IMPACT OF VIDEO ASSISTED TEACHING ON PSYCHOSOMATIC PROBLEMS RELATED TO PROBLEMATIC INTERNET USE AMONG ADOLESCENTS

Abstract

This study examines how video-assisted instruction affects teenagers' psychosomatic issues related to the use of the Internet by the students of senior secondary schools in Mandsaur City, Madhya Pradesh. Sixty students participated in a nonrandomized controlled trial. The Depression, Anxiety, and Stress Scale (DAS-42) and Kimberly Addiction test were the common instruments used in the study. Results showed significant improvements in the experimental group in terms of reduced internet addiction, depression, anxiety, stress, and somatic symptoms after the intervention.

Keywords: Impact, psychosomatic problems, problematic internet and adolescents

Authors

Dr. Amar Yadav
Principal, Govt.
College of Nursing,
Nimbahera, Chittorgarh, Rajasthan.
ajhadodia@gmail.com

Dr. Malti Lodhi
Associate Professor,
Department of Nursing,
Indira Gandhi National Tribal University
Amarkantak, Madhya Pradesh.
lodhi.malti@gmail.com

Achun Rongmei
Assistant Professor,
Department of Nursing,
Indira Gandhi National Tribal University
Amarkantak, Madhya Pradesh.
jainnyrongmei@gmail.com

I. INTRODUCTION

The primary reason that adolescents adopt new technologies is for social contact. Although teens can use contemporary technology to aid their developmental activities, new research indicates that these gadgets may hinder their advancement. Teens with Internet addiction have more serious personal problems and worse relationships with their parents, according to studies. However, little research has been done on the role that teens' connection to their parents and classmates plays in this area, given their psychological characteristics. Use/abuse, the adolescent's psychological profiles, and their attachment to parents and classmates.

To see the influence of parental and peer attachment on Internet use and abuse and to moderate the effect of adolescent psycho-pathological risk, the researcher used Hierarchical regression models. The results showed that attachment with parents influenced teenage Internet use. Adolescents' psycho-pathological risk refereed the relationship between maternal attachment and Internet use. The internet is becoming a common platform among students as an instrument for entertainment, education, social connection, and information sharing.

In urban India, there were 42 million internet users in 2007 as opposed to 5 million in 2000. As the use of the Internet spreads from offices to homes, schools, etc., the public's attention is being directed to the potential negative impacts of internet use, also known as problematic internet use, online addiction, or many other names, including Internet dependency or pathological internet use. "problematic internet use" means internet use interferes with a person's social, academic, professional, or Kimberly Young's psychological well-being.

Griffith assessed this conduct as addictive based on the six "core" traits of addiction: withdrawal, conflict, tolerance, mood change, relapse, and salience. In the DSM-IV-TR, Young categorized specific characteristics of pathological gambling as an impulsive control disorder.

Kimberly Test gives several types of Internet addiction, computer addiction, information overload, cyber sexual addiction, and cyber relationship addiction.

Adolescence is a concerning time in human development since a number of physical, psychological, and social changes mark it. Adolescents are particularly susceptible to using the Internet because of their varied social environments, relatively underdeveloped cognitive control, and peer pressure.

It has been claimed that the prevalence in Asia is between 2 and 18%, in Europe it is between 1 and 9%, and in the Middle East it is between 1 and 12%. The stated prevalence for the overall population was 6 percent, while for the population situated in colleges, it was 14 percent.

Teenagers are, therefore, typically given extra treatment. PIU's detrimental effects increase over time. Numerous studies have documented the issues that arise when teenagers use the internet excessively. According to studies, Teens with internet addiction are more prone to suffer from social isolation, loneliness, anxiety, impulsivity, and feelings of self-effacement. Additionally, studies show that compared to adolescents without addiction, addicts have higher levels of sadness and suicidal thoughts. According to a study, teenagers who are

hooked have bad eating habits and sleep issues, which may impede their ability to grow and develop normally. The study also found a correlation between PIU and drug use, alcohol or coffee consumption, and smoking.

Many studies reported that adolescents were more likely to show aggressive behavior, more severe psychiatric problems, and levels of depression symptoms.

Therefore, the study was chosen by the researchers to determine the connection between problematic internet use and psychosomatic symptoms in teenagers.

Researcher helps to develop effective strategies to identify adolescents at risk of becoming addicted in order to prevent serious problems. In particular, the following queries were investigated: 1) To what extent does Internet addiction affect teenagers? 2) What psychological signs and symptoms are connected to problematic internet use? Furthermore, what connection exists between psychosomatic symptoms and problematic Internet use?

