The Impact of Smartphone Addiction on Anxiety Levels among University Students: A Correlational Study

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ABSTRACT

Smartphone addiction is becoming a serious issue among university students, affecting their academic and personal lives. While smartphones are essential in today's digital world, students must maintain a balance in their usage. Awareness and self-discipline are necessary to prevent addiction and ensure that smartphones are used as a tool for growth rather than a source of distraction (Zhang & Zeng, 2024). This study explores the smartphone addiction among university students, which has become increasingly common among university students in Pakistan. Smartphone addiction refers to excessive and uncontrollable use of smartphone that affects the normal functioning of daily life. Smartphones offer numerous benefits, such as easy access to educational resources, improved communication with peers and teachers, and opportunities for online learning and earning. A non-random sampling technique was utilized for this qualitative research, which follows an exploratory design. The data was collected from university students age19-23. This data was analyzed using thematic analysis. The findings reveals that the 40% university students face social and behavioral changes. Additionally, 28% of students are having psychological impact and 27.4% are facing academic lifestyle disturbance. This study highlights the need of awareness and self-discipline to prevent smartphone addiction and ensure that smartphones should use as a tool for growth rather than a source of distraction.

Introduction

Smartphones are more than just personal devices. They reflect a person's social identity and status. Their constant internet connectivity and the wide range of services they offer set them apart from regular mobile phones. From staying social and entertained to managing time and finding information, smartphones have become essential daily (Sawsan et al., 2023). The 21st century has seen a rise in the number of people utilizing technology, particularly smartphones (N Al Battashi et al., 2020). Smartphones have become essential to modern life, as shown by their high global demand. Their advanced features have made them so indispensable that many people find it hard to live without them (Nadia et al., 2024).

Smartphones have many benefits. They help us stay connected, learn new things, and socialize easily (Hadia et al., 2025). The "gratification theory" suggests that using smartphones can bring happiness and satisfaction. However, the more people constantly use their smartphones, the less enjoyable it becomes. Smartphone addiction occurs when someone relies on their phone so much that they start feeling uneasy without it and struggle to handle their everyday responsibilities.

According to Ching et al., smartphone addiction happens when people become overly focused on their phones, using them excessively or without control. This can lead to neglecting other important aspects of their lives (Mohammad Saud et al., 2022). Smartphone usage among university students has been growing rapidly worldwide. A recent global survey revealed that 93% of adults between 18 and 24 own a smartphone, making this age group the highest in smartphone ownership (Robyn Coman et al., 2022).

Smartphones offer students a convenient way of accessing valuable information anytime and anywhere. They use these devices to interact with educational content and collaborate with teachers and fellow students. Smartphones can be great for learning but can also be a big distraction. Many students become distracted by texting during class rather than concentrating on the lesson, making it more difficult to remember the information. (Robyn Coman et al., 2022).

Being addicted to a smartphone can seriously harm mental well-being, leading to issues like suicidal thoughts, poor sleep patterns, and symptoms of depression. These effects can significantly impact overall well-being (Mohammad Saud et al., 2022. Also, Students who were addicted to their smartphones were more likely to struggle with lower grades, be less physically active, and experience poor sleep. They were also at a higher risk of gaining excess weight, feeling pain in their shoulders, eyes, and neck, and facing serious mental health issues (Mim Fox et al., 2022). Psychological disorders such as depression, anxiety, insomnia, and stress-related disorders were also connected to spending too much time on smartphones and exposure to electromagnetic fields (EMF) (Nadia O. Elamin et al., 2024).

Problem statement

Smartphone addiction is rapidly emerging as a pressing issue among university students in Pakistan, with many students devoting excessive time to their devices. This overuse detrimentally affects their studies, mental health, and overall well-being (Nadia et al., 2025). Smartphone addiction is a significant factor in the decline of students' academic performance, primarily by exacerbating academic anxiety. Our study aims to investigate how academic control can mitigate or exacerbate the adverse effects of smartphone addiction (Zhang & Zeng, 2024). Furthermore, smartphone use disorder is associated with physical ailments such as headaches and sleep disturbances, underscoring the urgency of our research.

