# **SMARTPHONE ADDICTION AND STUDY HABITS OF UNDERGRADUATE STUDENTS**

**Dr. Brian Pacheco1,Tanya Marchon e Mascarenhas2**

**ABSTRACT**

*The present study assessed the link between smartphone addiction and study habits of undergraduate students. The relationships of smartphone addiction to specific dimensions of study habits, namely, budgeting time, memory, taking examination, health were also investigated. In addition, the study sought to evaluate gender differences on the said variables. The sample for the study comprised of 200 undergraduate students from Goa between the ages of 17 - 21 (males = 100 and females = 100). The participants were selected by convenient sampling. Two psychological instruments — Mobile Phone Addiction Scale by Velayudhan and Srividya (2012), and Palsane and Sharma Study Habit Inventory by Palsane and Sharma (1989) were administered to participants. The results of the study indicated a small negative correlation between smartphone addiction and study habits. Smartphone addiction was negatively related to the budgeting time, memory, and taking examination dimensions of study habits. Significant gender differences in smartphone addiction and study habits were established.*

Keywords: Smartphone Addiction, Study Habits, Budgeting time, Memory, Taking Examination, Health

Over the past few decades, the mobile phone has infiltrated human lives in a big way. During the Covid-19 pandemic, where social distancing was greatly emphasised as a way to contain the spread of the coronavirus, mobile devices such as mobile phones, tablets, and laptops became almost necessary tools to stay connected to others, for work, or even to study online. Despite the many advantages screened devices seem to offer, the downside of excessive usage of the same has increasingly become apparent.

In recent years, the impact of smartphone usage on mental health has come to fore. Excessive, poorly regulated mobile phone usage is now being likened to that of addictions such as substance abuse.

**LITERATURE REVIEW**

Ezoe, Toda, Yoshimura, Naritomi, Den and Morimoto (2009) define mobile phone dependence in terms of “excessive use and an intermittent craving to use a mobile phone”. Kiran, Sanjana, and Reddy (2019) define mobile phone addiction as “constant dependency on one’s mobile phone, to cater to psychological needs and extraneous necessities”.

A study by Alosaimi et al. (2016) on a sample of university students in Saudi Arabia, 27.2% of 2367 participants reported smartphones usage that exceeded 8 hours per daily. Among smartphone users, at least 43% reported diminished sleeping hours, experiencing a lethargy the following day, 30% reported an unhealthy lifestyle in terms of food consumption and physical activity. 25% of smartphone users also reported a decline in academic performance.

A study by Chen et al. (2016) reveal that mobile phone addicts or possible mobile phone addicts when compared to non-addicts, spent considerably more money and time on mobile phone use. They were also found to be more vulnerable to negative emotions.

A person’s total potentialities and capabilities is judged in terms of their performance in academics (Nuthana & Yenagi, 2009). The performance of students in academics depends on numerous factors. One of this pertains to study habits. Percival and Ellington (1984) define study habits as methods and techniques of effective learning which involve a set of study skills such as organization of time, reading skills, essay writing, note-taking, examination techniques, as well as job hunting skills.

The association between mobile phone addiction and academic performance has also been scrutinized in recent years. Gupta, Garg, and Arora (2016) whose study included a sample of medical students found that mobile phone usage at night, and the total time spent using mobile phones was linked to difficulty in waking up, waking time, fatigue, decline in study habits, difficulty concentrating, increased absenteeism, and going late for classes. A study on a sample of senior secondary students identified an inverse relationship between mobile phone addiction and study habits (Lata, Makol, & Makol, 2017). In a meta-analysis of 44 studies comprising a total of 147,943 college students from 16 countries, Sunday, Adesope and Maarhuis (2021) concluded that addiction to smartphones impacts students' learning and overall academic performance negatively.

Studies exploring gender differences on mobile addiction as well and study habits have generated mixed results. Chiu, Hong, and Chiu (2013) found that female college students scored higher than male college students on mobile phone addiction. In contrast, a study Bisen and Deshpande (2016) found that male students were found to be more prone to smartphone addiction in comparison to female students.

**METHOD**

A correlational research design was used to examine the relationship between Mobile Phone Addiction and Study Habits in undergraduate students. The relationships of Mobile Phone Addiction to specific sub-scales of Palsane and Sharma Study Habit Inventory (budgeting time, memory, taking examination, and health) were also evaluated. In addition, gender differences in Mobile Phone Addiction and Study Habits were investigated. The sample for the study comprised of 200 undergraduate students from Goa between the ages of 17 - 21 (males = 100 and females = 100). The participants were selected by convenient sampling. All participants received adequate information about the nature of the study and their consent was taken prior to participation in the study.

The following hypotheses were formulated based on the research goals:

H1 – There is a significant relationship between Mobile Phone Addiction and Study Habits of Undergraduate Students.

H1.1 - There is a significant relationship between Mobile Phone Addiction and Budgeting Time of Undergraduate Students.

