

A DESCRIPTIVE STUDY TO ASSESS THE IMPACT OF SMARTPHONE ADDICTION ON PSYCHOLOGICAL WELLBEING OF STUDENT NURSES

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ABSTRACT

Background: Smartphones becoming the most accessible devices, teens are one of the most vulnerable to the smartphone addiction due to their improved performance with technological advances and inadequate power control compared to adults. Due to this increase in the use of modern technology there is a need to focus on smartphone addiction among students. **Materials and methods:** Quantitative approach was considered as best suited for study. Descriptive research design is used in this study, Nursing Students from the Faculty of Nursing was selected through convenient sampling technique. A total of 213 sample were fulfilled our inclusion criteria. A self-structured questionnaire was given to sample via online mode (Google Forms) for the purpose of data collection. Collected data was analyzed through descriptive and inferential statistics and represented in the form of tables, bar graph, and pie diagram. Result: The findings of research study were 37.7% of participants had mild SA, followed by 37.0% had moderate SA 18.8% had severe SA, 6.5% had no SA. Most of the participants 70.4% had good PWB; followed by 29.6% had poor PWB. **Conclusion:** The study attempts to assess impact of smartphone addiction on psychological well-being. It is based on the findings of the study it can be concluded that smartphone have significant impact on psychological well-being of student nurses.

KEYWORDS: Psychological well being, Smartphone addiction.

INTRODUCTION

Over the past few years, mobile phones have become an integral part of our lives. Although these devices have proved to be lifesaving in certain circumstances (e.g., after accidents) and helped to improve the quality of life in some sectors, concerns continue to be raised about potential adverse health impacts associated with their use. Education during COVID time relies heavily on mobile phones, with majority of students in public schools claiming to use mobile phones instead of laptops to get digital education during the pandemic. Technology affects the quality of young people and the amount of sleep, attention span and their academic performance. Literature indicates that 60 % of adults are addicted to their smartphones.^[1] Excessive usage of smartphones can deteriorate the psychological well-being and mental health problems like anxiety, depression and stress may manifest. The development of the smartphone with its many functions, increased memory and speed, and continuous internet connection, have increased the time

spent using the phone, which means closer use everywhere. This rapid development with altered exposure patterns has raised questions about the potential health effects of exposure. Specialists and student nurses are essential to ensure adequate care and safety of patient clinics. Improper use of social media in a clinical setting can disrupt the functioning of the learning environment and adversely affect the safety of patients. In the clinical setting, problematic smartphone use among nursing students is associated with perceived overcrowding, severe work fatigue, and a negative impact on clinical decision-making.^[2] Misuse of smartphones in a clinical setting can jeopardize the privacy and confidentiality of patients. In addition, the use of smartphones can increase the risk of transmission of bacterial agents to patients and thus increase the risk of hospital-acquired infections. There is little evidence for the types of smartphone use and the impact they can have on clinical practice.

However, there is a dearth of academic research on the link between excessive smartphone use and

psychological well-being of university students. Therefore, we conducted a Descriptive study in order to explore the smartphone addiction and its impact on Psychological well-being among the Nursing students. The current study also examines the relationship between smartphone addiction and psychological well-being among Nursing students.

MATERIAL AND METHODS

In this Descriptive study all the BSc Nursing students presently studying and can communicate in either Hindi or English language were enrolled. Data collection was performed in the month of July 2021. Students who were not using smartphone, on leave during data collection were excluded from the study. The study was approved by the Institutional Ethics Committee. Convenient sampling technique was used to collect the data. study was conducted on 213 students. Informed consent was obtained from the participants and data was collected using structured questionnaire in form of Google form. The Smartphone Addiction Scale - Short Version (SAS-SV) developed by Kwon M, Kim D-J, Cho H, Yang S,^[3] was used to assess smartphone addiction and Psychological wellbeing was assessed using a structured questionnaire.

