

RESEARCH ARTICLE

Perceived Stress and Smartphone Addiction Among Undergraduate Nursing Students at Mosul University

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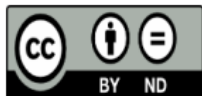
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ABSTRACT

Smartphone addiction among undergraduate students has become a pressing concern due to its association with perceived stress levels and negative impacts on their well-being and academic performance. This study at Mosul University investigated the correlation between smartphone addiction and perceived stress among nursing students. A descriptive, cross-sectional study design was adopted, and data was collected from 466 students using a randomized sampling method between September 15, 2022, and December 10, 2022. The online survey included two standard scales: the short version of the Smartphone Addiction Scale (SAS-SV) and the Perceived Stress Scale (PSS-10). The findings revealed that 68.7% of students reported high smartphone addiction, while 63.9% experienced moderate stress levels. Moreover, a statistically significant positive link between smartphone addiction and perceived stress levels was found ($P < 0.01$). These findings demonstrate the necessity of educating students about the detrimental consequences of smartphone addiction on mental health, especially perceived stress and promoting the adoption of coping mechanisms.

Keywords: smartphone addiction, perceived stress, academic performance.



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INTRODUCTION

In today's world, smartphone addiction is becoming more and more of an issue as individuals become increasingly dependent on their smartphones for communication, entertainment, and connection (Lanette et al., 2018). The addictive nature of smartphones has been linked to anxiety disorders such as depression and obsessive-compulsive disorder due to the constant availability of notifications that can be difficult to ignore (Durak, 2019). Smartphones have also been found responsible for creating social isolation by replacing face-to-face contact with virtual interactions through text messages or online chat (Rodrigues et al., 2022).

Smartphone addiction among undergraduate students is a growing concern in today's society, with the widespread use of smartphones and the increasing number of apps and social media platforms, students are becoming more dependent on their phones for communication, entertainment, and information, this dependence can lead to excessive smartphone use, which can result in negative consequences such as academic difficulties, social isolation, and poor mental health (Fook et al., 2021).

Several studies have shown that undergraduate students are particularly vulnerable to smartphone addiction. These studies have found that students who spend more time on their phones tend to have lower grades, less social interaction, and higher levels of anxiety and depression (Sunday et al., 2021).

The use of smartphones has both positive and negative effects on their users' lives; however, it is important to recognize when one may be developing an unhealthy dependence on their device. Signs that someone may have a smartphone addiction include difficulty focusing without using the phone or constantly checking notifications even if there are no new updates available (Cha & Seo, 2018). Additionally, feeling anxious when separated from one's phone or spending too much time playing games can indicate an issue with overuse of technology which should not be ignored but addressed properly instead so it does not lead to further mental health issues down the line (Paulus et al., 2018).

smartphone addiction among undergraduate students can lead to perceived stress. Excessive smartphone use can lead to feelings of being overwhelmed, anxious, and unable to cope with demands or challenges in one's life. When students spend too much time on their phones, they may neglect other important tasks or

activities, which can lead to academic or personal problems. For example, if a student spends hours scrolling through social media instead of studying, they may feel stressed and anxious about upcoming exams or assignments (Wacks & Weinstein, 2021).

Moreover, the constant notifications, updates, and messages from social media apps can create a sense of urgency and pressure to stay connected, which can lead to increased perceived stress. Students may feel like they are missing out or falling behind if they don't constantly check their phones, leading to a cycle of stress and dependence on their devices (Yang et al., 2021).

According to research, smartphone addiction is connected with undergraduate students' perceptions of stress in a good way (Zhang et al., 2022).

According to a study that appeared in the International Journal of Environmental Research and Public Health, 34.2% of American university students reported having a smartphone addiction, with women being more likely than males to have one (Albursan et al., 2022).

Another study that was published in the Journal of Behavioral Addictions revealed that 11.4% of Chinese university students were addicted to their smartphones. According to other research, university students in various nations and areas exhibit diverse degrees of smartphone addiction (A. Wang et al., 2022).

Study Objectives

1. To assess the degree of smartphone addiction and level of perceived stress among undergraduate nursing students at Mosul University.
2. To determine the correlation between students' smartphone addiction and perceived stress.

METHOD

Study design

To accomplish the objective of the current study, a descriptive, cross-sectional study design was used as a quantitative strategy during the period from the 15th of November 2020 to the 10th of December 2022.

Study setting

The data was collected from the Nursing College located in Mosul City, the center of Nineveh Governorate in the northwest region of Iraq.

Sample and Sampling

A total of 466 students were recruited using a randomized sampling method.

Study tool

The online survey includes two common scales: the short version of the Smartphone Addiction Scale (SAS-SV), which consists of 10 items and rates them from 1 (strongly disagree) to 6 (strongly agree); and the Perceived Stress Scale (PSS-10), which rates respondents' feelings and thoughts from the previous month. A person's PSS score can range from 0 to 40, with higher scores indicating greater perceived stress.

