

Effectiveness of Educational Module on Impact of Internet Addiction Among Adolescents

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Abstract

Background of the study: Internet addiction involves excessive or unregulated obsessions, urges, or behaviors related to computer and internet usage, which result in negative consequences such as impairment or emotional distress. This phenomenon has garnered heightened interest among both the general public and researchers, a trend that mirrors the expansion of computer and internet availability. Aim: To assess the efficacy of a structured educational program addressing internet addiction and its influence on health outcomes. Methods: A quasi-experimental research approach and non-probability purposive sampling were employed to assess the impact of a structured teaching program on internet addiction among 60 intermediate students at Aditya PU College, Bangalore. Data was gathered using two specific instruments. Section A - provides socio-demographic data and section B – deal with knowledge about the impact of internet addiction, data was analyzed by using descriptive and inferential statistical methods. Results: The showed that in Pretest majority of the samples 56 (93.3%) have inadequate knowledge and 4 (6.7%) have moderate knowledge; after the structured teaching in post test result showed that majority of the samples 53 (88%) have adequate knowledge and 7 (12%) have moderate knowledge. In the pretest, the mean knowledge score was 8.3 with a Standard deviation of 1.8. In the post test, the mean score increased to 27.8 with standard deviation of 2.4. The calculated P value was < 0.0001 found significant at the level of 0.05. An association was found between the most common mode of internet, and the most common location of usage of internet in the pretest scores of knowledge regarding Internet addiction with selected demographic variables of Aditya PU college students. So, the hypothesis stating that there will be an association with the pretest level of knowledge with selected demographic variables of Aditya PU college students was accepted.

Keywords: Effectiveness, structured teaching program, internet addiction, adolescents, Socio-demographic data, health impact

INTRODUCTION

Internet addiction is best defined as an impulse control disorder. In other words, it's a case where an internet user develops an inherent emotional attachment to their online activities on websites and apps [1, 2].

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Internet addiction involves excessive or inadequately managed preoccupations, urges, or behaviors related to computer use and internet access, resulting in impairment or distress. This condition has gained more prominence in the popular media, aligning with the expansion of computer and internet availability [3].

According to research published by the Kaiser family foundation (KFF) ages between 8 to 18 years spend on average 10 hours and 45 minutes a day and in seven days a week with media which translates in

to 75 hours and 15 minutes per week. 21% of young people are classified as heavy media consumers, spending over 16 hours daily with media, while another 63% fall into the moderate user category, using media for 3 to 16 hours daily. Those who use media for less than 3 hours daily are categorized as light users [4].

Out of the total media hours, approximately half are now spent on the internet. While most children and teenagers manage their online activities alongside school, sports, friends, and other responsibilities, a small percentage may develop compulsive or uncontrolled internet habits, referred to as internet 'addiction' in extreme cases [5]

As internet addiction is a psychiatric condition that involves maladaptive thoughts and pathological behaviors and also includes major symptoms like preoccupation with internet, withdrawal symptoms like restless or irritability with includes feeling of anger and depression. The different approaches and therapy can be used like Cognitive behavioral, marital and family therapy, group therapy approaches may be helpful [6].

Statement of Problem:

“A study to assess the effectiveness of structured teaching program on impact of internet addiction among intermediate students at Aditya PU College, Bangalore”.

Objectives

1. To evaluate the pre-test level of knowledge regarding internet addiction among Aditya PU college students.
2. To evaluate the post- test level of knowledge regarding internet addiction among Aditya PU college students.
3. To evaluate effectiveness of structured teaching program about internet addiction and its impact on health.
4. To associate the pretest level of knowledge regarding Internet addiction with selected Demographic variables of Aditya PU college students.

MATERIALS AND METHOD

Settings of the Study

The study was conducted in Aditya PU college situated in Maruthi Nagar, Yelahanka, Bangalore, having 2 years course of PCMSs, PCMB intermediate education, each class have 60 students.

Method of Data Collection

Self-designed knowledge questionnaires are utilized for data collection.

