

Gender Differences in Internet Addiction Among Young Adults: A Comparative Study

Ms. Aparajita Barik¹, Mr. Satyabrata Das²

¹M.Phil. Trainee, Department of Psychiatric Social Work, Mental Health Institute (COE), SCB Medical College and Hospital, Cuttack

²Ph D Research Scholar, P.G Department of Education Fakir Mohan University, Balasore

Abstract

The internet is an integral part of today's life; therefore, the risk of internet addiction is very high. The current consequences of internet addiction are not comparable to those of other types of addiction. However; internet addiction may be a serious problem in the future. For this reason, this issue should be addressed today. The primary objective of the study was to assess the differences in internet addiction between males and females in a sample of UG students in the Cuttack city. Differences were assessed in the total internet addiction score. A questionnaire of online survey was conducted in 2025. The objective of the study was mainly achieved by using the parametric t-test. The sample was selected in the form of a stratified random sampling and consists of 40 responses, out of which 20 were male and 20 were female. Data obtained using the standardized IAT scale was included in the analysis. The overall internet addictions were found by using statistical techniques like mean, standard deviation and t-test. Significant difference was identified at the 0.05 significant level by rejecting null hypothesis as the calculated value is greater than the tabulated value, which indicated male students have a higher internet addiction. So internet addiction in high-risk population should be systematically monitored. The internet addiction of young adults may be a serious problem in the near future, more studies should be done in cross-cultural context and also studies must be there to address those issues.

Keywords: Gender, Internet addiction, Young adults.

INTRODUCTION

In the new generation, the Internet has become an important tool for education, entertainment, communication, and information-sharing. Easy access and social networking are two of the several aspects of the Internet fostering addictive behaviour [1]. The unique characteristics of the internet such as its 24-hour availability, simple working, low cost, anonymity of its users and etc. have welcomed many people throughout the world [2]. In tandem with the splurge in access to the Internet globally, with the rise of new-generation gadgets, the risk of "internet addiction" is emerging as a significant behavioural addiction pandemic to be tackled worldwide [3]. Internet addiction commonly refers to an individual's inability to control his or her use of the Internet (including any online-related, compulsive behaviour, which eventually causes one's marked distress and functional impairment in daily life. Research studies in the Western and Asian contexts suggest that the risk of Internet addiction among young people is increasing [4]

REVIEW OF RELATED LITERATURE

Swain et al. (2024) conducted a cross-sectional study titled *"Role of Gender Difference in Internet Addiction and Its Association with Family Interaction Among Students"*, to examine the role of gender differences in internet addiction (IA) and its association with family interaction among undergraduate students in Odisha, India. The study involved 252 college students aged between 18 and 23 years and found that the overall prevalence of IA was 64.8%, with mild addiction accounting for 41%, moderate addiction for 21.9%, and severe addiction for 1.9% of the sample. Although female students showed slightly higher mean scores in internet addiction and family interaction than males, the differences were not statistically significant. Internet usage patterns differed by gender, with females predominantly using the internet for academic purposes, while males used it more for entertainment and stress relief. These usage patterns highlight a gender-based preference that may influence the type and intensity of internet engagement. Moreover, while females reported higher family interaction scores, no significant association was found between gender and family interaction levels. The study concluded that IA was prevalent among the majority of college students and that while gender-related trends existed in usage behavior, they did not show significant statistical impact on addiction levels or family dynamics. The authors emphasized the importance of raising awareness about the role of family support in managing IA among students.[5]

Varchetta et al. (2024) conducted a comprehensive cross-sectional study titled *"Exploring Gender Differences in Internet Addiction and Psychological Factors: A Study in a Spanish Sample"*, involving 585 Spanish young adults to examine gender differences in internet addiction (IA) and its psychological correlates. The findings revealed significant gender-specific patterns in internet-related behaviors. Males showed higher levels of Internet Addiction and Internet Gaming Disorder (IGD), whereas females exhibited greater tendencies toward Social Media Addiction (SMA), social media engagement, and phone obsession associated with phubbing. Interestingly, no significant gender difference was found in the Fear of Missing Out (FoMO) or in the communication disturbance aspect of phubbing. Psychological traits also differed between genders, with females demonstrating higher emotional dysregulation, neuroticism, agreeableness, and conscientiousness, while males scored higher on sensation seeking and lack of perseverance. Regression analysis indicated that for males, predictors of IA included IGD, SMA, phone obsession, and difficulties in emotional awareness and non-acceptance. For females, significant predictors were SMA, communication disturbance, IGD, and low prosocial behavior. These findings underscore the importance of tailoring prevention and intervention strategies for IA based on gender-specific predictors and psychological traits.[6]