Research Gap

In Pakistan, smartphone use among university students is rapidly increasing, but there is little awareness about the mental health risks of addiction. Pakistan's unique social and cultural factors make the issue even more complex. To truly address this problem, it is essential to understand the psychological effects of excessive smartphone use and develop practical solutions to help students break free from addiction (Nadia et al., 2025). research underscores the urgent need for these practical solutions.

Research Questions

1. How does excessive smartphone use impact students' mental health?
2. What specific smartphone activities make students feel more stressed?
3. Can smartphone addiction cause distraction and worse academic performance?
4. Does excessive smartphone use lead to increased social feelings of isolation?

Research Objectives

1. To understand how smartphone addiction affects students' mental health.
2. To examine how different smartphone activities may add to university students' stress and anxiety.
3. To see if smartphone addiction worsens academic performance.
4. To understand if excessive smartphone use leads to increased feelings of isolation

Assumptions

1. Too much smartphone use can negatively impact students' mental health and focus.
2. Smartphone addiction causes distraction and worse academic performance.

Literature Review

Smartphones have become an important part of our modern society. The widespread adoption of smartphones has created a culture where constant connectivity has become the norm. Even a simple notification can instantly change a person's mood and require attention regardless of the situation. Smartphones, which are internet-enabled mobile devices, serve multiple purposes, including storing information, checking emails, taking photos, playing music, watching videos, managing schedules, setting reminders, writing notes, navigating locations, installing applications, making calls, and sending messages. Its widespread usage sparked some worries about people becoming addicted to smartphones, leading to extensive research on It (e.g., Bianchi & Phillips, 2005; Hooper & Zhou, 2007; Hussain, Griffiths, & Sheffield, 2017; Lapointe, Boudreau-Pinsoneault, & Vaghefi, 2013; Tossell, Kortum, Shepard, Rahmati, & Zhong, 2015). Studies have shown that dependence on mobile phones is associated with mental health and social issues, including anxiety, depression, sleep disturbances, and social isolation (Elhai et al., 2017).

Among university students who are already dealing with stress due to academic and social pressures, excessive mobile phone use can further increase their anxiety levels. Studies suggest that males and females use mobile phones differently, with men often engaging more in gaming and online entertainment while women are more active on social media (Andreassen et al., 2012). These variations in mobile phone use could lead to different anxiety triggers, yet research rarely investigates how gender-specific behaviours influence the relationship between mobile phone addiction and anxiety among university students. Even though much research has been done on smartphone addiction, there is still no clear way to tell the difference between normal use, heavy

but harmless use, and actual addiction. It's important to avoid exaggerating normal phone use into 'addiction.

On the other hand, failing to recognize real cases of addiction can ignore its harmful effects on mental health, relationships, and daily life. Therefore, with increasing smartphone usage, it's crucial to establish clear criteria for addiction and find ways to reduce problematic phone usage while avoiding unnecessary labelling. Many studies have found the effects of social media on health, but does mobile phone addiction significantly increase anxiety levels among university students?

Over the last decade, we have noticed progress in science and technology that has impacted different aspects of life. Smartphones have developed from being a simple communication tool to an essential part of our daily lives. Smartphones allow quick internet access (Huake Qiu et al.,2024). Smartphones have transformed how we communicate and access information, impacting our personal and professional lives and raising concerns about overuse (Amin et al., 2024).

Smartphones are an integral part of daily life and have a positive impact. Smartphones provide students with plenty of opportunities to access useful information anytime and anywhere. They use these devices to view learning materials and cooperate with teachers and classmates (Alotaibi et al., 2022b).

Although smartphones offer benefits like better social networking, improved work methods, and increased productivity, previous research shows that excessive use can hurt people's daily lives and physical health (Ay et al., 2024b). It has also been observed that instead of paying attention in lectures, students often continue texting and struggle to remember the lecture content. Excessive smartphone use reduces face-to-face interactions, which can lead to or worsen various physical and mental health issues (Alotaibi et al., 2022b).