Research Design

The research design selected for the study was descriptive which was considered appropriate for the present study to assess the impact of smartphone addiction on psychological well-being of nursing students.

Statement of Problem

A Descriptive study to assess the impact of smartphone addiction on psychological wellbeing of student nurses.

Objectives of the study

- To assess the impact of smartphone addiction on Psychological Well Being of Student Nurses.
- To Determining the relationship between the impact of smartphone addiction and psychological well-being.
- To Find the relationship between psychological wellbeing and selected Demographic variable.

Sample size and sampling technique

The sample size for this present study was 213 B.Sc nursing students. Convenient sampling technique was used for the current study.

Inclusion criteria

The sample included

- B.Sc. Nursing students of SGT University.
- Students who are Present during the time of data collection.
- Students who use smartphones

Ethical Consideration

- Formal administrative approval was obtained from Dean Faculty of Nursing SGT University, Gurugram.
- Pilot study was done on 40 Nursing students
- The purpose and the need for the study was explained to the student nurses. Written consent was taken to confirm the willingness to participate in the study. A structured questionnaire was administered to assess the impact of psychological wellbeing of student nurses.

Data Collection Tools and Technique

In the present study, based on the objectives the tools were divided into 3 sections:-

- Demographic characteristics

Smartphone Addiction Scale - Short Version (SAS-SV):

SAS-SV assess smartphone addiction and yields a complete score that's indicative of smartphone addiction. SAS-SV include 10 questions for every item, and every question ask the participant to express their opinion on a 6-point likert scale ranging from strongly disagree to strongly agree. SAS-SV has demonstrated good reliability and validity for the assessment of smartphone addiction, and has been effectively used for the assessment of smartphone addiction in community and research areas. Items have 6 responses namely "strongly disagree(01), disagree(02), weakly disagree(03), weakly agree(04), agree(05), strongly agree(06)".

The maximum possible score is 60 and minimum possible score is 10.

The following criteria is set to measure the level of smartphone addiction:

- 00-15 = No Addiction
- 16-30 = Mild Addiction
- 31-45 = Moderate Addiction
- 46-60 = Severe Addiction

Structured Psychological Wellbeing Scale:

It is a self-structured rating tool. PWS (Psychological wellbeing scale) examines the impact of smartphone addiction on psychological wellbeing of student nurses. The tool is consisting of 16 items there are five alternatives response namely "always (01), frequently (02), sometimes (03), rarely (04), never (05)".

The possible maximum score is 80 and minimum possible score is 16.

The following criteria is set to measure the psychological wellbeing of student nurses:

- 16-48 = Poor Psychological Wellbeing
- 49-80 = Good Psychological Wellbeing

Validity and Reliability of the tools

The validity of the tool was obtained by submitting the tools to 5 experts. Content validity index was found to be

valid. Reliability of tool were assessed using crohnbach alpha. The reliability was found to be 0.85.

RESULTS AND DISCUSSION

Majority of the participants 53.1% were in the age group of 20-22 year followed by 33.8% were in the age group

of 17-19 years, (21) 9.9% were in age group of 23-35 years and (07) 3.3% were in the age group of above 25 years. Majority of the participants are female (135) 63.4% followed by (78) 36.6% are male. Table 1 depicts the demographic characteristics of Participants.

Table 1: Demographic characteristics of Nursing students n=213.

Demographic variable	Frequency	Percentage
Age:		
17-19	72	.33.8
20-22	113	53.1
23-25	21	9.9
Above 25	7	3.3
Gender		
Male	78	36.6
Female	139	63.4
Transgender	0	0
Course and year of study		
B.SC Nursing 1st year	72	33.8
B.SC Nursing 2nd year	55	25.8
B.SC Nursing 3rd year	30	14.1
B.SC Nursing 4th year	56	26.3
Type of family		
Nuclear	135	63.4
Joint	73	34.3
Extended	5	2.3
Family income per month		
10-20k	46	21.6
21-30k	45	21.1
31-40k	38	17.8
41-50k	84	39.4

Section: II Description of Level of Smartphone Addiction

Table 2: Level of Smartphone addiction among Nursing students n=213.

