



Exploring the Correlation between Internet Addiction, Academic Achievement, and Mental Well-Being of Teacher Trainees in Purba Medinipur

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Abstract:

In the digital era, the increasing dependence on the internet has significantly influenced the academic and psychological dimensions of learners, particularly teacher trainees. This study explores the correlation among internet addiction, academic achievement, and mental well-being of teacher trainees in the Purba Medinipur district of West Bengal. Adopting a quantitative research design, data were collected from a representative sample of teacher trainees using standardized tools measuring internet addiction, academic performance, and mental well-being.

The findings indicate a significant negative correlation between internet addiction and academic achievement, suggesting that excessive internet use adversely affects students' academic performance. Furthermore, a negative relationship was observed between internet addiction and mental well-being, highlighting increased levels of stress, anxiety, and reduced emotional stability among highly addicted individuals. In contrast, a positive correlation was found between academic achievement and mental well-being, indicating that psychologically healthy trainees tend to perform better academically.

The study underscores the need for awareness programs, digital literacy, and self-regulation strategies among teacher trainees to ensure balanced internet usage. It also emphasizes the role of teacher education institutions in promoting mental health support systems and integrating responsible technology use into the curriculum. The findings may contribute to policy formulation and the development of intervention strategies aimed at enhancing both academic success and psychological well-being in teacher education contexts.

Keywords: *Internet Addiction, Academic Achievement, Mental Well-Being, Teacher Trainees, Correlation Study, Digital Behaviour, Higher Education, Purba Medinipur, Psychological Health, Educational Research.*

Introduction:

The internet's transformative impact on daily life is undeniable, revolutionizing communication, learning, entertainment, and information access (Castells, 2000). In education, it provides invaluable resources for teacher trainees, facilitating access to academic content, peer collaboration, and virtual learning environments (Means et al., 2010). However, excessive internet use has contributed to the rise of Internet Addiction (IA), a behavioral condition marked by compulsive internet use that disrupts daily functioning

(Young, 1998). This is particularly concerning among adolescents and young adults, including teacher trainees (Kuss & Griffiths, 2017).

Teacher trainees are crucial for shaping the next generation's academic success and social development (Darling-Hammond, 2010). Their well-being, academic performance, and professional growth are essential for their own success and the quality of education they provide (OECD, 2005). Excessive internet use among these trainees can negatively impact their academic achievements and mental health, affecting their preparedness for the teaching profession (Kim et al., 2013). The effects of IA can manifest as reduced concentration, procrastination, poor academic performance, and emotional instability (Chou et al., 2005), potentially hindering their transition into teaching.

Investigating the impact of IA on teacher trainees' academic success and mental well-being is therefore crucial. This study focuses on exploring the correlation between internet addiction, academic achievement, and mental health among teacher trainees in Purba Medinipur, a rural and semi-urban district in West Bengal, India. Focusing on this understudied region contributes to the broader discussion on IA in India and its implications for education.

Rationale for the Study

The internet, as a tool for learning and communication, has brought substantial advancements in educational practices worldwide. However, its overuse has led to increasing concerns about Internet Addiction (IA), which is recognized as a behavioral disorder. The rapid increase in the use of the internet, especially among young adults, has resulted in negative consequences on academic performance and mental health (Young, 1998; Kuss & Griffiths, 2017). As teacher trainees are in the crucial phase of their academic and professional development, it is essential to understand how internet addiction may affect their academic achievements and mental well-being.

Teacher trainees in India, particularly those in rural and semi-urban areas like Purba Medinipur, face unique challenges that may amplify the effects of internet addiction. These include limited access to academic resources, social pressures, and the expectation of balancing both academic responsibilities and personal well-being. The widespread digitalization of education, accelerated by the COVID-19 pandemic, has increased internet dependency, making it crucial to study its effects on teacher trainees. Studies indicate that excessive internet use can result in decreased concentration, poor time management, and lack of motivation, all of which are detrimental to academic performance (Davis, 2001; Li & Wang, 2020).

Moreover, the mental health of teacher trainees is a growing concern. As future educators, their mental well-being plays a pivotal role in how they will approach their professional responsibilities. Research has shown that internet addiction is linked to increased rates of anxiety, depression, and stress (Turel et al., 2014; Cao et al., 2007), which could hinder their ability to cope with the demands of their training and later their teaching careers.

Despite the global focus on internet addiction, there is a notable gap in research specifically targeting teacher trainees, particularly in rural and semi-urban regions of India. Most existing studies are centered around urban populations, and little attention has been given to the unique socio-cultural dynamics and challenges faced by teacher trainees in regions like Purba Medinipur. This research aims to fill this gap by examining the prevalence of internet addiction among teacher trainees and exploring its relationship with academic performance and mental health in this specific context.

