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## The Impact of Internet Addiction on Aggression amongst school going students; a cross-sectional study

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### ABSTRACT

#### BACKGROUND

In today's rapidly evolving digital world, the internet has become an omnipresent force, significantly impacting various aspects of human life. Of particular interest is its influence on the behavior of adolescents attending school, with growing concern surrounding the potential link between internet addiction and aggressive tendencies. However, alongside its benefits, concerns have risen about excessive internet use among adolescents, leading to what is commonly termed as internet addiction.

#### MATERIAL AND METHOD

A cross-sectional research was conducted to find the impact of internet addiction on aggression. A sample size of 100 individuals, 50% males and 50% females respectively of age groups ranging from 14 years to 16 years who were willing to participate and gave their consent were included in the research. Individuals with any kind of psychiatric or medical condition were excluded from the research. All the participants were school going students who were in constant touch with internet.

#### RESULT

A total of 130 students were approached out of which 20 didn't respond, 110 responded but out of these 6 didn't meet the criteria and 4 didn't sign the consent therefore were rejected. The result obtained indicated that there was a strong positive relationship between internet addiction and aggression. The correlation was significant ( $p < .001$ ). Internet addiction was found to be significantly and positively related to aggression.

#### CONCLUSION

This implies that the more addicted adolescents are to use the internet, the more they exhibit aggressive behavior.

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## INTRODUCTION

The Internet's emergence has transformed numerous facets of daily life, including education, communication, and entertainment. In this fast-moving world, Internet addiction has become a prominent issue, especially among adolescents. For students, the Internet is an essential tool that provides many opportunities for learning and socialization. However, internet addiction has led to a phenomenon known as internet addiction, characterized by excessive and uncontrolled internet use that affects daily life. Internet addiction has become a significant concern, primarily as it affects the mental health of young people. This developmental stage of youth is critical because students are exposed to the outside world, including digital media, where they see a whole new world and feel they are not confined within the walls of their house. This exposure to the outside world, where there are no boundaries, often takes a toll on their young minds as they are unable to monitor their usage of the Internet, hence forming an addiction unknowingly.

Aggression refers to a behavior that is hostile, violent, or intended to cause injury or harm to others. Aggressive behavior is defined as behavior that causes harm or pain and can take many forms, including physical abuse, verbal abuse, and social abuse. Aggression, encompassing various forms of behavior intended to cause harm or distress to others, has been observed to exhibit a complex relationship with internet addiction.

It is seen that internet use may lead to increased feelings of frustration, social isolation, and decreased emotion regulation, which can contribute to heightened levels of aggression both online and offline. This is quite evident in online fights, where clearly the tolerance of youth is decreasing on a daily basis, and they can be seen regularly indulging in baseless fights. In offline lives, these individuals are often having angry fights with their close ones, further leading them towards isolation and hence increasing their usage of the Internet.

This research paper investigated the relationship between Internet addiction and aggression among students. It seeks to understand how excessive online use can lead to severe behavior, including a variety of psychological and environmental factors. Reviewing existing literature and conducting empirical research, this article seeks to gain a deeper understanding of the processes underlying these relationships and highlight implications for study policies and interventions—practical strategies to reduce its negative impact and promote healthy Internet use among students. Through analysis, this study focuses on advancing knowledge in psychology and informing stakeholders, including parents, teachers, and policymakers, about the impact of Internet use on youth. Therefore, to fulfill our aim we assess internet addiction of school-going students to see its impact on aggression.

## **METHOD**

### **INCLUSION CRITERIA:**

- School-going students
- Participants age range from 14-16 years
- who provides consent/assent

### **EXCLUSION CRITERIA:**

- People who are working or employed
- People with any kind of psychiatric and medical condition

### **RESEARCH DESIGN:**

Cross-sectional research

### **Sample Details:**

- **Sample Size:** A sample of 100 participants has been collected.
- **Sampling method:** Convenience Sampling

## **TOOLS**

### **(a) SOCIO DEMOGRAPHIC DATA SHEET**

A sample of 100 school-going students aged 14-15, spanning from 7th to 10th grade, was included in the research. The sample consisted of an equal distribution of males and females, with 50% representing each gender.

### **(b) Internet Addiction Scale (IAS)**

The Internet Addiction Scale (IAS) is a self-report questionnaire developed by psychologist Kimberly Young in 1998 to measure the severity of Internet addiction. It consists of 20 items and uses Likert's rating procedure with options ranging from "does not apply" to "always" and corresponding ratings from 0 to 5. Scores on the IAS can range from 20 to 100, with higher scores indicating greater levels of internet addiction. While widely used in research, it's important to note that the IAS is a self-report measure and may not capture the full complexity of internet addiction. Additionally, the concept of internet addiction remains controversial within the field of psychology.