H1.2 - There is a significant relationship between Mobile Phone Addiction and Memory of Undergraduate Students.

H1.3 - There is a significant relationship between Mobile Phone Addiction and the Taking of Examination of Undergraduate Students.

H1.4 - There is a significant relationship between Mobile Phone Addiction and Health of Undergraduate Students.

H2 – There is a significant gender difference in Mobile Phone Addiction of Undergraduate Students.

H3 - There is a significant gender difference in Study Habits of Undergraduate Students.

Two research tools were employed by the researchers: (a) Mobile Phone Addiction Scale by Velayudhan and Srividya (2012) which comprises of 37 items using a five-point Likert scale as a measure of smartphone addiction, and (b) Palsane and Sharma Study Habit Inventory by Palsane and Sharma (1989) which consists of 45 statements measured on a three-point scale to evaluate the study habits of undergraduate students. In order to test the hypotheses and to facilitate the interpretation of the results, data obtained was analysed by applying Pearson’s Product Moment Correlation and Student’s t-test using the Statistical Package for Social Sciences (SPSS) version 27.

**RESULTS**

Mobile phone addiction was found to have a small but highly significant negative relationship with study habits of undergraduate students (r=-.292, P<0.01). Hence, students that showed greater addiction to mobile phones reported poorer study habits. Mobile Phone Addiction Scale was also correlated to scores on specific dimensions of the Study Habits Inventory. Highly significant negative relationships were found between mobile phone addiction and some sub-scales of study habits, namely budgeting time (r=-.203, P<0.01), memory (r=-.206, P<0.01), and taking examination (r=-.189, P<0.01). There was no significant relationship between mobile phone addiction and health of undergraduate students.

Gender difference in mobile phone addiction in undergraduate students was also computed. The mean scores on mobile phone addiction in female and male students were 92.29 and 99.95, respectively. The standard deviations of the two groups were 14.36 and 11.58, respectively. The t-score (t=4.15, P<0.001) indicates that there exists a very highly significant difference in addiction to mobile phones among male and female undergraduate students, with male students exhibiting a significantly higher level of mobile phone addiction in comparison to female students.

Mean score of female and male undergraduate students on study habits were 56.18 and 52.07, respectively. Standard deviations for the two groups were found to be 10.28 and 8.53, respectively. The obtained t-score (t=3.07, P<0.01) indicates a highly significant gender difference on study habits. Female undergraduate students reported significantly better study habits than male undergraduate students.

**DISCUSSION**

The findings of the current study are in line with previous findings. A small but highly significant relationship was found between mobile addiction and study habits of undergraduate students that formed the sample of the study. The usage of mobile phone permeates and impacts every aspect of one’s life and routine. Academics is an important aspect of the lives of the youth, one that demands a certain amount of time and dedication. The addictive nature of the smartphones which supply an endless stream of entertaining would mean that students who could be devoting time to studies would now be distracted from the same, in the search of momentary pleasures.

Where specific components of study habits are concerned, three of the four components included in the study were found to be significantly related to mobile phone addiction. Budgeting time, which pertains to setting a routine in order to meet one’s needs, was negatively associated with mobile phone addiction. Given students’ pre-occupation with mobile phones, other important matters, including academics, may receive lesser attention than they deserve. Memory, described as learning in ways to ways to improve memory, was also found to be negatively linked to mobile phone addiction. This implies that students who report higher levels of addiction are less likely to use effective strategies to memorize learnt material. A small negative relationship was also found between mobile phone addiction and taking examination which is defined in terms of setting a time table for studying and improving efforts put into studies based on results obtained. An analysis into the relationship between mobile phone addiction and the component of health did not reveal a significant association between the two.

In evaluating gender differences in mobile addiction, data from this study indicated that male undergraduate students were significantly more prone to mobile addiction in comparison to their female counterparts. This finding is in line with the finding by Bisen and Deshpande (2016) who found that male students were significantly more addicted to smartphones than female students in a sample of engineering students in India.

Gender differences were also established in the domain of study habits. Female undergraduate students were found to have significantly better study habits than male students. A study by Ossai (2012) also found female students to show better study habits than male students.

**IMPLICATIONS OF THE STUDY**

Given the findings of the study, it is reasonable to conclude that smartphone addiction is negatively related to study habits of undergraduate students. Given that an addiction to smartphones can have damaging impacts on study habits, thereby, resulting in a poorer academic performance, interventions aimed at treating mobile addiction could positively influence performance in academics. Thus, the authors of the present study would like to highlight the necessity for systematic interventions aimed at helping students and individuals in the general population to cope with an addiction to mobile phones as a way of bettering their lives and being healthier, productive individuals.

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1 Assistant Professor, Department of Psychology, Rosary College of Commerce and Arts, Navelim, Goa.

2 Associate Professor, Department of Psychology, Rosary College of Commerce and Arts, Navelim, Goa.