

Level of Mobile Addiction Disorder (MAD) among Undergraduate Student Nurses of Edo State University Uzairue Edo State, Nigeria

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Abstract

Background: Wireless communication is a fast growing technology as it guarantees access to any individual in remote corner of the world. The usage of mobile phones has the potential to effect positively as well negatively on lives of people in the world.

Material and Methods: A cross-sectional study conducted to assesses the level of Mobile Addiction Disorder (MAD) among 100 undergraduate student nurses of Edo State University Uzairue Edo State, Nigeria. Participants were selected using a non-probability convenient sampling technique and data was obtained using a structured questionnaire. Data collected were analysed using descriptive and inferential statistics with the aid of SPSS version 22.0.

Results: Results showed that the mean age of the respondents was 22.3 with standard deviation of ± 4.61 . Majority (77%) of the respondents had high level of mobile addiction disorder. The study found no significant relationship between level of mobile addiction disorder with some selected socio-demographic variable such as ("Age, $P=0.989$ ", "Sex, $P=0.995$ ", "Guardians, $P=0.996$ ", "Cell-phone Usage, $P=0.968$)

Conclusion- The study concludes that there was a high prevalence of mobile phobne addiction (77%) among undergraduate student nurses of Edo State University Uzairue Edo State, Nigeria. Hence the need for continuous stakeholder engagement and sensitization of the study population on the dangers associated with excessive mobile phones use and need to consciously curb usage under risky situations.

Key word: Mobile phone, Addiction, Disorder, Undergraduate, Student Nurses

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I. Introduction

Mobile phones have over only a few decades revolutionized how people communicate, interact, search for information, work, do chores, and pass time. The development of the Smartphone with its multitude of functions, increased memory capacity, speed, and constant connectedness to the internet, has also increased the time spent using the phone, implying a near widespread usage.

According to Thomee. S (2018), young people watch videos, express themselves, communicate with friends, and search for information using Smartphone's, while older people use their Smartphone for having video calls with their children living far away and for playing games. The portability and accessibility of a Smartphone make it possible to use anywhere, for any duration¹⁴.

According to Addiction Centre, mobile phone addiction is the obsessive use of a smart phone. There are over 3.8 billion Smartphone users in the world; within that population 6.3 have a mobile phone addiction. Also in a related study done by Statistic, in 2020, 6.95 billion mobile users are forecasted to increase to 7.1 billion in 2021 and by 2024 this count is likely to rise to 7.41 billion.

According to a survey conducted by S. O'Dea (2020), the number of Smartphone users in Nigeria, Africa's biggest economy and most populous country, is forecast to grow to more than 140 million by 2025. Currently, estimates from different sources put the number of Smartphone users in Nigeria at roughly 25 and 40 million. The exact number of users is hard to pin down - however, the data shows a strong growth outlook for the Nigerian Smartphone market with user numbers to at least triple within the next five to six years. By implication, a large part of the populace has a very high handles for mobile phone addiction¹⁵.

Mobile phone addiction can be defined as problematic, dysfunctional use of the mobile phone, which has the following characteristics and symptoms: a strong desire to use the mobile phone, make phone calls or send text messages, expressed as constant preoccupation with those activities, Repeated unsuccessful efforts to

cease or reduce the number of phone calls made and text messages sent, Withdrawal symptoms such as restlessness, anxiety and depression associated with attempts to cease or reduce the number and time of phone calls and the number of text messages sent; Financial, career, family and social problems caused by mobile phone use, Lying to family and friends to conceal the costs of and the time devoted to making phone calls and sending text messages, Use of the mobile phone as a way of escaping from real problems or as a mood enhancer (to relieve loneliness, anxiety, depression or guilt)⁵.