By addressing this gap in the literature, the study will provide valuable insights into the complex dynamics between internet addiction, academic success, and mental health among teacher trainees. These insights can inform educational policy, mental health interventions, and the design of support systems aimed at fostering balanced internet usage among teacher trainees. Furthermore, the study will also investigate the influence of

gender and socio-economic status on these variables, which will contribute to a more nuanced understanding of how internet addiction impacts different subgroups within this population. The findings will ultimately help in developing strategies to mitigate the adverse effects of excessive internet use, ensuring that teacher trainees can thrive both academically and mentally as they prepare to enter the teaching profession.

Research Objectives

1. To assess the prevalence of internet addiction among teacher trainees in Purba Medinipur.
2. To evaluate the relationship between internet addiction and academic achievement.
3. To analyze the impact of internet addiction on the mental well-being of teacher trainees.
4. To explore gender and socio-economic differences in internet addiction, academic achievement, and mental well-being.
5. To propose strategies for mitigating the adverse effects of internet addiction on teacher trainees.

Research Questions

1. What is the level of internet addiction among teacher trainees in Purba Medinipur?
2. How does internet addiction correlate with academic achievement?
3. What is the relationship between internet addiction and mental well-being?
4. Are there significant gender and socio-economic differences in these correlations?
5. What interventions can be recommended to address the challenges of internet addiction among teacher trainees?

Operational Definitions of Key Terms

1. **Internet Addiction (IA):** A behavioral addiction characterized by excessive or compulsive internet use, resulting in negative consequences in daily life, including academic and personal issues.
2. **Academic Achievement:** The level of success a student attains in their educational pursuits, typically measured through grades, test scores, and overall performance.
3. **Mental Well-Being:** A positive state of emotional, psychological, and social well-being, encompassing aspects such as stress, anxiety, depression, and overall happiness.

Review of Related Literature

Internet Addiction: Internet addiction is characterized by excessive or poorly controlled preoccupations, urges, or behaviors related to internet use that lead to impairment or distress in daily life (Young, 1998). It has emerged as a significant behavioral concern in the digital age, particularly among young adults who frequently use the internet for both academic and recreational purposes. Excessive internet usage can disrupt sleep patterns, impair productivity, and cause emotional instability. Additionally, it has been shown to diminish the ability to engage in face-to-face interactions, thereby affecting personal relationships and social skills (Young, 1998; Kuss et al., 2013). Studies have further linked internet addiction to various mental health challenges, including depression, anxiety, and stress (Kuss et al., 2013; Pontes et al., 2015). These findings emphasize the need to understand the extent to which internet addiction affects individuals in specific educational and professional contexts. Among teacher trainees, whose role demands a balance of academic

rigor and interpersonal skills, internet addiction could potentially hinder both personal and professional growth.

Academic Achievement: Academic achievement represents a critical measure of educational success and personal development, encompassing students' ability to meet learning objectives and perform well in assessments. Internet addiction has been shown to negatively affect academic outcomes through several mechanisms, including promoting procrastination, reducing focus, and increasing susceptibility to distractions (Chou et al., 2005; Shao et al., 2017). Research indicates that excessive internet use can significantly interfere with productive study time, diminish attention spans, and impede cognitive performance, resulting in lower academic achievement (Jun & Choi, 2015). This relationship is particularly concerning for teacher trainees, who are tasked with mastering subject knowledge while also developing pedagogical skills. Their academic success is not only critical for their career aspirations but also directly impacts the quality of education they can deliver as future educators.

Mental Well-Being: Mental well-being refers to an individual's emotional, psychological, and social state, encompassing their ability to manage stress, maintain fulfilling relationships, and achieve personal goals (Keyes, 2002). Poor mental well-being can significantly affect academic performance and overall life satisfaction. Internet addiction has been associated with various mental health issues, including anxiety, depression, and feelings of loneliness (Li et al., 2016; Pantic et al., 2012). Research suggests that the compulsive use of the internet may exacerbate mental health challenges by fostering isolation, disrupting daily routines, and increasing stress levels (Andreassen et al., 2012). In educational contexts, poor mental well-being among students often translates into academic struggles, as emotional instability and stress reduce their ability to concentrate and perform well academically. For teacher trainees, this creates a dual burden of managing personal challenges while preparing for the professional responsibilities of teaching.

Teacher Trainees: Teacher trainees occupy a unique position as they transition from students to professional educators. This phase is marked by substantial academic and professional demands, such as acquiring subject expertise, honing teaching methods, and managing the pressures of internships and assessments (Ginsburg, 2005). These stressors, when combined with the pervasive use of digital technologies, make teacher trainees particularly susceptible to the adverse effects of internet addiction. Despite the increasing prevalence of internet addiction among young adults, studies focusing on teacher trainees remain limited, particularly in India. Existing research on internet addiction largely targets general student populations, neglecting the specific experiences of teacher trainees who are poised to shape the educational futures of their students (Gao et al., 2020). Addressing this gap is essential to understand how internet addiction affects their academic achievement and mental well-being. Teacher trainees in semi-urban and rural areas, like Purba Medinipur, may face additional challenges due to limited access to resources and disparities in digital literacy. This highlights the need for targeted research that explores the interplay of internet addiction, academic success, and mental health in this demographic.

