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PERCEIVED PREVALENCE OF SMARTPHONE DEPENDENCE AMONG HEALTHCARE STUDENTS IN ILORIN, KWARA STATE

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Abstract: The study investigated the prevalence of smartphone dependence among healthcare students in Ilorin. This research was a quantitative approach that adopts a survey research design to conduct the study. The proportionate sampling technique was used to select 269 respondents. A self-developed questionnaire was employed to collect data from the respondents. The percentage, independent t-test and one-way ANOVA were used to analyse the data collected. Of the 269 copies of questionnaire administered, 254 copies were adequately filled, included and reported in the analyses. High prevalence level of smartphone dependence was found among healthcare students in Ilorin. Also, gender and age have no relative influence on the respondents' perceived prevalence of smartphone dependence. Relevant recommendations were provided in this regards.

Keywords: Prevalence, smartphone dependence, healthcare, students.

Introduction

Problematic smartphone use is a type of psychological or behavioral dependence on mobile devices and is strongly related to other types of excessive use of digital media, like social media dependence and internet addiction disorder. The term “behavioural addictions” in relation to smartphone use can lead to additional issues in research and stigmatize users (Panova & Carbonell, 2018; Smetaniuk, 2014). Dependence can manifest as a preoccupation with mobile communication, an excessive spending of time or money on mobile devices, or the usage of mobile devices in dangerous or unsuitable situations, such as when operating a vehicle.

The prevalence of smartphone dependence has continued to rise as a result of rapid technological innovation. For instance, in Nigeria, Amali et al. (2012) discovered that University of Ilorin students have a practice of utilizing mobile phones for various purposes during lecture hours. Balogun and Olatunde (2020) found a significant prevalence of problematic smartphone use among pre-university students in Ibadan. Amole et al. (2020) also discovered a comparatively high frequency of problematic phone use with documented physical and social repercussions among Kano metropolis youngsters. Ogunmodede et al. (2023) found a 99.4% (3305) frequency among university undergraduates. Female gender, engaging in nocturnal calls or social media chats, using a smartphone in bed when unable to sleep at night, and probable psychiatric morbidity were all reported to be predictors of smartphone use among students.

Smartphone dependency has been linked to both physical and mental health issues, including dry eyes, carpal tunnel syndrome, repetitive motion injuries, wrist, neck, back, and shoulder pain, migraine headaches, numbness and pain in the thumb, index and middle fingers. These behaviors are attributed to a complex interaction of factors, including genetics and neurobiological mechanisms, personality traits, coping mechanisms, and social environment (Griffiths, 2014). Current theoretical developments have largely embraced bio-psychosocial models of addiction. As a result, a mix of biological, psychological, and social elements play a role in the etiology of addiction, which may also apply to Smartphone dependence (Oulasvirta et al., 2011).

Demographic variations have also been reported to have influenced the overuse of smartphone. The study of Zhong, et al. (2022) showed that difference in mobile dependence and demographic factors and gender and age among the students examined. Tavakolizadeh (2014) found similar findings as the females were found to be more susceptible to addiction than the males; and age has an influence on the respondents' mobile addiction. Conversely, the results of the study by Kuma, et al. (2019), which reported that no significant difference exists between male and female prevalence of phone dependence; while Haug, et al. (2015) study did not find a relative age difference in respondents' perceived prevalence of phone dependence.

Less focus has been placed on the excessive phone use, particularly in the study's location, among healthcare students. Few studies that are currently available have only examined smartphone dependence among undergraduate students at traditional universities (Balogun & Olatunde, 2020; Ogunmodede, et al., 2023) and young people who were surveyed online (Amole, et al., 2020), but none have examined healthcare students in the Ilorin metropolis. Therefore, this study deems it essential to examine prevalence of smartphone dependence among healthcare students in Ilorin, Kwara State and the demographic interactions on respondents' perceptions.

Research Questions

The research question emerged from the first objective of this study:

1. How prevalent is phone addiction among healthcare students in Ilorin?

Research Hypotheses

The following hypotheses are in line with objectives:

1. There is no significant difference in the perceived prevalence of phone addiction among healthcare students in Ilorin based on gender.
2. There is no significant difference in the perceived prevalence of phone addiction among healthcare students in Ilorin based on age.

Methodology

This study is basically a descriptive research; thus, the research design adopted for this study is the descriptive survey design. The researcher considered this design appropriate because it involves the use of questionnaire to sample the opinions or perception of the respondents on the extent to which they make use of their phones daily. The population for this study consisted of all healthcare students in UITH school complex, Ilorin, Kwara State. The population is estimated at 892 students.

Based on the population size, 269 students were selected to participate in this study. The respondents were selected using proportionate sampling technique as shown in Table 1. At the first stage, the researcher used proportionate sampling technique to select respondents based on the contribution of each of the nine schools; then, random sampling technique was adopted to select the respondents from each of the Departments. However, at the completion of the research exercise, while sorting and coding the data collected, 254 responses were adequate, included and reported in the data analysis.

The instruments used for this study was a self-developed questionnaires titled "Prevalence of Phone Addiction Questionnaires" (PPAQ). The instrument was divided into two sections A and B. The section A elicits information on the personal characteristics of respondents such as gender and age; while sections B contained fifteen items on "Prevalence of Phone Addiction". The section B was patterned on five point Likert-type format, of A = Always; OC = Often; S = Sometimes; R = Rarely; and N = Never.

The content validity of the instrument was achieved by giving the questionnaire to four (4) experts in the measurement and evaluation. Suggestions and corrections made by the experts were incorporated into the final draft of the instrument. The split-half reliability method was used to establish the reliability of the instrument. The once-administered 20 copies of the questionnaire (to healthcare students that were part of this study) were split into two and the Cronbach Alpha statistics was used to determine the consistency of the instrument. Consequently, 0.86 reliability index was obtained that adjudge the questionnaire trustworthy for this study.

