# EXAMINING THE EFFECT OF INTERNET ADDICTION ON THE ACADEMIC PERFORMANCE OF UNDERGRADUATE STUDENTS

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## ABSTRACT

The purpose of this study was to look at the connection between undergraduate students' academic achievement and Internet addiction. The study also looked at how students' internet addiction varied according to their gender. One hundred undergraduates from universities made up the sample. Descriptive statistics, t-tests, ANOVA, and basic linear regression analysis were used to gather and examine their answers to the "Internet Addiction Scale" and their GPA from the prior semester. The findings showed a strong inverse relationship between undergraduate university students' academic achievement and internet addiction. The findings also showed that there are gender disparities in internet addiction, with male students showing higher levels of addiction than female students. A number of recommendations were made for future study and practical applications in light of these findings.

**Keywords:** Addiction, Internet, Undergraduate, Academic Performances

## INTRODUCTION

The word addiction is derived from the Latin addicts, which meaning being overly attached to something and losing one's freedom of choice or ability to be a slave. The definition of addiction has expanded in recent years to include behaviors unrelated to substance use that result in issues and impairment (Rosenthal & Faris, 2019). An harmful habit that disrupts someone else's personal life is internet addiction. It could throw off a person's regular schedule. Regular Internet use can totally ruin a person's life. Despite the absence of classification by the American Psychiatric Association as a behavioral addiction, akin to other addictions documented in the works of Longstreet et al. (2019), it is noteworthy that Internet gaming disorder finds mention in the DSM-5 appendix as an ailment associated with Internet usage, as articulated by Roehr (2013)

Since IA may have an impact on undergraduate students' psychological health, it is crucial to assess emotional disturbances among students. They will be more susceptible as a result to mental disorders like stress, anxiety, and depression. Free limitless internet connectivity is available in many universities and colleges with the goal of enhancing education research, facilitating communications, and enhancing teaching and learning processes. On the other hand, excessive internet use is associated with detrimental effects on students' quality of life, psychological health, and academic performance (Radeef & Faisal, 2021).

The introduction of the internet has had a variety of social and health effects, some of which have even caused anxiety in the community. The primary consequences are decreased academic performance, anxiety, sadness, and psychological anguish. Students that participate in IA and spend excessive amounts of time online get psychologically and physically exhausted. As a result, they will be less motivated to work on their academic obligations, perform poorly academically, and become less interested in learning (Rafiee et al., 2020). The

prevalence of internet addiction disorder (IAD) is a severe problem that has been growing in the contemporary world since the year 2000. "A compulsive and unmanageable reliance on a substance, routine, or behavior to an extent where cessation elicits profound emotional, mental, or physiological responses." is the definition of addiction, which has a lengthy history (Pabasari, 2017). The term "Internet addiction" also refers to using the Internet excessively to the point where it interferes with social, academic, and professional performance. On the other hand, there is no consensus on how to screen for IAD, and definitions of the term may differ throughout research papers. It wasn't until the mid-1990s that psychology acknowledged it as an addiction (Mishra et al., 2014).

The younger generation is compelled to utilize the Internet more and more since it is the most readily available form of media for academic and other purposes, making it easier for them to access. This medium has developed into a useful resource for social interactions, gaming, entertainment, training, chatting, and other activities in addition to knowledge and academic goals. The increasingly twisted bent of human nature toward enjoyment has led to a rise in internet usage. It looks intriguing at first, but eventually it turns into a habit and could even turn into an addiction. An examination of human behavior, both personally and socially, is necessary given the increasing popularity of social networking sites among Internet users (Singh & Barmola, 2015).

Recent studies conducted at colleges and universities have revealed that excessive Internet use may have a negative impact on some college students' academic performance. There is a clear correlation between heavy Internet use and poor academic achievement. Self-reports of impairment caused by the Internet were also connected with loneliness, staying up late, fatigue, and missing class. Increased use of all Internet applications was linked to both self-reported Internet dependency and worse academic performance (Zhang et al., 2018). According to Shek et al. (2013), A decline in scholarly methodologies, a conspicuous diminishment in academic performance, absenteeism from educational sessions, an increased likelihood of facing academic censure, and limited involvement in supplementary educational pursuits are encompassed

by academic challenges stemming from Internet addiction. Additionally, teenage Internet addicts frequently experience extreme psychological distress, including feelings of loneliness and social isolation, compulsivity, depression, anxiety, self-effacement, and fear that life would be boring, empty, and joyless without the Internet (Saikia et al., 2019).