Today, smartphones are essential for many people, but students use them too much on school campuses in unhealthy ways. Overusing or depending too much on smartphones can lead to serious problems. For example, people who walk across streets while watching videos on their phones may not notice traffic and could get hit by a car. Also, students often find it harder to focus in class, which can lower their grades and productivity (Lane et al., 2021b). Various studies have shown the negative consequences of the overuse of smartphones. Excessive use of smartphones can cause issues like sleep problems, lower academic performance, and stress. Many studies have also linked smartphone addiction to depression, loneliness, anxiety, and sleep disorders (Ay et al., 2024c). Smartphone use has grown rapidly worldwide (Amin et al., 2024b).

University students are at a tough point, moving from teenage to adulthood. This time can be stressful as they try to adjust, focus on getting good grades, plan for their future, and deal with being away from home. All these challenges can make many students anxious, and they find escape on mobile phones (Ay et al., 2024).

Al-Barashdi and Jabur ýfound found that one of the reasons for smartphone addiction in students includes entertainment and escaping academic pressure. Previous studies show that depression is becoming more common among university students around the world. Many young people, more than two-thirds, don't talk about or seek help for mental health problems. Because of this, university students may turn to their smartphones more, which makes them more likely to become addicted to them (Amiri & Dowran, 2020b).

This study looks at how common depression is and how smartphone addiction relates to depression in health science students. The findings could help us understand how smartphones affect mental health in young adults, particularly university students, and guide strategies to help.

Smartphone addiction, also referred to as problematic social media use (PSMU), is defined as "the excessive use of smartphones to a point where it interrupts user's daily lives is considered to be smartphone addiction". Since the smartphone was invented, it has become widely accepted by consumers worldwide. Smartphones can be used for various purposes, including storing data, accessing emails, taking pictures, enjoying music and films/videos, scheduling reminders, making notes, tracking locations, installing apps, making phone calls and sending texts. The famous idiom "to have the world in the palm of your hand" appears to be the best feature of smartphones. Consequently, such a small device can potentially manage many areas of an individual's life.

As internet use has become an integral part of modern life, increasing dependence on smartphones has led to smartphone addiction (SA). Smartphone addiction (SA) has a negative impact in a variety of ways, such as psychological and physical health. Mental health disorders such as anxiety, depression, stress, self-esteem, social isolation and lower levels of life satisfaction.

Over the past decade, smartphone ownership has increased to about half or more of the world's population. In recent years, smartphones have provided great convenience to people's lives, leading to a continuous increase in smartphone users. Pakistan is one of the leading countries with a significant increase in smartphone ownership and ranks among the top 10 countries in the smartphone market, with users with a total of 191.8 million active mobile connections. However, despite the statistically significant increase in mobile phone usage in Pakistan, there is an absence of native outcomes from the Pakistani community that might help understand smartphone addiction.

The use of smartphones exponentially increases among university students around the world. Statistically, around 20% of students worldwide experience mental health disorders within 12 months. Since 2021, statistics show that one in three young adults living in urban areas are smartphone users. This trend is no less prevalent in Pakistan as the digital landscape is developing rapidly, and students spend much time using smartphones, which may affect their educational performance, sleep quality, attention, and personal relationships.

Research Methodology

This study pursued a qualitative research design to assess the impacts of smartphone addiction on a university student's life academically, psychosocially, physically, and socially. A qualitative approach captures the sum of emotions, sentiments, and perceptions held by respondents toward phenomena, which is critical in examining issues like smartphone addiction.

Participants and Sampling

The study was conducted on students from different universities in Pakistan. The study involved female participants between the ages of 19 and 22. All participants were selected based on their relevance to the research topic and were either university students or recent graduates, providing a contextually appropriate demographic for the study's objectives. To obtain sufficient information, purposive sampling was applied, aiming at students who frequently used smartphones and were ready to give their testimony. This technique proved beneficial in selecting the most relevant participants to address the dynamically framed research questions.

Data Collection Methods

Data was collected using primary means:

1. Semi-Structured Interviews

The design of these tools allowed respondents to elaborate on their answers while still addressing the central topics of interest. Captured under the overarching themes of Competence and Immersion in Audio-Visual Media were:

Academic Impact (e.g., attention and time management-related concerns)

Psychological Effects (e.g., stress, anxiety, FOMO)

Physical Health Concerns (e.g., sleep problems, tiredness)

Social and Behavioral Changes (e.g., withdrawal, impaired interactions)

The methodological design was broad enough to permit respondents to elaborate on their in-depth experiences, which enriched the data qualitatively.