Up to 85% of Americans use the Internet for everyday communication, according to Thussu (2018). In developing (Asian) nations like India, the situation is different. Over seven million Indians were using the Internet in 2001 (Liu & Rao, 2015). However, as of January 2017, 462.1 million people were active Internet users, making up almost 35% of the total population, according to the Statistics Portal. Compared to 2011, when only 10% of the population was using the internet, this data demonstrates a notable growth in internet usage. Additionally, compared to 29% of women, 71% of men utilize the Internet (Kashyap, 2020). The Internet and Mobile Association of India (IAMAI) projects that by June 2018, there will be 500 million Internet users in India, making it the country with the second-largest Internet user population globally (Udupa et al., 2020). Urban India's internet penetration rate increased from 60.6% in 2016 to 64.84% in 2017. In contrast, during the same time period, the percentage of rural residents with internet access increased from 18% to 20.26% (Chauhan, 2019). These figures demonstrate how quickly the Indian population is using the internet.

II. OBJECTIVES

1. To assess problematic internet use and related psychosomatic problems among adolescents in the control and experimental group.
2. To ascertain how video-assisted instruction affects adolescents in the experimental group's psychosomatic issues associated with problematic internet use.
3. To assess how video-assisted instruction affects adolescents' psychosomatic issues associated with problematic internet use in the experimental and control groups.

III. HYPOTHESES

H1$_a$: The mean post-test scores on psychosomatic issues connected to problematic internet use will be significantly higher than the pre-test scores.
H1$_b$: Adolescent psychosomatic issues and problematic internet use will be significantly correlated.
H1$_c$: There will be a substantial correlation between teenagers, demographic factors, and psychosomatic issues associated with problematic internet use.

H1$_d$: There will be a significant difference between the experimental and control groups in terms of problematic internet use and psychosomatic issues among adolescents.

Material and Methodology, and Tools for Present Research Work

- **Research Approach:** The research methodology used in the study was quantitative.
- **Research Design:** Quasi-experimental research design were used in this study with a non-randomized control group.
- **VARIABLES:** The following variables are included in this study:
- **Independent Variable:** Video-assisted teaching is an independent variable in this study.
- **Dependent Variable:** Psychological problems include Depression, Anxiety, Stress and somatic problems include Headache, Eye burning, Watering eyes, Blurred vision, Neck pain, Shoulder pain, back pain, Prickling feeling in fingers, Coldness in hands, Bad dreams, devil behaviour, tiredness, Unable to sleep, Poor personal hygiene, Early wakeup, Day time sleepiness, Do not eat a meal on the proper time, skipping exercises, etc are the dependent variables.
- **Socio-demographic Variables:** Socio-demographic variables in this study are age, Gender, Class of studying, Use of internet since, Place of residence, Source of internet use, Place at most frequent internet use, many on internet recharge per month; Time spent on internet use, the main purpose of internet use, etc.
- **Setting of the Study:** The selected Government and Private Senior Secondary School in Mandsour, Madhya Pradesh, served as the pilot study site.
- **Sample:** The study sample consisted of students who were studying classes 10th, 11th, and 12th in selected senior secondary schools within the age group of 11 to 18 years, both boys and girls, and who fulfilled the inclusion criteria.
- **Sample Size:** Using a basic random selection procedure, among 60 samples, 30 from each group that met the inclusion requirements were selected from the primary population. The students gave their informed written consent, and data was gathered for two weeks in a row.
- **Sampling Method:** The sample was chosen using the probability sampling method.
- **Description of the Tool:** After a thorough examination of the literature and consultation with specialists, the standard data collection tool was utilised in this study to gather the necessary data. The tool is divided into four parts.

Section A: Sociodemographic Factors: Age, Gender, Study Class, Internet Use Since, Residence Location, Internet Source, Most Frequent Internet Use Location, Monthly Internet Recharge Rate, Time Spent on Internet Use, Primary Internet Use Goal, etc.

Section B: Kimberly Young's Internet addiction test. There are twenty pieces in all. The following is a description of the scoring. (The lowest score was one, and the maximum was five.)

Section C: The DAS-42 Depression, Anxiety, and Stress Scale. There are forty-two items, and the scoring was explained as follows. (The lowest score was zero, and the maximum was three.)

Section D: Checklist for somatic symptoms. There are eighteen pieces in all. The following is a description of the scoring. (The lowest score was zero, and the maximum was one.)

Reliability: The researcher created the Somatic Complaints Observational Checklist. It was given to sixty individuals prior to the main trial. The correlation coefficient value of the tool, which was evaluated using the test-retest approach, was 0.87. This correlation value was extremely strong, making it a useful tool for evaluating the effectiveness of psychosomatic issues linked to problematic teen internet use.