Variable	Frequency	Percentage
No smartphone addiction	14	6.5
Mild smartphone addiction	80	37.7
Moderate smartphone addiction	79	37.0
severe smartphone addiction	40	18.8

Data presented in table depicts that 37.7% of participants had mild smartphone addiction followed by 37.0% had moderate smartphone addiction, 18.8% had severe

smartphone addiction 6.5% had no smartphone addiction.

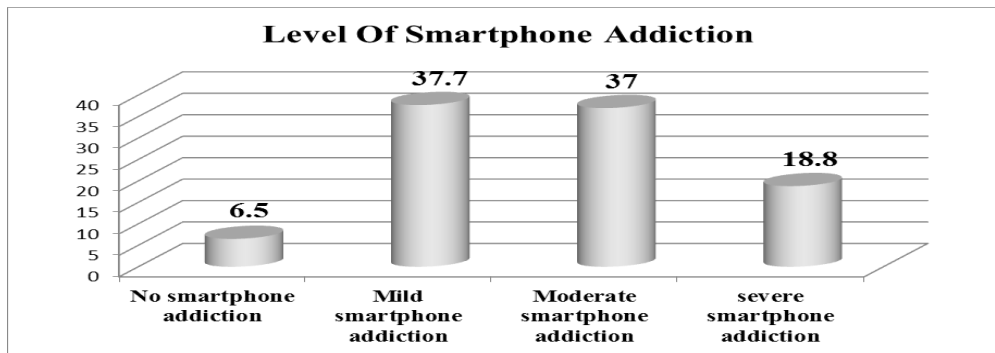


Figure 1: Depicts Level of Smartphone addiction among Nursing students 37% of students had moderate level of smartphone addiction followed by 18.8 % students with severe smartphone addiction.

Section: III Description of Level of Psychological Wellbeing

Table 3: Level of Psychological wellbeing among Nursing Students n=213.

Level Of Psychological Well Being	Frequency	Percentage
Good psychological wellbeing (49-80)	150	70.4
Poor psychological wellbeing (16-48)	63	29.6

Data shown in table depicts that Most of the participants 70.4% had good psychological wellbeing, followed by 29.6% had poor psychological wellbeing.

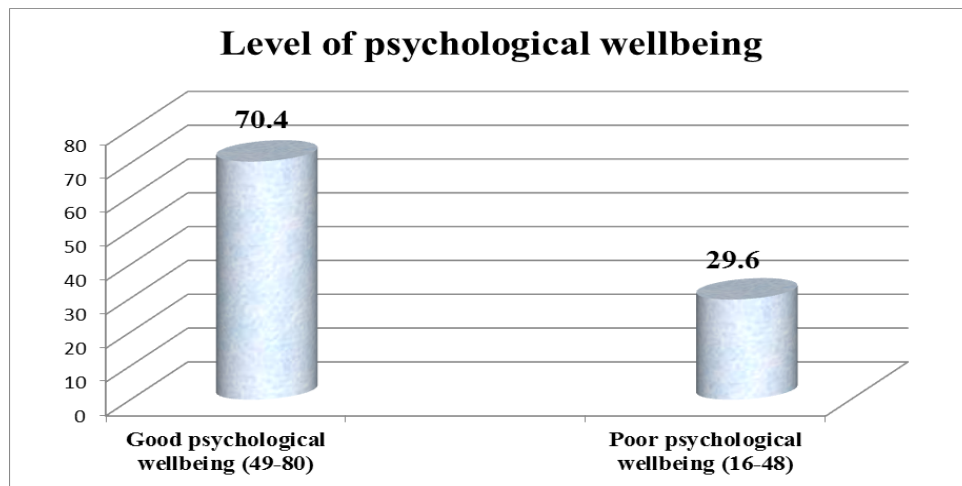


Figure 2: Depicts Level of psychological wellbeing among Nursing students ,70% of students had good psychological wellbeing whereas 29.6% of students had poor psychological well being

Table 4: Description of Association of Psychological Well-Being with Selected Demographic Variable. There was no significant association of Psychological Well-Being with Selected Demographic Variable.