Research Analysis and Interpretation

Data analysis was conducted with thematic analysis, meaning that the data is presented with a systematic framework and focus on recurring issues. This consisted of:

Familiarization with materials through reading and re-reading transcripts of the interviews and responses to questionnaires.

Forming codes of key recurring words, phrases, and ideas (for example, "distraction in studies," "emotional stress," or "late-night usage").

Clustering these codes into more general themes by the aims of the research.

Counting and calculating frequencies and percentages of codes to ascertain which issues were predominant among participants.

This approach benefited the researchers by enabling them to aggregate qualitative data and provide robust, well-supported conclusions.

Table 4.1: Smartphone Addiction Affects University Students

Themes	Codes	Percentages	Overall Percentage
Social and Behavioral changes	**Lonely and Isolated**	36.60%	44.5%
	Poor **Communication Skills**	36.60%	
	Reduced Face-to-Face Interaction	27.70%	
Psychological Effects	**Fear of Missing Out (FOMO)**	20.80%	27.4%
	Mental Fatigue	37.50%	
	Increased Anxiety and Stress	41.67%	
Academic Impact	Time **Management Issues**	40%	28%
	Distraction in Studies	60%	

Table 4.1 showcases an in-depth thematic analysis of how smartphone addiction affects university students, including the results from interviews and open-ended questionnaires. The three main themes of the data are academic impact, psychological effects, and social/behavioural changes, which are then expanded with particular codes that mirror student experiences most often. The most frequent social and behavioural change code had the highest percentage of 44.5 in total responses. In that context, the biggest part, the social and behavioural changes, was given in 44.5% of all the responses, supporting the observation of many students that they didn't have enough face-to-face conversations, that they have lost some communication qualities and have become lonely or isolated. The academic impact was the second largest, with 28% focusing on the distractions from one's focus on the study as the primary source of the problem.

Additionally, poor time management skills affect students' academic performance. While the remaining 27.4% shared the psychological effects, it was the students themselves who showed anxiety and stress, mental exhaustion, and FOMO (fear of missing out), especially at the expense of more extended social media presence and late-night phone use. The information available through the table presentation is that the consumption of the phone significantly influences different aspects of student life; however, the negative effects of addiction are most pronounced in the social and emotional areas, thus making it essential to implement specialized treatments which can help students to get over these bad consequences.
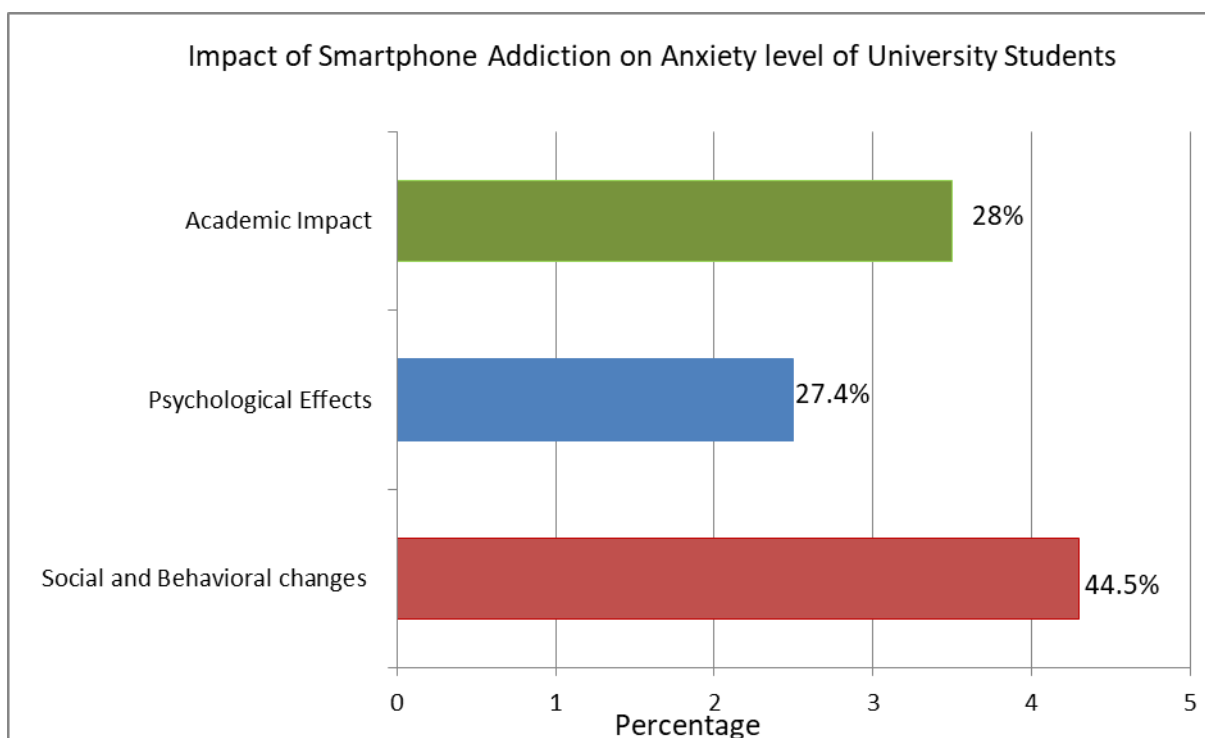

