiction.

A similar cross-sectional study was conducted on internet addiction among adolescents from private school of Haridwar, Uttarakhand. A cross-sectional survey design was used for 52 randomly selected adolescents. More than half (53.8%) of the participants had moderate internet addiction and 7.7% had severe internet addiction which could possibly affect the physical and mental health of the youngsters.<sup>[9]</sup>

The results of findings depict that the Chi-square value between the level of internet addiction and sociodemographic variables including occupation of mother with  $P = 0.001$ , occupation of father with  $P = 0.780$ , education of mother with  $P = 0.052$ , and education of father with  $P = 0.003$  was found to be statistically significant at the level of 0.05. This reveals that there was a significant association between the level of internet addiction with occupation of mother and father as well as education of mother and father.

It is contradicted by a descriptive study done to assess the level of internet addiction among adolescents: A case study of high schools in Mangalore. The tool consisted of a baseline pro forma, a modified form of IA test and a structured questionnaire developed during the study. The study revealed that majority (70.5%) of the adolescents were normal users, 23% had a mild addiction, 6% had a moderate addiction, and 0.5% had a severe addiction. The majority (73%) of samples had a mild impact, 16.5% had a moderate impact, and 10.5% had no impact. There was a significant association between impact due to IA with some of their selected demographic variables, namely, gender, age, class, presently residing, and occupation of father of the high schools students and the null hypothesis ( $H_{03}$ ) was rejected.<sup>[4]</sup>

A comparative study was conducted among children ( $n=70$ ) of two district between Sagar (Madhya Pradesh) and Surajpur (Chhattisgarh), India, to assess the pattern of internet addiction. Researcher has employed semi-structured interview schedule

to collect primary data it's includes like socioeconomic profiles of the respondent with Young's Internet Addiction Test scale (IAT) with translated into Hindi language and the participants age between 7 and 18 years old. According to Young's 20-item scale, 9 (12.85%) respondents (score >79) were severe addicts of internet, and most important these all are belonging from Sagar. Thirty-nine (55.72%) respondents as moderate (score 50–79) and 22 (31.43%) respondents were mild and safe (score <49).<sup>[10]</sup>

## CONCLUSION

The present study revealed that majority of the adolescents were having moderate internet addiction and there was a significant association between the level of internet addiction with occupation and education of parents.

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