Researchers employ terms including pathological use of the Internet, Internet abuse, Internet dependency, and problematic use of the Internet in addition to the concept of Internet addiction. According to Jafari et al. (2022) there are several types of internet addiction, such as addiction to social media, virtual chat, online gaming, online shopping, and excessive downloading of movies, images, or programs.

The causes, effects, and epidemiology of internet addiction have all been the subject of numerous research. However, not much research has been done on the prevalence of internet addiction and how it affects Pakistani students' academic performance. The greatest contributor to the advancement of society is the student body (Liu et al., 2020). Research indicates that students who rely heavily on the Internet experience difficulties in their academic lives (Elbilgahy et al., 2021; Hasan, 2019).

Academic success enables students to be more productive and contribute to the development of the nation. But there is cause for alarm given how common Internet addiction and other electronics, like smartphones, are among students. Thus, reducing its impacts can be achieved by researching the occurrence, scope, and impact of this phenomena on nursing students' academic performance. IA is a problem that is accelerating among both the general population and college students. It has the power to change nearly every aspect of a student's life and performance (Hasan, 2019).

On the frequency and consequences of internet addiction on academic performance, there is, however, a paucity of research. This study examines the frequency of internet addiction and how it affects graduate students' academic performance in Multan, Pakistan.

## Statement of the problem

Students that use the internet have difficulties with their schoolwork, getting enough sleep, and finishing their homework. This issue may also have an indirect impact on their academic achievement. Numerous studies have asserted that people may become addicted to Internet use, which can have detrimental consequences on people's abilities, social conduct, and academic performance, among other things. Even though the Internet has the potential to greatly enhance students' learning, it is critical to assess the patterns of students' internet use in order to provide early intervention. The impact of kids' Due to the aforementioned effects, attention and resolution are required for addressing the impact of internet usage on academic performance.

## Objectives of the research paper

The objectives of the study were as follows:
• To evaluate how internet addiction affects graduate students' academic performance;
• To evaluate how internet addiction affects undergraduate students' academic performance.

## Hypothesis

- Internet addiction has a detrimental effect on undergraduates' academic achievement.
- A negative correlation between academic performance and internet addiction is observed.

## The significance of the study

The data from the current study will undoubtedly help. University students frequently struggle with internet addiction, which impairs cognitive function, encourages participation in risky activities and poor academic performance, and can also cause worry and stress. A modified version of the traditional addiction model underpins the functioning of behavioral addictions. It is stated that students' overuse of the internet causes anxiety, sadness, and other mental health problems that have a negative impact on their academic performance. It will be helpful to monitor and manage students' online addiction by holding educational workshops on responsible online usage.

## Operational definition

**Effects**: a modification brought about by an activity or other factor.

**Internet**: An international computer network made up of linked networks that use common communication protocols to provide a range of communication and informational services.

**Addiction**: is a cognitive condition defined by a strong, unwavering desire to engage in specific behaviors—most commonly, drug use—despite the possibility of serious injury and other unfavorable outcomes.

A **performance** occurs when a play, concert, or other type of entertainment is staged or presented. It can also refer to the act of performing or finishing a task, activity, or function.

A person who is enrolled in school or another educational setting is called a **student**. A "**student**" is someone who attends secondary school or above in the United Kingdom and the majority of Commonwealth nations; "pupils" are people who attend primary or elementary schools.

## Demarcation

The study, conducted within a constrained population, precludes the generalization of singular outcomes.