### **(c) Aggression Scale (AS)**

The aggression scale is used to study the level of aggression in individuals above 14 years of age. It consists of 55 statements and is a Likert-type 5-point scale. Respondents rate each item on a scale indicating the frequency or intensity of their aggressive behavior. The scores are totaled to provide an overall measure of aggression. It can be used in clinical and research settings to assess various forms of aggression. It's important to interpret scores in conjunction with other relevant information and consider the context and population being assessed.

## **PROCEDURE**

Potential participants from Yamuna Nagar, Haryana were approached via hardcopy questionnaires in person. Before participation, consent/assent was sought from each participant, explaining the study's purpose, procedures, and benefit to the mental health community. A written consent form was provided, outlining participants' rights, confidentiality measures, voluntary measures, and the voluntary nature of participation. Participants were given the opportunity to ask questions and to provide their written consent. A Proforma was developed to gather sociodemographic details such as age, gender, academic course, region, family type, and academic year.

Subsequently, participants underwent the administration of selected study tools, beginning with the Internet Addiction Scale (IAS) which contained a total of 20 items. Participants were instructed to rate their responses. Following the IAS, participants completed Aggression Scale (AS) which had 55 items. The questionnaire took a total of 25-30 minutes collectively. Clear instructions were given regarding assessments designed to assess an individual's aggression and internet addiction in the past 6 months and participants were debriefed, providing additional information about the study's objectives and addressing any questions or concerns.

Throughout the process, strict adherence to ethical standards, participant confidentiality, and data protection regulations was ensured.

## **STATISTICAL ANALYSIS**

To ensure a thorough understanding of the data, we followed the guidelines outlined in the 7th Manual of the American Psychological Association (APA). After considering the nature

and objectives of our research, we identified various statistical techniques for data analysis. The data for the research was examined using SPSS version 26.0. Initially, we employed Pearson's correlation to examine the relationship type between Internet Addiction and Aggression and to gauge the strength and direction of the association between internet addiction scores and aggression measures. The correlation analysis provided valuable insight into the initial relationship between internet addiction and aggression.

Additionally, we utilized Regression models to explore the predictive value of internet addiction on aggression. These models allowed us to control for potentially confounding variables such as age, gender, education level, and comorbidities, ensuring the accuracy and reliability of our findings.

## RESULT

**Table 1: Demographic details of the participants**

Variables		Frequency	%
<b>Gender</b>	Female	50	50.0
	Male	50	50.0
<b>Religion</b>	Christian	1	1.0
	Hinduism	80	80.0
	Jainism	2	2.0
	Sikhism	17	17.0
<b>Socioeconomic status</b>	Lower Middle Class	6	6.0
	Middle Class	42	42.0
	Upper Middle class	51	51.0
<b>Region</b>	Rural	2	2.0
	Urban	98	98.0
<b>Educational Qualification</b>	10 <sup>th</sup> Class	83	83.0
	9 <sup>th</sup> Class	4	4.0
	8 <sup>th</sup> Class	8	8.0
	7 <sup>th</sup> Class	5	5.0

Table 1 denotes the sociodemographic details of the selected sample. The variables selected were gender, religion, socioeconomic status, region, and educational qualification. Their frequency and percentage were noted.

**Table 2****Data distribution on levels of Internet Addiction**

Variables		Frequency	%	N
Internet Addiction	Moderate	64	64.0	100
	Normal	17	17.0	
	Severe	19	19.0	

Table 2 denotes the frequency and percentage of internet addiction. The majority of school-going students have a moderate level (n=64) of internet addiction.

**Table 3****Data distribution on levels of Aggression**

Variables		Frequency	%	N
Aggression	Average Aggression	50	50.0	100
	High Aggression	49	49.0	
	Low Aggression	1	1.0	

Table 3 denotes the frequency and percentage of aggression. The majority of school going students have an average level (n=50) of aggression.

**Table 4****Correlation for the association between Aggression and Internet Addiction**

Variables	Internet addiction	Aggression
Internet Addiction	1	
Aggression	.336**	1

Table 4 denotes the significant relationship between internet addiction and aggression amongst school going students. The result obtained indicated that there was a strong positive relationship between internet addiction and aggression and hence the hypothesis was accepted. The correlation was significant at .33 level. Internet addiction was found to be significantly and positively related with aggression. This implies that the more addicted adolescents are in using the internet, the more they exhibit aggressive behaviour.

