# Positive and Negative Impact of Smart Phone on Study Habits among Students: A Study of Colleges of J&K

Suman Vashist 1, Thavamani2

#### **A**BSTRACT

Aims and Objective: The aim of the study is to assess the positive and negative impact of smart phones on study habits among students: A study of colleges of J&K. Materials and Methods: Quantitative research approach was adopted to assess the positive and negative impact of Smart Phone on Health Status among student: A study of colleges of J&K. The present study was conducted at selected college in J&K. Purposive sampling technique was used to select the students who were selected from colleges. The tool was developed by keeping in mind the objectives of the study and prepared after extensive review of literature, internet sources and through discussion with guide, coguide and opinions of various experts in the field of medical health nursing, psychology, psychiatric, social, and preventive medicine. The reliability of the tool was assessed by Cronbach's alpha method, which was Likert's scale positive and negative impact of smart phone on study habit Likert's scale impact of smart phone on psychological health status (r = 0.764). The tool was found to be reliable. The pilot study was carried out on 30 samples to assess the feasibility for conducting main research study and to assess the relevancy of the tool. The pilot study was conducted at BEE ENN nursing college, Jammu. The main data collection was done in the month of March 2021 and April 2021 at selected nursing college in J&K. 250 students were selected for the study using purposive sampling technique. The data analysis was done according to study objectives by using descriptive and inferential statistics. The plan of the data analysis is as follows; frequency, percentage, mean, and standard deviation were calculated. Chi-square test was used for association. Results: Out of 250 students, according to the age; the majority of students were between 19 and 21 years of age. Students had an average age of 20.51 ± 2.308. According to sex, the majority of 86.4% of students were female. According to family patterns, the majority of 70.8% of people lived in the nuclear family. Based on the monthly household income (Rs), the majority of people had 45.2% of Rupees with 16K to 30K. The monthly average household income was Rs.  $32,880 \pm 15635.96$ /month. Our finding suggests that the majority of 42.4% did not use a phone at college. According to social sites, the majority of just over half 52.4% of students used Facebook. In terms of mobile internet use, most of 82.0% of the students used social networking. A majority of 79.6% played mobile games. Most of 80.8% of the students listened to mobile music. Just over half, 51.6% of users did not shop through the mobile app while 48.4% did buying online. The majority 62% of students was using the online banking app. Based on the duration of use each day; the majority of 44% of students spend 1–2 h. Our finding showed that majority of 74% students had good impact on study habit while 26% had bad impact. The average impact on study habit was 47.80 ± 13.316. The present study finding shows the association of impact of study habits and selected variables of pattern of smart phone use among students. As result showed that use of mobile phone at college ( $\chi^2 = 24.363$ , P = 0.001), use of social site ( $\chi^2 = 19.356$ , P = 0.001), use of mobile phone for video call ( $\chi^2 = 18.651$ , P = 0.001), most common purpose of using internet by mobile (fisher's exact value = 19.281, P = 0.001), playing games ( $\chi^2 = 84.826$ , P = 0.001), watching movie ( $\chi^2 = 39.719$ , P = 0.001), online banking ( $\chi^2 = 18.045$ , P = 0.001), and duration of usage per day (fisher's exact value = 74.168, P = 0.001), found significant at 1%. Hence, the null hypothesis is rejected. It is concluded that pattern of smart phone use among students had significant association on study habits. Conclusion: The study concluded that pattern of smart phone use had significant positive and negative impact on study habits. Nurses role are very important to understand, management and prevention of these of these problems among students.

**Keywords:** Impact, Smart phone, Students, Study habits *Asian Pac. J. Health Sci.*, (2021); DOI: 10.21276/apjhs.2021.9.1.11

### INTRODUCTION

Mobile phones are considered as an essential part of day-to-day life. Electronic devices have become one of the favorite activities of students. The world of electronic devices, however in changing dramatically. Students, in particular, spend a significant amount of time viewing and interacting with electronic devices. Students spend more times using media use electronic devices to improve the efficiency and effectiveness of the knowledge and such as information about the students.

Mobile phone is largely seen as one of the world's biggest technology platform. It is a source of knowledge, entertainment, brand building, commerce, education, and much more. However, mobile phone, which has over the years changed the way we live, work, and communicates. Mobile phone addiction has been a headache for several Asian countries such as India, South Korea, and China over the past decade. The usage of mobile phones is a lifestyle component. Young people in particular are frequently continually spotted using their smart

<sup>1</sup>Department of Nursing, Desh Bhagat University, Punjab, India, <sup>2</sup>Department of Nursing, Obstetrics and Gynecology in Nursing, SCPM Nursing College, Haripur, Uttar Pradesh, India

Corresponding Author: Suman Vashist, Department of Nursing, Desh Bhagat University, Punjab, India. E-mail: suman.vashist444@gmail.com How to cite this article: Vashist S, Thavamani. Positive and Negative Impact of Smart Phone on Study Habits among Students: A Study of Colleges of J&K. Asian Pac. J. Health Sci., 2021;9(1):54-57

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phones, making or receiving calls, while they utilize various programs or just tap on touch screens for several minutes at a time. The possibilities offered by smart phones are intriguing and many individuals have a very high cumulative time using smart phones each day.<sup>[1]</sup>