Data Collection Procedure

For the Experimental Group: Students were getting video-assisted teaching for 20 minutes, regarding prevention from internet addiction and psychosomatic problems related to problematic internet use

For the Control Group: Students were not getting video-assisted teaching regarding the prevention of internet addiction and psychosomatic problems related to problematic internet use

Make a plan to analyze the data using descriptive statistics.
- The demographic characteristics of the students were examined using frequency and percentage distribution.
- The test scores for internet addiction and psychological issues such as stress, anxiety, depression, and somatic issues were evaluated using mean and standard deviation.

Statistical Inference
- The mean of internet addiction and psychological issues such as stress, anxiety, depression, and somatic issues were analysed using the paired t-test. Adolescents in the experimental group and those in the control group without intervention were shown before and after video-assisted instruction.
- A significant difference between the experimental and control groups' post-test scores for internet addiction, psychological issues such as stress, anxiety, and depression, and somatic issues were compared using an unpaired t-test.
- Using specific demographic data in the experimental group, the chi-square test was utilized to determine the substantial correlation between internet addiction and psychological issues such as stress, anxiety, depression, and physical issues.

Taking Ethics into Account: The chosen Government and Private Senior Secondary School in Mandsour (MP) served as the site of the pilot project. The senior secondary principal's formal consent was acquired.

IV. RESULTS AND CONCLUSIONS

As per age analysis the most of respondents in the experimental group (63.3%) and the control group (56.7%) were between the ages of 14 and 16. A smaller proportion, 26.7% in the experimental group and 33.3% in the control group, were aged 17 to 18. Additionally, 10% of respondents in both groups were between the ages of 11 and 13.

In terms of gender, most respondents were male, accounting for 56.7% in the experimental group and 53.3% in the control group. Female respondents made up 43.3% in the experimental group and 46.7% in the control group.

Based on their current class, the maximum of respondents—63.3% in the experimental group and 56.7% in the control group—were studying in class 11. Meanwhile, 26.7% in the experimental group and 33.3% in the control group were in class 12. A smaller percentage, 10%, in both groups, were in class 10.

Regarding the duration of internet usage, 40% of respondents in both the experimental and control groups had been using the internet for two to three years. Another 33.3% in both groups reported using the internet for one to two years, while 10% of respondents of both groups had been using it for more than three years.

Most respondents (76.7%) of both study groups lived at home, while 23.3% of respondents resided in hostels.

When asked about the device used for internet access, most respondents (80%) in both groups reported using mobile phones. Laptops were used by 13.3%, while 6.7% used computers.

All respondents (100%) in both research study groups indicated that their primary location for internet usage was either their home or hostel.

In terms of monthly internet expenses, the maximum of respondents—73.3% in the experimental group and 80% in the control group—spent less than ₹200 per month. Meanwhile, 20% of respondents in the experimental group and 13.3% in the control group reported spending more than ₹400 per month. A smaller percentage, 6.7% in both groups, spent between ₹200 and ₹400 per month.

Most respondents in the experimental group (43.3%) and the control group (40%) reported using the internet for two to three hours daily. Additionally, 26.7% in the experimental group and 36.7% in the control group used the internet for three to four hours daily. A smaller proportion—23.3% in the experimental group and 16.7% in the control group—used the internet for up to two hours daily, while 6.7% in both groups used the internet for more than four hours per day.

In terms of internet usage purposes, most of the respondents in the experimental group (43.3%) and the control group (40%) used the internet for online gaming. Social media usage was reported by 30% of respondents in the experimental group and 40% in the control group. A smaller proportion, 20% in the experimental group and 16.7% in the control group, used the internet for educational purposes, while 6.7% in the experimental group and 3.3% in the control group used it for web browsing.

Table 1: Mean difference in the experimental group for problematic Internet use

Group	Mean	Mean difference	Standard Deviation	t-Value	df	p-Value	Remark
Pre-test	53.433	11.300	26.329	3.091	29	.004	Significant
Post-test	42.133		12.667				

Source: Primary data

Table1 Indicates that the degree of internet addiction, the mean score for the experimental group decreased from 53.433 to 42.133, reflecting a mean difference of 11.300. With t(29)=3.091and p-value=.004, the reduction is statistically significant.