Demographic variable	df	t/f	p value
Age : 17-19 20-22 23-25 Above 25	52	.984	.513
Gender : Male Female Transgender	210	1.33	0.18
Course and year of study : B.SC Nursing 1st year B.SC Nursing 2nd year B.SC Nursing 3rd year B.SC Nursing 4th year	52	.791	.836
Type of family Nuclear Joint Extended	52	1.28	0.12
Family income per month: 10-20k 21-30k 31-40k 41-50k	52	1.34	0.08

Description of Correlation Between Impact of Smartphone Addiction And Psychological Well-Being.
Table 5: Correlation Between Impact of Smartphone Addiction And Psychological Well-Being n=213.

Correlation	Psychological well-being (r)	p value
SAS-SV Scoring	-0.6	0.000*

p value <0.05 = significant

Data presented in table shows that: There is a negative correlation between impact Of Smartphone Addiction

and Psychological Well-Being as the p value (0.000) is highly significant

Description of Association of smartphone addiction with psychological wellbeing

Table 6: Association of smartphone addiction with psychological well being n=213.

Association of smartphone addiction with psychological wellbeing	df value	f value	p value
Between Groups	3	52.189	.000*

p value <0.05 = significant

Data presented in table depicts the association of smartphone addiction with psychological wellbeing using independent t test is significant. Hence there is significant association between smartphone addiction and psychological wellbeing as the p value is highly significant. Therefore, the null hypothesis is rejected.

DISCUSSION

In the present study shows that 37.7% of participants had mild smartphone addiction, followed by 37.0% had moderate smartphone addiction, 18.8% had severe smartphone addiction, 6.5% had no smartphone addiction. These findings were dissimilar the study that was conducted by C.M. OSORIO (2021) to estimate the prevalence of smartphone addiction in nursing students. The estimation of nomophobia or smartphone addiction was 22% (CI95% 18%-26%) in a sample of 2780 nursing students.^[4] In the present study we found out that 32.4% spend 2-3 hour on smartphone in a day, followed by (68) 32.0% spend more than 4 hours on smartphone in a day, (49) 23.0% spend 3-4 hour on smartphone in a day, and (27) 12.6% spend 1-2 hour on smartphone in a day. There is a similar study that was conducted by Rai S. (2014) to assess the effects of excessive use of smartphones among professional college going students the showed that students used smartphone around 4 hours.^[5]

In the present study shows that 37.7% of participants had mild smartphone addiction, followed by 37.0% had moderate smartphone addiction, 18.8% had severe smartphone addiction, 6.5% had no smartphone addiction. The findings were in inconsistent with study that was conducted by Seong-Soo Cha (2018) conducted a study on Smartphone use and smartphone addiction in middle school students in Korea.^[6] 30.9% were classified as a risk group for smartphone addiction and 69.1% were identified as a normal user group.

In the present study we observed that Most of the participants 70.4% had good psychological wellbeing, followed by 29.6% had poor psychological wellbeing. This finding was also dissimilar to the study

that A.P. Jayanti (2016) conducted a Study on Some of the Common Health Effects of Cell-Phones amongst College Students she found 51.47% students have issues regarding irritability and anger.^[7] In the present study 29.6% had poor psychological wellbeing these findings were similar to a study that was conducted by A. Mandana (2008) conducted a study on problematic use of mobile phone and mental health he concluded that study concluded that mobile phone has impact on mental health.^[8]

CONCLUSION

The study attempts to assess impact of smartphone addiction on psychological well-being. Based on the findings of the study it can be concluded that smartphone have significant impact on psychological well-being of student nurses.

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