## Methodology:

**Construct of the study**: A cross-sectional study was conducted.

**Study location**: Three undergraduate colleges in Multan served as the study's location.

**Study duration**: After receiving ethical committee approval, the study was carried out in six months.

The research population consists of second, third, and fourth year undergraduate students from the University of Layyah, the GC University Lahore Layyah campus, and the GC University Faisalabad Layyah campus.

**Number of samples**: The formula was used to determine the sample size as

$$n = \frac{N}{1+N\,(E)^2}$$

Given that the population (N) is established at 133, and accounting for the sample size (n), the margin of error (E) set at 0.05 necessitated a calculated sample of 100 for this study.

**The criteria for inclusion were as follows:**
1. Undergraduate students enrolled in their 2nd, 3rd, and 4th academic years.
2. Students who were present during the day designated for data collection.

**Elimination Criteria:**
1. Students from other than the three colleges
2. Those students displayed a reluctance to engage were omitted from participation.

**The method of data collection entailed.**
The utilization of a self-administered questionnaire among students.

**The academic performance assessment**
The gauge employed was the attainment of grade point averages (GPA) during the preceding semester.

**Moral consideration**
For this investigation, the following ethical factors will be taken into account:
• The responders received an explanation of the study's objectives.
• Respondents received accurate information about the study and were given the choice of whether or not to participate, allowing for the acquisition of their informed consent.

• By requesting that respondents not provide their names on the questionnaire, respondents were assured that the information they provided would be treated in confidence and used solely for the purpose of the study.

**Data Analysis**
To analyze the data, SPSS 21 (Statistical Package for Social Sciences) was utilized. The mean, standard deviation, and percentages were used to represent the data. The Shapiro-Wilk test p value, Q-Q plots, skewness and kurtusis z-values, and other methods were used to estimate the data's normality. The X2 test was used to ascertain the relationship between the variables, and a significance level of 5% was used because $p < 0.05$. The data was shown on a number of graphs to assess the quality and dependability of the information.

**Results :**
**Normality test**
The normality of the data was tested by the Shapiro-Wilk p-value test because the sample was greater than fifty.
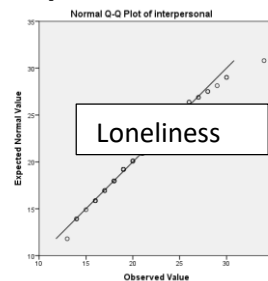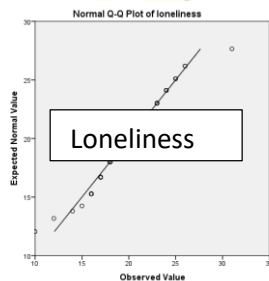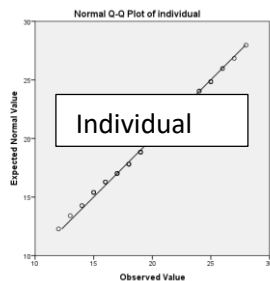


The three Q-Q plots of internet addiction components above demonstrate that the data was roughly regularly distributed. As a result, the data displayed results on the Q-Q plots above, which are normally distributed. The data about internet addiction and its impact on students' academic performance was analyzed using parametric tests.

**CGPA in the previous exam**
Table 1 indicates that over 41.0% of students scored lower than average (CGPA of 2) in the previous exam, and just eight students achieved excellence with a CPGA of 4. Thus, we may conclude that between 20 and 25 percent of students were making good use of the internet to research topics or learn about their course material. While learning things unrelated to their curriculum, everyone else was squandering their time on other online pursuits.

**Table -1**

| CGPA in Previous exam | Frequency | Percent |
|---|---|---|
| 2.00 | 41 | 41.0 |
| 3.00 | 27 | 27.0 |
| 4.00 | 8 | 8.0 |
| >2 to <3 | 11 | 11.0 |
| >3 to <4 | 14 | 14.0 |



CGPA in previous exam
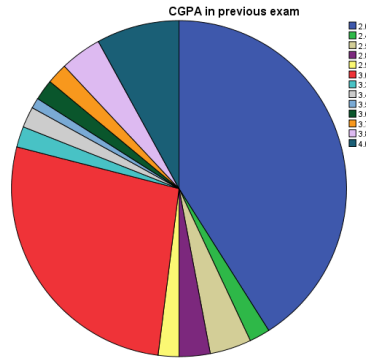
**The duration of daily online activity**