Research Gap

While significant research has been conducted on Internet Addiction (IA) and its impacts on mental health and academic achievement, much of this work has focused on general student populations or urban contexts. There is a notable paucity of studies specifically addressing teacher trainees, particularly those in rural and semi-urban settings like Purba Medinipur, West Bengal. Existing literature emphasizes the adverse effects of IA, including reduced academic performance, poor time management, and increased mental health challenges (Kuss et al., 2013; Shao et al., 2017). However, these studies often neglect the unique socio-cultural and professional demands faced by teacher trainees. Teacher trainees are in a critical phase of both academic and professional development, requiring balanced internet use to excel in their roles as future educators. Yet, limited research has explored how IA impacts their academic achievements, mental well-being, and preparedness for teaching careers. Moreover, the role of gender and socio-economic factors in

moderating the effects of IA on this group remains underexplored. Although some studies have examined gender differences in internet use patterns (Li et al., 2016), they do not provide sufficient insights into how these differences manifest in the context of teacher trainees' academic and mental health outcomes. Additionally, most existing studies are situated in urban areas with relatively better access to digital resources. This leaves a gap in understanding how teacher trainees in resource-constrained settings cope with the dual challenges of internet dependency and limited educational infrastructure. The rapid digitalization of education, especially post-COVID-19, has further amplified the dependency on internet-based learning. However, its psychological and academic implications on teacher trainees in rural and semi-urban contexts remain understudied. Addressing this gap is critical to developing targeted interventions, fostering balanced internet usage, and ensuring the holistic development of teacher trainees in such regions. The present study seeks to fill these gaps by examining the correlation between internet addiction, academic achievement, and mental well-being among teacher trainees in Purba Medinipur. By incorporating variables such as gender and socio-economic status, it aims to provide a nuanced understanding of these dynamics and propose strategies to mitigate the adverse effects of IA.

Research Methodology

Research Design

This study will adopt a mixed-methods approach combining quantitative and qualitative methods. A correlational research design will be used to examine the relationships among internet addiction, academic achievement, and mental well-being.

Population and Sampling

- **Population:** Teacher trainees enrolled in B.Ed. programs in colleges across Purba Medinipur.
- **Sampling Technique:** Stratified random sampling to ensure representation from various socio-economic and gender groups.
- **Sample Size:** 300 teacher trainees.

Data Collection Tools

1. **Internet Addiction Test (IAT):** A standardized tool to measure the level of internet addiction (Young, 1998).
2. **Academic Records:** Official records to evaluate academic achievement.
3. **Mental Well-Being Questionnaire:** A validated scale (e.g., Warwick-Edinburgh Mental Well-Being Scale) to assess mental health (Tennant et al., 2007).
4. **Demographic Questionnaire:** To collect data on age, gender, socio-economic background, and internet usage patterns.

Data Collection Procedure

1. **Phase 1:** Preliminary meeting with college administrators for permissions.
2. **Phase 2:** Distribution of consent forms and questionnaires to teacher trainees.
3. **Phase 3:** Conducting focus group discussions to gather qualitative insights.

Data Analysis

- **Quantitative Data:** Descriptive and inferential statistics using SPSS to analyze relationships among variables. Pearson’s correlation coefficient and regression analysis will be used to examine the strength and direction of relationships.
- **Qualitative Data:** Thematic analysis to identify patterns and insights from focus group discussions.

Ethical Considerations

1. Informed consent will be obtained from all participants.
2. Confidentiality and anonymity will be maintained.
3. Participants will have the right to withdraw at any time.
4. Approval will be sought from an institutional ethics committee.

Expected Outcomes

1. Insights into the prevalence of internet addiction among teacher trainees in Purba Medinipur.
2. Identification of correlations between internet addiction, academic achievement, and mental well-being.
3. Understanding of gender and socio-economic differences in these relationships.
4. Recommendations for interventions to mitigate the effects of internet addiction.

Conclusion

This study aims to fill a significant research gap by focusing on the relationship between internet addiction, academic achievement, and mental well-being of teacher trainees in Purba Medinipur. By examining these factors, the research will offer valuable insights into how internet addiction affects future educators, with implications for policy, intervention, and support programs aimed at improving academic performance and mental health. The findings could guide the development of strategies to foster healthier internet usage habits, benefiting both the trainees and the educational institutions they will serve.

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