Figure 4.1: Smartphone Addiction Affects University Students

The "Impact of Smartphone Addiction on Anxiety Level of University Students" graph displays information regarding how smartphone addiction influences various areas of students' lives. It indicates that the largest influence is felt in social and behavioural changes, constituting 44.5%. This implies that almost half of the students develop heightened anxiety because of perturbation in their social interactions and behaviour patterns, like less face-to-face communication, social withdrawal, or mood alteration. Academic effect is the next most impacted field, with 28% of students showing anxiety because of less concentration, procrastination, and lower performance.

Psychological impact, including stress, emotional instability, and sleep disturbances, is also prominent, involving 27.4% of the students. Overall, from the graph, it is clear that smartphone addiction plays an important role in causing anxiety among students, especially by changing their social behaviour and academic performance.

Extract (01) From Student Interview (Age 21 years)

> **Question:** Do you think your smartphone use affects your sleep quality? How so?
> **Answer:** Yes, it does. Sometimes, I can't sleep properly and even have nightmares.
> **Question:** Have you experienced feelings of burnout or mental fatigue linked to smartphone use?
> **Answer:** No, I haven't experienced burnout or mental fatigue due to smartphone use.
> Question: Which specific smartphone activities (e.g., social media, gaming, messaging, studying apps) cause you the most stress or anxiety?
> **Answer:** Probably, social media causes me the most stress or anxiety.
> **Question:** Do academic-related apps or notifications cause pressure or stress for you?
> A: No, academic-related apps or notifications don't cause me any stress.
> **Question:** How do you feel when comparing yourself to others on social media?
> Answer: I don't compare myself much to others on social media because I'm aware that not everything on there is true.
> **Question:** Do you find it difficult to focus on studying or classwork because of your phone?
> **Answer:** No, I don't find it difficult to focus. I usually stay away from my phone while studying.
> **Question:** Have your grades or academic performance ever suffered due to smartphone distraction?
> **Answer:** No, my academic performance hasn't suffered because of my phone.
> **Question:** How often do you check your phone while doing homework or attending class?
> Answer: I have a habit of not checking my phone while studying or in class.
> **Question:** Do you feel less connected to people around you when you're focused on your phone?
> **Answer:** No, I don't feel less connected to people when I'm using my phone.
> **Question:** Has your phone use ever interfered with face-to-face social interactions?
> **Answer:** No, my phone use has never interfered with face-to-face interactions.
> **Question:** Do you sometimes feel lonely or isolated after extended phone use?
> Answer: No, not really.
> **Question:** Have you ever tried to reduce your smartphone usage? If so, what motivated you?
> **Answer:** No, I haven't tried to reduce it since it hasn't caused major problems for me.
> Question: What strategies, if any, have helped you manage smartphone-related stress or distraction?
> Answer: I haven't experienced smartphone-related stress, so I haven't needed any strategies.
> **Question:** Do you believe students are aware of the mental health impact of excessive smartphone use?
> **Answer:** Yes, because it's widely discussed on social media.
> **Question:** If you could change one aspect of your phone habits, what would it be and why?
> Answer: I'd reduce my social media use to save time and stay more focused.