Development and Description of the Tool

The instrument was created using relevant literature sourced from textbooks, journals, and guidance provided by experts in nursing, general medicine, and psychiatry. It comprises two sections [7-9].

Section A: Socio- Demographic Data [10,11]

Age, gender, religion, residence, type of family, educational status, parents' occupation, family monthly income, frequency of internet, years of internet use, mostly used gadget, most common mode, most common location, leisure activities.

Section B: Knowledge Related Questionnaires Regarding Impact of Internet Addiction

It included 30 questions related to the impact of internet addiction; the items were multiple choice questions in nature. This tool was in English and same was used for structured questionnaire.

Scoring

Table 1 The knowledge regarding impact of internet addiction among intermediate students was assessed in terms of knowledge scores, each correct answer is given a score of 1 and wrong answers, score of “0”. The maximum score was 25. To the study the knowledge scores were categorized as follows.

RESULTS

The Table 2 presents the frequency and percentage distribution of a sample of 60 individuals according to various socio-demographic variables. All participants are aged between 17 and 19 years, with an equal representation of genders. The majority identify as Hindu (58.3%) and reside in urban areas (63.3%). Most come from nuclear families (78.3%) and have diverse educational backgrounds, with a significant portion being illiterate (20%) or having completed primary or middle school (18.3% each).

Table 1. Knowledge scores on the impact of internet addiction among intermediate students.

Level of knowledge	Range
Inadequate	0 - 10
Moderate	11 - 20
Adequate	21 - 30

Table 2. Frequency and percentage distribution of samples according to socio demographic variables (N=60).

SNO	SOCIO-DEMOGRAPHIC VARIABLE		FREQUENCY	PERCENTAGE
01.	Age in years	17 – 19 Years	60	100%
02.	Gender	Male	36	60%
		Female	24	40%
03	Religion	Hindu	35	58.3%
		Muslim	15	25.0%
		Christian	10	16.7%
04.	Residence	Rural	22	36.7%
		Urban	38	63.3%
05.	Type of family	Nuclear	47	78.3%
		Joint	13	21.7%
06	Educational status	Illiterate	12	20.0%
		Primary school	11	18.3%
		Middle school	11	18.3%
		High school	08	13.3%
		Higher secondary school	09	15.0%
		Under graduation	09	15.0%
07	Parents Occupation	Daily wages	14	23.3%
		Self-employment	14	23.3%
		Government employee	10	16.7%
		Private employee	09	15.0%
		Agriculture	13	21.7%
08	Family monthly income	Rs 2000 – Rs 5000	01	17%
		Rs 6000 - Rs 9000	06	10%
		Rs 10000 - Rs 13000	11	18.3%

		Above Rs 25000	20	33.3%
09	Frequency of internet	1 – 2	30	50.0%
		3 – 5	29	48.3%
		6 – 8	01	1.7%
10	Years of internet use	1-5	47	78.3%
		6 – 10	13	21.7%
11	Mostly used gadget	Desktop	11	18.3%
		Laptop	9	15.0%
		Tablet	5	8.3%
		Mobile phone	35	58.3%
12	Most common mode	WI- FI	9	15.0%
		Broadband	5	8.3%
		Data card	13	21.7%
		Mobile internet	33	55.0%
13	Mode common location	Residence	24	40.0%
		Cybercafé	03	5.0%
		Library	12	20%
		Classroom	09	15%
		Computer lab	07	11%
14	Leisure activities	Reading books	21	35.0%
		Listening to music	11	18.3%
		Playing outdoor games	10	16.7%
		Use of medias	18	30.0%

In terms of their parents' occupations, daily wages and self-employment are common (23.3% each), while government and private employment, along with agriculture, make up the rest. Family monthly income varies, with a notable percentage earning above Rs 25,000 (33.3%). Internet usage is widespread, with half using it for 1-2 hours daily and the majority having 1-5 years of experience. Mobile phones are the most used gadgets (58.3%), and mobile internet is the most common mode of access (55%).

Leisure activities among the participants include reading books (35%), listening to music (18.3%), playing outdoor games (16.7%), and using media (30%).