Chowdhury et al. (2023) conducted a cross-sectional study titled *"Internet Addiction and Its Psychological Impact on College Students in Bangladesh"*, involving 350 college students. The study utilized Young's Internet Addiction Test (IAT) and other psychological measures to examine the prevalence of internet addiction and its association with psychological well-being. Results indicated that 42% of participants were moderately addicted and 11% were severely addicted to the internet. Male students exhibited higher levels of addiction compared to females. The study also found that internet addiction was significantly associated with increased symptoms of depression, anxiety, and stress. Students with higher addiction scores were more likely to report difficulties in maintaining academic performance and social relationships. The study concluded that internet addiction is a growing concern among college students, particularly among males, and is linked to substantial psychological and academic impairments.[7]

Chen et al. (2023) conducted a cross-sectional study titled *"Childhood Trauma and Internet Addiction Among College Students in China: The Mediating Role of Self-Esteem"*, which involved 2,405 college students. The study aimed to explore the relationship between different types of childhood trauma and internet addiction, with a focus on the mediating effect of self-esteem. Using the Childhood Trauma Questionnaire (CTQ), the Internet Addiction Test (IAT), and the Rosenberg Self-Esteem Scale (RSES), the findings showed a significant positive correlation between childhood trauma and internet addiction. Emotional abuse had the strongest association among all trauma types. Importantly, self-esteem partially mediated the relationship, indicating that lower self-esteem contributed to greater vulnerability to internet addiction in students with traumatic childhood experiences. The study highlighted the psychological mechanism through which trauma may influence addictive behaviors and recommended that interventions to enhance self-esteem could serve as a preventive strategy against internet addiction among youth exposed to early life adversities.[8]

Mari et al. (2023) conducted a study titled *"Gender Differences in Internet Addiction: A Study on Variables Related to Its Possible Development"*, which aimed to explore the gender-specific characteristics influencing the development of pathological internet use. The findings indicated that gender plays a significant role in shaping internet addiction behaviors. While social media addiction emerged as a common predictor for both males and females, the study also identified gender-specific predictors unique to each group. These insights emphasize the importance of considering gender differences in both prevention strategies and treatment interventions for internet addiction.[9]

Islam et al. (2022) conducted a cross-sectional study titled *"Internet addiction and its association with depression, anxiety, and stress among university students in Bangladesh"*, involving 400 university students. The study aimed to assess the prevalence of internet addiction (IA) and its relationship with psychological distress using Young's Internet Addiction Test and the DASS-21 scale. The findings revealed that 39.7% of students had moderate levels and 12.3% had severe levels of internet addiction. The prevalence of IA was significantly associated with higher levels of depression, anxiety, and stress. Male students and those in lower academic years showed higher levels of addiction. Additionally, students who used the internet for more than five hours daily had significantly elevated IA scores. The study concluded that IA is a growing concern among university students and is strongly associated with poor mental health outcomes, underscoring the need for preventive strategies and mental health interventions in educational settings.[10]

Khan et al. (2017) conducted a cross-sectional analytical study titled *"Effect of Gender and Physical Activity on Internet Addiction in Medical Students"*, to investigate the impact of gender and physical activity on internet addiction among 322 medical students in Rawalpindi, Pakistan. Using Young's Internet Addiction Test, the study found no statistically significant gender difference in internet addiction scores, with females scoring slightly higher than males, but without meaningful statistical disparity. Conversely, physical activity showed a significant inverse relationship with internet addiction. Students who did not engage in any form of physical activity had notably higher internet addiction scores compared to those who maintained regular physical activity routines. The study emphasized that although gender alone may not be a predictor of internet addiction, lack of physical engagement contributes considerably to higher addiction tendencies. These findings suggest the necessity of incorporating physical activity into daily routines as a preventive measure for internet addiction among students.[11]