Extract (02) From Student Interview (Age 19 years)

Question: On average, how many hours do you spend on your smartphone each day?
Answer: I spend around 9 hours a day on my smartphone.
Question: What are the top 3 apps you use the most on your phone?
Answer: The top three apps I use are Instagram, WhatsApp, and TikTok.
Question: Do you check your phone first thing in the morning or right before going to bed?
Answer: I usually check my phone first thing in the morning.
Question: Have you ever felt anxious or stressed after spending a long time on your phone?
Answer: Yes, I've felt anxious or stressed a couple of times after prolonged phone use.
Question: Do you think your smartphone use affects your sleep quality? How so?
Answer: No, my smartphone use has no noticeable effect on my sleep quality.
Question: Have you experienced feelings of burnout or mental fatigue linked to smartphone use?
Answer: No, I've never experienced burnout or mental fatigue from using my phone.
Question: Which specific smartphone activities (e.g., social media, gaming, messaging, studying apps) cause you the most stress or anxiety?
Answer: Social media causes the most stress for me, mainly due to the constant stream of content and comparisons.
Question: Do academic-related apps or notifications cause pressure or stress for you?
Answer: No, academic-related apps or notifications don't cause me any stress. I find them helpful and manageable.
Question: How do you feel when comparing yourself to others on social media?
Answer: Sometimes, I feel talentless and useless when I compare myself to others on social media. It cannot be very encouraging to see people showcasing their achievements and perfect lives constantly.
Question: Do you find it difficult to focus on studying or classwork because of your phone?
Answer: No, I don't have much trouble focusing. I make a conscious effort to stay away from my phone while studying or doing classwork.
Question: Have your grades or academic performance ever suffered due to smartphone distraction?
Answer: No, my academic performance hasn't been negatively affected by smartphone use.
Question: How often do you check your phone while doing homework or attending class?
Answer: I have a habit of not checking my phone during study sessions or class. I stay focused during those times.
Question: Do you feel less connected to people around you when you're focused on your phone?
Answer: Yes, I do feel less connected to the people around me when I'm deeply engaged with my phone.
Question: Has your phone use ever interfered with face-to-face social interactions?
Answer: Yes, it has happened once. I realized later that I missed out on being present at the moment because I was too distracted by my phone.
Question: Do you sometimes feel lonely or isolated after extended phone use?
Answer: Not really. I don't often feel lonely or isolated, even after spending a long time on my phone.
Question: Have you ever tried to reduce your smartphone usage? If so, what motivated you?
Answer: No, I've never seriously tried to reduce my smartphone usage, as I haven't felt strongly motivated to do so.
Question: What strategies, if any, have helped you manage smartphone-related stress or

distraction?
Answer: I've reduced my screen time as a way to manage distractions and stay more focused.
Question: Do you believe students are aware of the mental health impact of excessive smartphone use?
Answer: Yes, most students are aware because it's a common topic on social media and is frequently discussed.
Question: If you could change one aspect of your phone habits, what would it be and why?
Answer: I would reduce my social media usage to save time and improve my focus and productivity.

Discussion

The results obtained from this study revealed the fact that mobile device addiction brings multiple and extreme results to the students' lives, academics, and psychological, social, and physical issues. The study pinpointed the social and behavioural dimensions as the most negatively affected and, simultaneously, the most noticeable. It is observed that of the students, 40% are the ones who have been affected the most by symptoms of social withdrawal, including poor face-to-face communication with classmates and the increased state of loneliness of these students. The modification in one's behaviour is largely due to overindulgence in the use of the smartphone to access social media, which develops fake connections among the public but can discard practical and actual connections with others. The students were reported to shun physical gatherings, and all their conversations now are exclusively digital, which has resulted in decreased communication skills, emotional disconnect, and isolation. This coincides with the existing literature, which posits that excessive digital technology usage may lead to a decline in understanding, hamper the creation of a bond, and make people believe that they are loved and accepted when and where the real situation is far different.