Addiction to Smartphone usage is a common problem among adults worldwide. It manifests itself in the excessive usage of their phones, while engaged in other activities such as studying, driving, social gathering and even sleeping. However, many people fail to realize that addiction to Smartphone usage is a serious issue that can have a negative effect on the person's thoughts, behaviour, tendencies, feelings, and sense of well-being. In particular, it can be a risk factor for depression, loneliness, anxiety and sleep disturbances. As per the Mental Health Foundation in the United Kingdom, people with depression experience an unhappy mood, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, low energy, and poor concentration³

The study aims to assess the level of Mobile Addiction Disorder (MAD) among Undergraduate Student Nurses of Edo State University Uzairue (EDSU), Edo State, Nigeria.

II. Material and Methods

A non experimental descriptive study was carried out Undergraduate student nurses of the department of nursing science Edo State University Uzairue Edo State, Nigeria. From January 2021 to December 2021, a total of 100 subjects (both male and female) were used for the study.

Study design: A non-experimental descriptive design

Study location: Edo State University Uzairue Edo state Nigeria.

Study duration: from January 2021 to December 2021.

Sample size: 100 undergraduate student nurses

Sample size determination: The sample size that represented the reference population was calculated using the Yamens formula.

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

Where:

N= Total population

n= sample size

e= confidence you are seeking from the study (e=0.05)

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

$$n = \frac{165}{1 + 165(0.05)^2}$$

$$n = 116.8 = 117$$

Out of the 117, sample size selected for the study, 17 participants were unable to complete the questionnaire and were excluded from the analysis. The sample collected for the study was 100

A quantitative exploratory research approach was used for the present study which aims to determine the level of Mobile addiction Disorder among.

Subjects and selection method: The study participants were drawn from Edo State University Uzairue, Department of Nursing Sciences, 4001, 3001 and 2001 students by a non-probability convenient sampling technique used to select the sample who met the following the sampling criteria.

Sampling criteria

These are those criteria in selecting the sample based on certain inclusion and exclusion criteria.

Inclusion Criteria

1. All 2001, 3001 and 4001 Undergraduate student Nurses of Edo State University Uzairue. Student nurses who are willing to participate in the study from 2001 – 4001.
2. Student nurses with minimum age of 16years and above.

Exclusion Criteria

1. Undergraduate nurse of Edo University Uzairue who were not willing to participate in the study.
2. Students nurse below the age of 16.

Description of instrument for data collection

After a written informed consent was obtained, a well standardized questionnaire was used to collect of the recruited undergraduate student nurses. The questionnaire consists of two parts:

Part A: Socio-demographic variable: this includes the base-line information of the student nurse such as age, gender, ethnicity (tribe), religion, family background,

Part B: Mobile phone abuse tool was developed by DSM-5 (American Psychiatric Association, 2002). It was used to assess the level of Mobile Addition disorder among youth. It consist of 25 items, each measured using a 5-point likert scale. The response options are Strongly agree - 5, Agree - 4, Somewhat agree - 3, Disagree - 2, Strongly disagree -1.

Validity and reliability of the instruments/tools

Validity

This is defined as the level of accuracy with which the tools measures with what it intends to measure. Both face and content validity was carried out were valuable suggestions of expert was incorporated of the final incorporation of the demographic tools. The standardized tool Mobile Phone Abuse questionnaire was available in English and permission was sorted from the author to use it. The author was duly acknowledged in the research work

Reliability

This is defined as the extent to which a tool yield the same result to repeat measured.

The tool were tested for reliability during the pilot study which was obtained by spilt-half technique using of Karl Pearson's correlation coefficient formula to calculate the reliability and it was found to be 0.8. Hence, the tool was considered to be highly reliable to proceed for study

Pilot study

Pilot study was conducted and was done via Self administered questionnaire , were 10 students were selected using non-probability convenient sampling technique the sample possess similar characteristics as that of the sample of the final study.

Prior to the study, permission was obtained from the concerned authorities following a brief self-introduction via online mode. The selected respondent was informed about the purpose of the study and verbal consent was obtained. The assessment of Mobile Addiction disorder was done using ATeMo.

After conducting the pilot study, it was found that the study was feasible, concerned authorities and subjects where cooperative. The tool was relevant to time and cost of the study was within limit.