Zalavadiya et al. (2016) conducted a cross-sectional study titled *"Comparative Study of Internet*

Addiction Between Male and Female Students of a Medical College of Gujarat", which involved 212 medical students (143 males and 69 females) from P.D.U. Government Medical College, Rajkot, Gujarat. Using Young's Internet Addiction Test (YIAT-20), the study found that male students had significantly higher internet addiction scores compared to females. Specifically, 35% of males scored ≥ 50 on the IAT compared to 17% of females, and the median addiction score for males was 43, significantly greater than the 27 median for females. Males also spent more time on the internet for non-educational purposes, incurred higher internet expenses, and reported more psychosocial problems such as lifestyle changes, sleep disturbances, depression, and academic disruptions. Furthermore, problematic behaviors such as cybersexual activity and purposeless surfing were also more prevalent among male students. The study concluded that male students are more vulnerable to internet addiction and experience a greater range of adverse effects related to excessive internet use.[12]

Vyjayanthi et al. (2014) conducted a cross-sectional study titled *"Gender Differences in the Prevalence and Features of Internet Addiction among Indian College Students"*, involving 810 undergraduate students from various academic disciplines in India. The study used Young's Internet Addiction Test and a semi-structured questionnaire to examine gender-based prevalence and behavioral features of internet addiction. The overall prevalence of internet addiction was 8.8%, with a higher proportion among males (10.33%) compared to females (6.84%). Notably, male students were more engaged in multiplayer online games, whereas females showed higher involvement in social networking platforms. Students with addiction reported longer hours of internet use, often exceeding 10 hours per week, and experienced significant impairments including academic disruptions, social withdrawal, and physical symptoms such as insomnia, eye strain, and daytime sleepiness. Engineering students showed higher rates of addiction, likely due to increased internet access and academic demands. The study concluded that internet addiction is more prevalent among males and associated with distinct patterns of application use and notable functional impairments.[13]

RESEARCH GAP

1. May be very few studies conducted on internet addiction of young adults in Odisha.
2. Most of the study conducted on the impact of internet addiction where limited study conducted in the context of gender differences.
3. Most of the study conducted on school going children and adolescences where limited study conducted on young adults.

RATIONALE OF THE STUDY

In recent decades, internet usage among young adults has undergone dramatic expansion, offering immense benefits in education, entertainment, and communication. At the same time, concerns have grown about excessive or uncontrolled digital engagement — often referred to in the academic literature as Internet Addiction Disorder (IAD), Problematic Internet Use (PIU), or compulsive Internet use. [14] Young adults are especially vulnerable to problematic internet behaviours. Empirical studies highlight psychological consequences such as poor academic performance, social isolation, and elevated risk for mood disorders like anxiety and depression. [15] Moreover, gender differences have been observed in patterns of internet use and addiction. Studies suggest that males are more likely to engage in online gaming and experience higher rates of internet addiction, whereas females often use the internet for social networking, which may also lead to problematic use, albeit through different mechanisms.[16]

Internet addiction and its related variables (i.e., internet gaming addiction, social media addiction, fear of missing out, phubbing) have mostly been investigated in the general population without considering possible gender differences. From the review it was observed that majority of the study investigated about the internet addiction and factors affecting and review indicated the inconsistent in finding and also research gaps are present. So present study aims to find the gender differences in internet addiction among young adults, that will indicate the present status between male and female in terms of internet addiction, which will help the different stakeholders of the society.

STATEMENT OF THE PROBLEM:

Gender differences in internet addiction among young adults: a comparative study.

OPERATIONAL DEFINATION:

Gender differences:

In the present context gender differences refers to biological attributes and here it is categorized as male and female.

Internet Addiction:

In this context Internet addiction defined as one's inability to control internet using, which could lead to physical, psychological, and social difficulties. The suggested activities that are particularly addictive on internet are online gaming and social networking etc.

Young Adults:

In this study young adults refers to both male and female college going students of the age group of 18 to 25 having minimum educational qualification +2.

DELIMITATION OF THE STUDY:

1. The study has delimited to young adults that is male and female college going students of different UG colleges of Cuttack district within the age group of 18 to 25.
2. The study is delimited to 40 college going students, that is 20 male and 20 female.