### REGRESSION ANALYSIS: STUDYING THE SIGNIFICANCE OF AGGRESSION AND INTERNET ADDICTION

**Table 5.**

#### **Influence of Internet Addiction on Aggression**

Predictor	R	SE	$\beta$	t	p	R <sup>2</sup>	Adjusted R <sup>2</sup>	F	df1	p
Internet Addiction	.336	.126	.336	3.532	<.001	.113	.104	12.476	1	<.001

The regression analysis represented in Table 5 shows the influence of internet addiction on aggression. It indicates that internet addiction is a significant predictor ( $\beta = .33$ ,  $p < .001$ ) of aggression. The R<sup>2</sup> value of internet addiction is shown. It was seen that the R<sup>2</sup> value of internet addiction on aggression was .113. Therefore, internet addiction can be used to predict aggression up to 11.3%. Internet addiction directly impacts aggression among school-going students.

### DISCUSSION

The study aimed to explore the relationship between internet addiction and aggression among school-going students. The findings revealed a positive correlation between internet addiction and aggression, supporting the initial hypothesis. One hundred students, including an equal number of males and females aged 14 to 16, participated in the research. Students who provided consent and expressed genuine interest in the study were included, while those with medical or psychiatric conditions or employed were excluded. Convenience sampling was employed, and the research was conducted using a cross-sectional method. The research utilized tools such as the Aggression Scale (AS) and Internet Addiction Scale (IAS), and demographic factors such as gender, region, socioeconomic status, religion, and educational qualification were considered.

The study's results are consistent with prior research conducted by Bibi Asma Khatoon et al. (2016) that demonstrated a significant positive impact of internet addiction on aggression. Other studies like the ones conducted by Giridharan and Lavanya (2022) also support these findings, indicating a positive relationship between internet addiction and aggression among adolescents. A cross-sectional study conducted by Chadia (2021) also concluded that problematic internet use has become a significant health issue that should not be overlooked, mainly because of adolescents' increased internet use. This suggests that internet addiction may have a noteworthy influence on aggressive behavior among school-going students. The study also delved into potential underlying factors contributing to the link between internet addiction and aggression. It was found that prolonged exposure to violent or aggressive online content, coupled with desensitization to real-life violence, could potentially heighten aggressive tendencies among adolescents. Another study conducted by Jacob Shefeena (2019) suggested that while technology can benefit young students, improper internet use can lead to negative consequences. The study also revealed a positive relationship between internet addiction and aggression which is consistent with the findings of the present study. Another research conducted by Volk et al (2018) shows congruency to our findings that individuals who are more addicted to internet gaming and take more significant risks are more likely to engage in aggressive behavior. Moreover, the constant connectivity and anonymity provided by the internet may lead to disinhibition, making individuals more likely to express aggression online, which could spill over into their offline behavior. Furthermore, the study highlighted the importance of parental involvement and guidance in mitigating the negative effects of internet addiction on aggression. It emphasized the need for open communication between parents and their children regarding online activities and the establishment of healthy boundaries for internet usage. Additionally, promoting alternative



offline activities and fostering a supportive and nurturing home environment were identified as potential protective factors against the development of aggressive behavior linked to internet addiction. Some studies also reported gender-wise differences and the effect of internet addiction on aggression and they found that females exposed more aggressive behavior than males (Joarder et al. 2021)

## **CONCLUSION**

The study emphasizes the importance of understanding the impact of internet addiction on students' behavior, particularly in terms of aggression. The result showed that there is a positive relationship between internet addiction and aggression. Considering this relationship is crucial for developing effective interventions to mitigate the adverse effects of internet addiction and enhance students' online well-being. Understanding the link between internet addiction and aggression in students is crucial for developing interventions. In conclusion, the findings of this study underscore the urgent need for multifaceted interventions targeting internet addiction and its potential connection to aggressive behavior among school-going students.

## **LIMITATIONS**

- The study has a sample size of 100 participants with a restricted age range.
- The study uses a cross-sectional design, meaning that data is collected at a single point of time.
- This study does not talk about various subtypes of aggression. As we know, aggression is multifaceted and is influenced by numerous factors.

## **FUTURE DIRECTION**

- In the future, it would be beneficial to conduct longitudinal research to track changes over time.
- The study can be planned with increased sample sizes to improve generalizability and incorporate more objective measures to complement self-reported data.
- Taking a holistic approach that considers different aspects of psychology, environment, and culture will help us gain a more comprehensive understanding of the underlying causes and mechanisms of severe Internet protection-related behavior.

- Future research endeavors should delve deeper into the underlying mechanisms linking internet addiction and aggression to gain a comprehensive understanding of these complex relationships.
- Additionally, the observed correlation between internet addiction and aggression emphasizes the importance of integrating mental health support within educational settings.

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