Method of data collection

Data collection was done within the month of June 2021, where 100 undergraduate student nurses were selected using Non-probability convenient sampling. Permission was obtained from the Head of Department (HOD) of nursing science and informed consent from the student nurses after explaining the purpose of the study to them.

Data was collected using the standardized online administered questionnaire related to M.A.D. It took about 15minutes to answer the combined questionnaire for the participant. It took the period of 4weeks (1month) to complete the data collection.

Method of data analysis

It was decided to analysis data collected using Descriptive and Inferential statistical methods of analysis. Hence, the collected data was carefully recorded, analyzed, summarized and tabulated using SPSS (Statistical Package for Social Sciences) through the following technique.

A. Descriptive statistics

- Frequency and percentage analysis was used to describe the socio-demographic variable
- The mean score and standard deviation was used to access M.A.D among undergraduate student nurses.

B. Inferential statistics

One-way ANOVA was used to find the association between Mobile Phone Abuse among undergraduate student nurses with their demographic variable.

III. Result

According to kelling, result is the organization of data for easy interpretation and understanding according to the research objectives of the study which are:

1. To assess the level of Mobile Addiction among undergraduate student nurses of Edo State University Uzairue
2. To find the association between the level of Mobile Addiction Disorder among undergraduate student nurses with their selected socio-demographic variable.

This chapter presents the results of this study. A total of 117 questionnaires were distributed among Undergraduate Student Nurses of Edo State University Uzairue and the whole 100 questionnaires were fully completed and returned. Thus giving a response rate of 85%.

Level of addiction of the respondents with mobile phone addiction was determined by recording the Likert scale score to suit the correct answers ("5 point for strongly agree, 4 point for agree,3 point for somewhat agree, 2

point for strongly disagree and 1 point for disagree”) for each of the variables. The total score obtainable was 125 and inter-quartile percentage were used to grade level of addiction to High (83.4-125), Moderate (41.7-83.3) and Low (0 - 41.6).

Table 1: Table showing the level of Mobile Addiction Disorder among undergraduate nursing students
N=100

Score	Frequency	Percentage (%)	Level of Addiction
0 - 41.6	9	9%	Low
41.7- 83.3	14	14%	Moderate
83.4-125	77	77%	High
Total	100	100%	

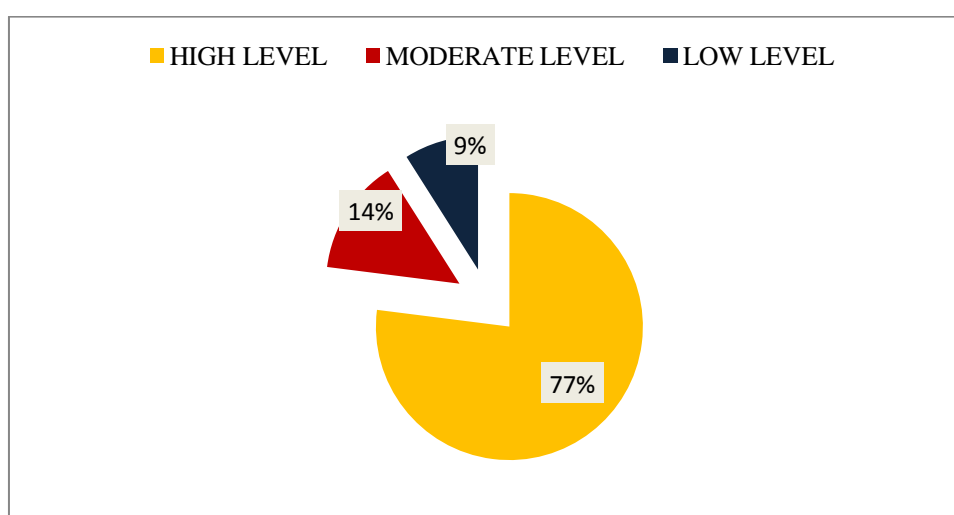


Figure 1. Pie chart showing the distribution of respondents level of addiction.