Data analysis

The SPSS version 26 was used to analyze the data to describe and analyze the study's findings. The statistical data were analyzed using various descriptive and inferential statistical tests. The results of these tests were used to interpret and draw inferences from the data.

RESULTS

In this study, the demographic data of the participants were analyzed, revealing that the majority of the sample (60.9%) fell within the age range of 22-23 years old. In terms of gender composition, males accounted for 53% of the participants while females accounted for 47%.

Table.1 Scoring of smartphone addiction (SAS-SV):

Variables	Frequency	Percent
Low Smartphone Addiction	2	0.4
Moderate Smartphone Addiction	144	30.9
High Smartphone Addiction	320	68.7
Total	466	100.00

As shown in Table (1), most of the students were represent a High Smartphone Addiction with 68.7%.

Table.2 The Individual level of perceived stress scale (PSS):

Variables	Frequency	Percent
Low stress	7	1.5
Moderate stress	298	63.9
High perceived stress	161	34.5
Total	466	100.00

As shown in table (2), most of the students were complaining of Moderate stress 63.9%. Followed by 34.5% complaining of high perceived stress.

Table3. Relationship between students' smartphone addiction and perceived stress:

Variables	Mean	Std. Deviation
Smartphone addiction	44.34	9.253
Perceived stress	24.76	5.838
Pearson Correlation (R)		0.536
P-value		0.000**

Note:

The total score for smartphone addiction is 60.

The Total score of perceived stress is 40.

** = Significance at P. < 0.01.

As shown in Table (3), there is a highly significant difference between students' smartphone addiction and perceived stress at (P. < 0.01).

DISCUSSION

The ubiquitous usage of cellphones has shaped modern culture and brought with it a number of advantages and conveniences. Yet, excessive smartphone use has been linked to a number of unfavorable effects, including psychological stress and addiction. Undergraduate nursing students may be more susceptible to stress and addiction connected to smartphone use since they are frequently subjected to high levels of academic and clinical obligations.

The findings of this study may provide insights into inform the development of effective interventions to mitigate the negative effects of smartphone use on their academic and clinical performance.

Out of the total respondents, 2 (0.4%) were categorized as having low smartphone addiction, 144 (30.9%) had moderate smartphone addiction, and 320 (68.7%) had high smartphone addiction. When compared to earlier studies, this proportion is nearly those (Buctot et al., 2020) who found (62.6%) of participant's addiction to smartphones, and (Kwak et al., 2018) revealed that moderate to severe smartphone addiction affected 70% of teenagers, yet, it is more than what other studies found as (37.4%) (Albursan et al., 2022), and (Chen et al., 2017) which reported (29.8%).

Our findings indicate that a majority of the participants, specifically 298 (63%), reported

having moderate levels of perceived stress, while 161 (34.5%) reported high levels of perceived stress. Only a small percentage of participants, specifically 7 individuals (1.5%), reported low levels of perceived stress. In another study such as (Alsaleem et al., 2021) it was found that the percentage of individuals who reported high perceived stress was 13.6% among those in healthcare colleges, and 12.0% among those in non-healthcare colleges. It is possible that the significant difference in stress levels could be attributed to the variations in the stress study methodology utilized among different groups, as well as the discrepancies in the intensity of individual, familial, academic, financial, and university environmental stressors.

Also, it suggests that stress is a common experience among individuals in this sample, which could have important implications for their mental and physical health. However, it is important to note that these results are specific to the sample and may not be representative of the wider population.

Smartphone addiction and perceived stress have a relatively strong positive link, according to the Pearson correlation coefficient (R), which stands at 0.536. Given that this association has a statistically significant p-value of 0.000, there is evidence to support the premise that smartphone addiction and perceived stress are related in this student group. In line with the research conducted by (Brubaker & Beverly, 2020; Chiu, 2014; Sanusi et al., 2022; W. Wang et al., 2021) the findings were consistent with our study.

Overall, these findings suggest that students who report higher levels of smartphone addiction also tend to report higher levels of perceived stress. This highlights the potential negative impact of smartphone addiction on individuals' mental health and well-being, particularly in the context of academic stress and workload. However, it is important to note that this is a correlational study, and therefore, causality cannot be inferred from these findings.

CONCLUSIONS

About two-half of undergraduate nursing students at Mosul University was high smartphone-addicted and complained of moderate stress. The students' perceived stress and smartphone addiction are highly correlated. Perceived stress is linked with smartphone addiction.

RECOMMENDATIONS

Enhance awareness of the University students regarding the effects of smartphone addiction on mental health, especially perceived stress.

Encouraging the students to follow the ways to overcome smartphone addiction.

ETHICAL CONSIDERATIONS COMPLIANCE WITH ETHICAL GUIDELINES

Prior to data collection, formal administrative approval was obtained from the branch of the clinical science of nursing in the nursing college in order to conduct the study. The approval process included submitting a detailed research design, describing the proposed methodology and data collection, and obtaining the necessary ethical clearances.

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AUTHOR'S CONTRIBUTIONS

All authors contributed to the study concept, writing, and reviewing of the final edition.

DISCLOSURE STATEMENT:

The authors declare no conflicts of interest.

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