Results

Research Question: How prevalent is phone dependence among healthcare students in Ilorin?

Table 2

Distribution of Perceived Prevalence of Phone Dependence among Healthcare Students

Score Range	N	Percentage	Remark
60-75	140	55.0	High prevalence
45-59	88	35.0	Moderate prevalence
1-44	26	10.0	Low prevalence

On the prevalence of phone dependence scale, there are 15 items with five point Likert-type scoring format, which include Always = 5; Often = 4; Sometimes = 3; Rarely = 2 and Never = 1. So, the highest score range is between 60-75, which skewed to the left continuum (Always and Often) of the scale; the middle scores range from 45-59, which falls within the middle continuum (Sometimes) of the scale; while the low score range is between 1-44, which skewed to the right continuum (Rarely and Never) of the scale. Based on this classification, Table 3 indicates that 140 (55.0%) of the respondents falls within 60-75 score range, 88 (35.0%) scored within 45-59 on the scale; while 26 (10.0%) were between 1-44 score range of the scale. Since 55.0% of the respondents agreed to “always and often” usage of smart phone, it is inferred that there is a high prevalence of smartphone phone dependence among healthcare students in Ilorin, Kwara State.

H₀₁: There is no significant difference in the perceived prevalence of smartphone phone dependence among healthcare students in Ilorin based on gender.

Table 3

Independent t-test Comparing Male and Female Respondents’ Perceived Prevalence of Smartphone Phone Dependence

Gender	N	Mean	SD	df	Cal. t	p-value	Remark
Male	106	50.67	5.19	252	0.43	0.664	Retained
Female	148	50.36	5.733				

Table 3 shows that at a degree of freedom (df) of 252, the calculated t-value of 0.43 is not statistically significant ($p = 0.664 > 0.05$). This indicates that, there is no significant difference in the perceived prevalence of smartphone phone dependence among healthcare students in Ilorin based on gender; hence, the hypothesis was retained. Therefore, the respondents are not different in their perception of prevalence of smartphone phone dependence among the students despite their gender difference.

H₀₃: There is no significant difference in the perceived prevalence of smartphone phone dependence among healthcare students in Ilorin based on age.

Table 4

One-Way ANOVA Comparing Respondents’ Perceived Prevalence of Smartphone Phone Dependence Based on Age

Source	Sum of Square	df	Mean Square	Cal. F	p-value	Remark
Between Group	147.884	4	36.971	1.22	0.302	Retained
Within Group	7527.601	249	30.231			
Total	7675.484	253				

Table 4 shows that at degrees of freedom (df) of 4 and 249, the calculated F-ratio of 1.22 is not statistically significant ($p = 0.302 > 0.05$). This indicates that, there is no significant difference in the perceived prevalence of smartphone phone dependence among healthcare students in Ilorin based on age; hence, the hypothesis was retained. Therefore, the respondents with different age groups are not different in their perception of prevalence of smartphone phone dependence.

Discussion

The descriptive statistics revealed that there is a high prevalence of smartphone dependence among healthcare students. This implies that healthcare students are dependent on or involve in excessive use of Smartphone. Being preoccupied with the use of phone, spending so much time on phone and losing interest in beneficial task at the expense of Smartphone usage are common phenomena among the healthcare students. Such attitude and mannerism might divert their focus, disrupt their academic commitment and mar their health status. The finding of this study is in contrast with Noronha et al. (2022), which indicated a moderate level of phone addiction among the study's participants; while Yahyazadeh et al. (2017) finding reported a lower prevalence level of smartphone dependence among the sampled respondents. Perhaps, the difference in methodologies adopted in achieving or realizing the objectives of the studies could have been responsible for the disparity in findings between this current study and the past researches.

The result of the independent t-test revealed that there is no significant difference in the perceived prevalence of smartphone dependence among healthcare students in Ilorin based on gender. This means that the male and female healthcare students were similar in their view of the prevalence of phone addiction among them. This finding corroborates the previous studies by Abed et al. (2017); Kuma et al. (2019), which reported that no significant difference exists between male and female prevalence of phone addiction. Similarity of this finding with the previous studies could have been because they were conducted among respondents that possessed similar demographic attributes. This finding suggests that male and female individuals are both susceptible to excessive Smartphone use and dependence.

The ANOVA statistical result revealed that there is no significant difference in the perceived prevalence of phone addiction among healthcare students in Ilorin based on age. This means that the healthcare students are coherent in their views of the prevalence of smartphone dependence despite variation in their age range. The result of this study complies with the finding of Haug et al. (2015), which revealed that age difference did not bring about difference in respondents' perceived prevalence of dependence. The similarity of the respondents' attributes with the previous research could have led to congruence in their findings. This finding suggests that age is not a determinant of susceptibility to smartphone dependence.

Conclusion

The findings of the study revealed that smartphone dependence is high among healthcare students. Also, gender and age have no relative influence on the perceived prevalence of smartphone dependence among the healthcare students. Intervention strategies should therefore be centered on reducing the level of smartphone dependence among the healthcare students and positive usage of the technological gadgets.

Recommendations

Based on the findings of this study, it was recommended that:

1. The school administration, counsellors and instructors should urge students, through workshops and orientation programs, to reflect on their smartphone usage and how it may be influencing their studies, personal and interpersonal relationships, and general well-being. This will enable them to promptly evaluate the level at which they involve in the use of phones and reduce their dependency on it.

2. Students should be encouraged by school healthcare stakeholders to create boundaries for their smartphone usage by designating specific times of the day to check their smartphones or deactivating notifications during study sessions. This will go a long way in checkmating their excesses in the use of smartphones and avoid being dependent on its use.

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