OBJECTIVE:

To study the differences in internet addiction between male and female young adults

HYPOTHESIS:

There is no significance difference in internet addiction between male and female young adults

METHODOLOGY:

This survey type of research study was conducted from January to May 2025 at different colleges of Cuttack district after getting approval from Ethical Review Committee of the institution. 20 Male and 20 female students of different UG colleges were selected by probability stratified random sampling who gave written informed consent to participate in the study. Students who did not have computer or related device (like Smart phone, Laptop, Tablet) were excluded.

Data collection tool used in the present study was 'Young's Internet Addiction Test' questionnaire developed in 1998 by Young. This is a fully validated, self-administered questionnaire comprising of 20

closed ended items with responses on 5 points Likert Scale. At an expected response rate of about 85%, the questionnaires were distributed to 40 UG students within the age group of 18-25.

DATA ANALYSIS AND INTERPRETATION

Microsoft Excel software was used to enter data. Analysis was carried out using SPSS. Descriptive data were analysed by percentage, mean and standard deviation. 't' test was used for in-between group comparisons.

Here the investigator made 2 groups that is 1 st group consists of 20 boys student and 2 nd group is 20 girls student. Then he calculated the mean, standard deviation from scores of two group.

Degree of freedom	Tabulated 't' value	
	Standard error at level of significance	
38	0.05	0.01

	2.02	2.71
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Degree of freedom for which tabulated 't' value has identified is $N_1 + N_2 - 2 = (20 + 20) - 2 = 38$.

Group	M	SD	fd	't' Value	Significant/ non- significant
Group-1(Boys)	36.7	15.60	38	2.17	Significant at 0.05 level
Group-2(Girls)	31.3	8.09			

The above table shows that Mean internet addiction scores of boys group and girls group are 36.7 and 31.3 respectively and the Standard Deviation for the both groups are 15.60 and 8.09 respectively with degree of freedom 38. The calculated 't' value is 2.17. The tabulated 't' value at 0.05 level is 2.02. As the calculated 't' value is more than the tabulated 't' value at 0.05 level. Hence, we can say that the scores are significant between boys group and girls group. So here the investigator rejected the null hypothesis at 0.05 level of significance.

DISCUSSION:

In this current study the data were collected from 20 male and 20 female young adult by using standardized IAT scale. The overall internet addiction were found by using statistical techniques like mean, standard deviation and t-test. Significant difference was identified at the 0.05 significant level by rejecting the null hypothesis, which indicates male students have a higher internet addiction then young adult girl.

LIMITATION:

Our study was a cross-sectional study with a limited sample size. More studies with bigger sample sizes are warranted to establish a causal association between IA and family interaction among undergraduate students.

EXPECTED IMPLICATION:

It will help both state and central government to know the status of internet addiction among young adults.

It aware the parents and teachers to know about the internet addiction of young adults

It provides valuable insights for mental health professionals and educators, highlighting the need for gender-specific interventions that address the unique predictors of IA in males and females.

Public health policies aimed at reducing Internet addiction, particularly in vulnerable populations. By recognizing the role of specific psychological and social variables, policymakers can develop targeted initiatives that address the underlying factors contributing to IA.

Findings underscore the relevance of considering gender differences in research and intervention design. As Internet usage patterns continue to evolve, it is crucial to adopt a nuanced approach that considers the distinct motivations and risks associated with Internet addiction for different genders.

FURTHER STUDY:

Longitudinal and cross-sectional studies can help to identify more differences over time.

Cross cultural research can identify cultural variations in Internet addiction in terms of rural and urban, between different type of institutions.

Future research could benefit from employing more diverse and representative samples to enhance

the external validity of the results.

More studies with bigger sample sizes are warranted to establish a causal association between IA and family interaction among undergraduate students.

More studies must have carried out to know the impact of internet addiction on the physical as well as mental health of young adults.

Rigours study should be done on different factors which are associated with internet addiction.

CONCLUSION:

This study's results imply that men use the Internet differently from women, and that men are more likely subject to Internet addiction. Watch over the use of internet by parents and colleges necessary to prevent and stop emerging internet addiction. The need for detailed research for the same required.

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