The figure 1. above showed that majority of the respondents 77(77%) had high level of addiction to mobile usage, 14(14%) of the respondents had moderate level of addiction while very few 9(9%) of the respondents low level of addiction to mobile phone.

Table 2: Table showing association between Level of Mobile Addiction and Socio-Demographic Variables

Socio-Demographic Variable.	Level of addiction			Total (%)	Chi -Square	
	High (n=77)	Moderate(n = 14)	Low (n = 9)		X ²	P-Value
Age (years)					0.90	0.989
16-20	34	6	4	44(44%)		
21 - 25	25	4	3	32(32%)		
26 - 30	14	3	1	18(18%)		
31 - 35	4	1	1	6(6%)		
Total	77	14	9	100(100%)		
Sex					0.008	0.995
Male	33	6	4	43(43%)		

Female	44	8	5	57(57%)	
Total				100(100%)	
Guardians					0.167 0.996
Single parent	18	3	2	23	

N=100

From table 2 shows the association between the Level of Mobile Addiction and socio demographic variables. There was no significant association between the level of mobile addiction of the respondents with their respective socio-demographic variables. Hence the Null hypothesis is accepted. Where the P-values of the variables are: (“Age, P= 0.989”, “Sex, P= 0.995,” “Guardians, P=0.996”, “Cell-phone Usage, P=0.968).

IV. Discussion

The main objective was to assess the level of mobile addiction among nursing students of Edo State University Uzairue Edo State Nigeria. Generally, the findings confirmed the existence of the mobile addiction phenomenon among the students of the University it also showed that addiction existed at different levels i.e. low, moderate and high levels of addiction.

Findings showed that 14% of the respondents were moderately addicted the mobile phone while a majority (77%) of the respondents was highly addicted. However, findings also showed that only few of the respondents 9% had low levels of mobile addiction. The findings of this study are consistent with a study done by Amnah I. A et.al. (2019), at Jouf University Saudi Arabia in which the result revealed that majority of the students (79.5%) utilized mobile phones for Internet access. 48.6% of the students were scored to be average mobile phone users. However, 49.5% and 1.9% of the students had moderate and severe addictions respectively.

The study revealed some respondents are aware of their addiction to smart phone. 90% of the respondent loses sleep due to the time they spend on mobile phone. This result is consistent with study by Arefin et al., (2017) it was found in the result of this study that 88% of the respondent spent larger part of their night on mobile phone, it was stated they realize sometimes that their phone usage time is longer than they planned and try to shorten the time, but they fail to do so because of their addiction. In addition to poor academic performance, the smart phone usage disturbs the daily life activities and relationships with their family members also hampered

The students who stayed up late night and use their phone during sleep hours were prone for day time sleepiness in the class rooms. This eventually results in their decreased academic performance. This finding was in line with a study conducted by Mgaya & Lusekelo, (2015) which found that students with higher social media addiction rate have poorer academic records than those who are either moderately addicted or not addicted.

The finding of the study also demonstrate that there was no significant association between the level of mobile addiction with selected social-demographic variable at P <0.05. This result was consistent with the findings of Hong, Chiu and Huang (2012). The total score for Smartphone addiction is significantly not related to the social-demographic variable. The result of this study is also consistent with those of some studies by Attamimi, (2011); Chung, (2011) and Kwon et al., (2013) in their studies it reported that Smartphone addiction is not significantly related with gender. Also In a study on cell phone usage of children aged 8–18 years, neither household income nor parents’ education was found to have an effect on the use of Smartphone’s

V. Conclusion

According to the findings of this study, it was easy to draw conclusion that the level of Smartphone addiction on the respondents was high (77%), resulting in certain negative effect on students’ performance academically. Hence the need to evaluate and understand better the use of Smartphone’s among undergraduate students because students make their own choice and preference on which mobile application to use, as shown in this study were almost 88% of the respondents stated that they tend to use Smartphone for more than 4 hours per day on social communication sites such as whatsapp, snapchat, twitter etc. without considering that those time spent on social media could have been used on academic related works and hence yield good results at the end of semester examinations.

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