Table 2

| | | Frequency | Percent |
|---|---|---|---|
| Valid | one hour | 8 | 8.0 |
| | three hours | 9 | 9.0 |
| | five hours | 13 | 13.0 |
| | seven hours | 19 | 19.0 |
| | more than eight hours | 51 | 51.0 |
| | Total | 100 | 100.0 |

Table 2 indicates that over 70% of students spent seven hours or more on the internet. Thus, aside from reading books or engaging in other activities, we may conclude that students spend the majority of their time on the internet. The more time they spend online and the lower the CGPA, the more likely it is that bad academic achievement will be correlated practically adversely with increased daily online time.

| | Personal | Solitude | Social | Prior Exam's GPA |
|---|---|---|---|---|
| Personal | 1 | | | |
| Solitude | −0.243* | 1 | | |
| Social | −0.153 | 0.1860 | 1 | |
| Prior Exam's GPA | −0.740 | 0.072 | 0.193 | 1 |

**The observed correlation holds significance at the 0.05 level, considering both tails of the distribution.**

The correlation coefficient (r) values of -0.243, -0.153, and -0.740 corresponding to the individual, loneliness, and interpersonal components, respectively, indicate a negative association with internet addiction and the CGPA from previous examinations. This association is deemed statistically significant when the p-value falls below 0.01.

**Conclusion**

Therefore, based on the results above, we may conclude that undergraduate students at these three colleges frequently suffer from internet addiction and that these students performed poorly in the prior class. Internet addiction can significantly impact students' academic performance in several ways: Decreased Academic Performance: Excessive time spent online can lead to neglect of studies, resulting in lower grades due to reduced focus, procrastination, and incomplete assignments. Distraction and Lack of Concentration: Constant access to the internet can be distracting, making it challenging for students to concentrate on their studies. They might find it difficult to stay focused during classes or while studying, affecting their ability to retain information. Poor Time Management: Internet addiction can lead to poor time management skills as students spend excessive hours on non-academic activities online, leading to neglect of important study time. Sleep Disturbances: Engaging in late-night internet use can disrupt sleep

patterns, leading to fatigue, reduced attention span, and decreased cognitive abilities during classes and while studying. Social Isolation: Excessive internet use might lead to decreased face-to-face social interactions, which are crucial for personal and social development. This isolation can impact mental health and, consequently, academic performance. Reduced Physical Activity: Spending excessive time online can lead to a sedentary lifestyle, reducing physical activity and overall health. Physical health can indirectly affect academic performance by impacting concentration and cognitive abilities. Difficulty in Setting Boundaries: Internet addiction can make it challenging for students to set boundaries between leisure and study time, affecting their ability to prioritize and focus on academic tasks. Impact on Mental Health: Excessive internet use can lead to increased stress, anxiety, and depression, which can negatively impact a student's ability to concentrate and perform well academically. Plagiarism and Lack of Critical Thinking: Overreliance on the internet for information may lead to plagiarism or a lack of critical thinking skills as students may not thoroughly analyze information but instead copy-paste or rely solely on online sources without verifying their credibility. Impact on Relationships: Internet addiction may strain relationships with peers, family, and teachers, potentially affecting the student's support system, which is crucial for academic success. Addressing internet addiction requires a holistic approach involving self-regulation strategies, guidance from educators and parents, setting healthy boundaries, and promoting a balanced lifestyle that includes both online and offline activities.

## Recommendation

Based on the findings of the study, it is recommended that educational institutions implement awareness programs and workshops to educate students, parents, educators, and legislators about the negative effects of internet addiction. These initiatives should emphasize responsible online usage and provide strategies for reducing excessive internet use, especially among undergraduate students. By addressing internet addiction early on, educational institutions can contribute to improving students' cognitive function, reducing participation in risky activities, enhancing academic performance, and alleviating stress and worry associated with internet addiction.

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