Table 3 titled "Distribution of samples according to pre-test knowledge scores" shows the breakdown of subjects based on their pre-test knowledge levels. It indicates that the majority of the subjects (93.3%) had inadequate knowledge, while a small percentage (6.7%) had moderate knowledge.

Table 4 titled "Distribution of study subjects according to post-test knowledge scores" demonstrates that following the intervention, most of the subjects (88.3%) achieved adequate knowledge levels, while 11.7% attained moderate knowledge levels. In total, 50 subjects were evaluated.

Table 5 titled "Comparison of Pre and Post test mean scores assessment of knowledge on Internet Addiction" presents the mean scores and standard deviations for subjects before and after an intervention. The mean pre-test score was 8.3 with a standard deviation of 1.8, while the mean post-test score increased significantly to 27.8 with a standard deviation of 2.4. The P-value of less than 0.0001 indicates that the intervention was highly effective.

Table 3. Distribution of samples according to pre-test knowledge scores.

Pre-test knowledge scores	No. of subjects	Percentage
Inadequate	56	93.3%
Moderate	4	6.7%
Total	50	100%

Table 4. Distribution of study subjects according to post-test knowledge scores.

Post-test knowledge scores	No. of subjects	Percentage
Moderate	7	11.7%
Adequate	53	88.3%
Total	50	100%

Table 5. Comparison of Pre and Post test mean scores assessment of knowledge internet addiction.

	Pre test	Post test	P-value	Result
Mean	8.3	27.8	<0.0001*	The intervention was effective
Standard deviation	1.8	2.4		

CONCLUSION

The major findings of the study:

- The percentage distribution of samples according to age. It is evident from the above figure that the samples (100%) of samples are in the age group of 17 – 19 years.
- According to gender it reveals that majority of the samples 36 (60%) belongs and males and least 24 (40%) belongs to females.
- According to religion 35 (58.3%) belongs to Hindu and least 10 (16.7%) belongs to Christian.
- According to residence 38 (63.3%) belong to urban areas and least 22 (36.7%) belongs to rural area.
- When it comes to the type of house, majority of the samples 47 (78%) have nuclear family and 13 (22%) have joint family
- According to education status, the chart reveals that 12 (20%) of the samples are illiterate and least 9 (15%) completed higher secondary school and under graduation.
- According to parent's occupation 14 (23.3%) are daily wages and self-employment and least 9 (15%) are private employees.
- According to family monthly income 22(36.7%) are earning between 14000 – 17000 and least 1 (1.7%) are having income Rs 2000 – Rs 5000.
- The percentage distribution of samples according to frequency of internet that majority of the samples 30 (50.0%) are using 1- 2 hours per day and least 1 (1.7%) are using 6 – 8 hours per day.
- When it comes to the Years of internet use, it was observed that the majority of the samples 47 (78.3%) are using from 1 – 5 years, and least 13 (21.7%) are using since 6 – 10 years.
- According to mostly used gadget. The chart reveals that majority of samples 35 (58.3%) are using mobile phone and least 5 (8.3%) are using tablet.
- When it comes to most common mode of internet usage, it was observed that majority of the samples 33 (55%) are using mobile internet and the least 5 (8.3%) are using broad band.
- When it comes to percentage distribution of samples according to most common location reveals that 24 (40.0%) are using internet in residence and least 3 (5.0%) are using in café.
- The percentage distribution of samples according to leisure activities reveals that majority of the samples 18 (30.0%) are using media, and the least 21 (35.0%) are reading books.
- The Pretest level of knowledge was observed that, majority of the samples 56 (93.3%) have inadequate knowledge and 4 (6.7%) have moderate knowledge.
- The Post test level of knowledge was observed that, majority of the samples 53 (88%) have adequate knowledge and 7 (12%) have moderate knowledge.

- An association was found between the most common mode of internet, most common location of usage of internet in the pretest level of knowledge regarding Internet addiction with selected demographic variables.

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Conflict of interest

None

Source of finding

Self

Ethical Clearance

The proposal of the study was presented before the institutional ethical committee for ethical clearance to conduct this study. All the necessary permissions were granted for pursuing this study.

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