Table 2: Mean difference in the experimental group for psychological problems related to problematic Internet use

	Group	Mean	Mean difference	Standard Deviation	t-Value	df	p-Value	Remark
Depression	Pre-test	19.566	4.800	7.868	5.371	29	.000	Significant
	Post-test	14.766		5.899				
Anxiety	Pre-test	18.200	7.766	8.218	5.234	29	.000	Significant
	Post-test	10.433		3.654				
Stress	Pre-test	16.733	3.033	6.638	4.633	29	.000	Significant
	Post-test	13.700		4.186				

Source Primary Data

Table 2, represents that the mean score of depression in the experimental group decreased from 19.566 to 14.766 , reflecting a mean difference of 4.800. With t(29)=5.371 and p-value= .000, this reduction in depression levels is statistically significant. For anxiety, the mean score dropped from 18.200 to 10.433, showing a mean difference of 7.766. with t (29)= 5.234 and p-value= .000, indicating a significant reduction in anxiety levels among the participants. The stress levels of respondents in the experimental group decreased from a mean score of 16.733 to 13.700, with a mean difference of 3.033. With a t (29) = 4.633 and p-value= .000, this reduction in stress levels is statistically significant.

Table 3: Mean difference in the experimental group for Somatic problems related to problematic Internet use

Group	Mean	Mean difference	Standard Deviation	t-Value	df	p-Value	Remark
Pre-test	9.200	1.766	3.055	3.140	29	.004	Significant
Post-test	7.433		2.045				

Source: Primary Data

Table 3 Indicates that for the somatic problem, the mean score after the intervention in the experimental group decreased from 9.200 to 7.433, reflecting a mean difference of 1.766. With t(29) and p-value =.004, the reduction is statistically significant.

V. SUGGESTIONS OF THE STUDY

The Following Suggestions Were Made After Conducting the Study.
- To add one more trait transgender in gender attribute
- To add whether students have their own mobile phone or Laptop.
- To add the monthly income of the family.
- Sample size should be increased for better analysis.
- The other opinions and suggestions will be incorporated into the main study to accomplish the objectives of the study.

REFERENCES

[1] Beard, K. W., & Wolf, E. M. (2001). Modification in proposed diagnostic criteria for internet addiction. *Cyberpsychology & Behavior*, 4, 377-383.
[2] Block, J. J. (2008). Issues for DSM-V: Internet addiction. *American Journal of Psychiatry*, 306-307.
[3] Cerniglia, L., Zoratto, F., Cimino, S., Laviola, G., Ammaniti, M., & Adriani, W. (2017). Internet addiction in adolescence: Neurobiological, psychosocial, and clinical issues. *Neuroscience & Biobehavioral Reviews*, 76, 174-184.
[4] Chauhan, L. (2019). *Use of Internet for Performance of Household Responsibilities by Married Women of Vadodara City* (Doctoral dissertation, Maharaja Sayajirao University of Baroda (India)).
[5] Griffith, M. (2000). Does internet and computer addiction exist? Some case study evidence. *Cyberpsychology & Behavior*, 3, 211-218.
[6] Internet and Mobile Association of India. I-Cube 2008 Study. Retrieved from http://www.iamai.in/Upload/Research/I-Cube_2008_Summary_Report_30.pdf
[7] Jiménez-Murcia, S., Granero, R., Fernández-Aranda, F., Sauvaget, A., Fransson, A., Hakansson, A., ... & Menchón, J. M. (2019). A comparison of DSM-IV-TR and DSM-5 diagnostic criteria for gambling disorder in a large clinical sample. *Frontiers in psychology*, *10*, 931.
[8] Kashyap, R., Fatehkia, M., Tamime, R. A., & Weber, I. (2020). Monitoring global digital gender inequality using the online populations of Facebook and Google. *Demographic Research*, *43*, 779-816.
[9] Liu, M., & Rao, P. (2015). A comparative perspective of knowledge management via social media: India and China. *The Learning Organization*, *22*(2), 93-114.
[10] Lu, X., Watanabe, J., Liu, Q., Uji, M., Shono, M., & Kitamura, T. (2011). Internet and mobile phone text-messaging dependency: Factor structure and correlation with dysphonic mood among Japanese adults. *Computers in Human Behavior*, 27(5), 1702-1709.
[11] Thussu, D. (2018). A new global communication order for a multipolar world. *Communication Research and Practice*, *4*(1), 52-66.

[12] Tsitsika, A., Critselis, E., Kormas, G., Filippopopulou, A., Tounissidou, D., Freskou, A., et al. (2009). Internet use and misuse: A multivariate regression analysis of the predictive factors of internet use among Greek adolescents. *European Journal of Pediatrics*, 165, 655-666.

[13] Udupa, S., Venkatraman, S., & Khan, A. (2020). "Millennial India": Global digital politics in context. *Television & New Media*, *21*(4), 343-359.