Additionally, it was psychological for a significant number of students who found themselves dealing with increased anxiety, stress, and mental fatigue. Usually, these symptoms were regarded as a direct result of the students being glued to their phones, constantly checking their notifications, and comparing themselves with their friends, who seemed to live much better lives. Also, there were many cases of students who habitually stayed up late at night to scroll through their phones, as well as the excessive exposure to blue light from the screen, which not only scuttled their ability to get to sleep but also augmented their emotions and cognitive fatigue. The students' consistent utilization of smartphones as an escape route from their academic and personal life stressors seemed to exacerbate their mental health challenges, hence creating a cycle of dependency, and in return, the well-being of the students was gradually diminishing to the worst point.

From an academic point of view, the students recognized the presence of smartphones as a distraction and the actual means of their performance. On the one hand, smartphones were found to be very convenient for obtaining different educational materials, while on the other hand, a researcher found that the levels of students' concentration decreased due to frequent breaks from using apps and social media. The investigation discovered three main negative consequences, namely, poor time management, repeated procrastination, and lower efficiency of work tasks. When talking about the influence of phones on students' academic performance, participants revealed no doubt that they were worried about learning more slowly and losing stable grades.

This confirms that using smartphones in the educational context without proper regulation inhibits both learning effectiveness and the achievement of certain goals, as stated in earlier reports.

The combined effect of these problems helps to understand the situation. Smartphone addiction exists, and it is an issue which is not paid enough attention to; thus, student life is indeed a topic to be affected by this addiction increasingly. Not only is student-society performance hindered, but mental relaxation is also weakened, as well as personality and numerous others. It also deprives them of holistic development. These findings operationalize what educational institutions need to equip themselves with the resources necessary for promoting the well-being of their students. One solution is conducting informational campaigns and workshops and modifying the curriculum by embedding classes that can help one manage time and have emotional fitness as a topic.

Conclusion

The results from this study indicate the ever-growing challenge of smartphone addiction amongst students in universities, as it impacts several areas of their lives. Smartphones have become essential to education, communication, and other day-to-day activities. However, their unregulated use poses dire academic, psychological, social, and physical consequences. From an academic standpoint, students reported a decline in focus, poor time management, and a decline in performance. The distractions that smartphones provide also interfere with their study routines and engagement in class. From a psychological standpoint, the impacts proved to be equally damaging as students reported symptoms including anxiety, stress, mental fatigue, and the fear of being left out or missing something (FOMO), all of which indicate that students' mental well-being suffers when they are constantly connected.

From a social perspective, there is concern about students spending too much time on their devices while disconnecting from real-life interactions and poor communication skills. This demonstrates that while smartphones can enhance connectivity on a virtual level, they serve to sever real-life relationships critical to emotional wellness. The ramifications of smartphone overuse, like pump sleep disturbances, fatigue, and general lack of energy, only add to the damage the unregulated use causes. The results shed light on the healthcare concern surrounding balanced smartphone usage, which is divided equally between active and passive use.

As discussed in the associate study, the impact of smartphones can be curtailed by proactive action from focus groups such as educators and policymakers and by directly working at the school and university levels. Adding new programs alongside teaching diagnostic and behavioural evaluation that build awareness and promote healthy digitally informed action includes digital literacy, emotional, and even child and adolescent time management training. In addition, mental health in the context of advanced technology necessitates further exploration of the intervention strategy research for their mentoring systems, providing sustainable solutions to maintain education.

In conclusion, although contemporary daily life relies profoundly on smartphones, and further use of phones is anticipated, our findings strongly delineate an urge for effective and responsible approaches to harnessing such devices, yielding positive growth-oriented results.

Future Directions

The research required is longitudinal to examine not only the psychological, academic, and social impacts of smartphone addiction in the future but also to trace the pattern of the ebb and flow of such impacts. Conducting a cross-cultural, cross-institutional, and cross-gender analysis is important for understanding the differences among the participants and thus can result in better-

tailored treatments. Particularly in the case of Pakistan, where significantly different digital usage is observed, the adoption of indigenous strategies becomes more obligatory.

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