A smart phone is an advanced mobile phone device which is designed to solve daily accessibility problems. Smart phones provide so many features and allow more than make phone calls and send text messages. Smart phones have become a device highly in demand due to its power to perform basic and advanced computer functions. Any problem can be solved through one touch nowadays. That is why in modern life style, people cannot live without it, and they have become the necessity in life. The use of smart phones provides high quality performance and quick access to information and entertainment, such as mobile audio and video calls, mobile teleconferencing, sending and receiving emails, and easy access to the internet for different kinds of people, including students. One more usage of it is entertainment and social media. It is a source of all kinds of social connectivity and fun. Because of which, people especially students get addicted to it, which, in turn, influence their studies, moral values and mental and physical health.[2]

However, smart phone has also made students' lives easier, as they can access their school information on the gadget through electronic learning (e-learning), and mobile learning (m-learning) as well as they can learn or get any kind of knowledge on them.<sup>[3]</sup>

## MATERIALS AND METHODS

Quantitative research approach was adopted to assess the positive and negative impact of Smart Phone on study habit among student: A study of colleges of J&K. The present study was conducted at selected nursing college in J&K. Purposive sampling technique was used to select the students who were selected from colleges. The tool was developed by keeping in mind the objectives of the study and prepared after extensive review of literature, internet sources and through discussion with guide, co-guide and opinions of various experts in the field of Medical health nursing, Psychology, psychiatric, social, and preventive medicine. The reliability of the tool was assessed by Cronbach's alpha method, which was Likert's scale impact of smart phone on physical health status (r = 0.845), Likert's scale impact of smart phone on psychological health status (r = 0.764). The tool was found to be reliable. The pilot study was carried out on 30 samples to assess the feasibility for conducting main research study and to assess the relevancy of the tool. The pilot study was conducted at BEE ENN College, Jammu. The main data collection was done in the month of March 2021 and April 2021 at selected nursing college in J&K. 250 students were selected for the study using purposive sampling technique. The data analysis was done according to study objectives using descriptive and inferential statistics. The plan of the data analysis is as follows; frequency, percentage, mean, and standard deviation were calculated. Chi-square test was used for association.

#### RESULTS

# Section I

Finding related to the Socio-demographic profile of students (Table 1).

#### Section II

Finding related to assess the pattern of smart phone use among students (Table 2).

# Section III

Finding related to assess the impact of smart phone use on study habits among students.

**Table 1:** Finding related to the Socio-demographic profile of

| students. n=250  |                      |               |            |  |  |
|------------------|----------------------|---------------|------------|--|--|
| Variables        | OPTS                 | Frequency (f) | Percentage |  |  |
| Age(in years)    | ≤2518                | 50            | 20.0       |  |  |
|                  | 19–21                | 106           | 42.4       |  |  |
|                  | 22-24                | 72            | 28.8       |  |  |
|                  | ≥25                  | 22            | 8.8        |  |  |
| Sex              | Male                 | 34            | 13.6       |  |  |
|                  | Female               | 216           | 84.4       |  |  |
| Course           | GNM                  | 24            | 9.6        |  |  |
|                  | Post B. Sc (N)       | 26            | 10.4       |  |  |
|                  | B. Sc (N)            | 178           | 71.2       |  |  |
|                  | M. Sc (N)            | 22            | 8.8        |  |  |
| Academic class   | 1 <sup>st</sup> year | 61            | 24.4       |  |  |
|                  | 2 <sup>nd</sup> year | 75            | 30.0       |  |  |
|                  | 3 <sup>rd</sup> year | 68            | 27.2       |  |  |
|                  | 4 <sup>th</sup> year | 46            | 18.4       |  |  |
| Habitat          | Rural                | 190           | 76.0       |  |  |
|                  | Urban                | 60            | 24.0       |  |  |
| Present residing | Home                 | 48            | 19.2       |  |  |
|                  | Hosteller            | 180           | 72.0       |  |  |
|                  | Paying guest         | 22            | 8.8        |  |  |
| Father's         | Informal             | 50            | 20.0       |  |  |
| educational      | Middle               | 52            | 20.8       |  |  |
| status           | Secondary            | 49            | 19.6       |  |  |
|                  | Senior secondary     | 44            | 17.6       |  |  |
|                  | Graduation or above  | 55            | 22.0       |  |  |
| Mother's         | Informal             | 115           | 46.0       |  |  |
| educational      | Middle               | 25            | 10.0       |  |  |
| status           | Secondary            | 33            | 13.2       |  |  |
|                  | Senior secondary     | 44            | 17.6       |  |  |
|                  | Graduation or above  | 33            | 13.2       |  |  |
| Father's         | Government job       | 77            | 30.8       |  |  |
| occupation       | Private Job          | 33            | 13.2       |  |  |
|                  | Business             | 64            | 25.6       |  |  |
|                  | Other                | 76            | 30.4       |  |  |
| Mother's         | House wife           | 138           | 55.2       |  |  |
| occupation       | Government job       | 77            | 30.8       |  |  |
|                  | Private job          | 35            | 14.0       |  |  |
| Type of family   | Nuclear              | 177           | 70.8       |  |  |
|                  | Joint                | 73            | 29.2       |  |  |
| Family income    | ≤15,000              | 26            | 10.4       |  |  |
| (Rs./month)      | 16,000–30,000        | 113           | 45.2       |  |  |
|                  | 31,000–45,000        | 54            | 21.6       |  |  |
|                  | 46,000–55,000        | 35            | 14.0       |  |  |
|                  | ≥55,000              | 22            | 8.8s       |  |  |

Table 3 presents that impact of smart phone use on study habit among students. Out of 250 students; majority of 74% students had good impact on study habit while 26% had bad impact. The average impact on study habit was  $47.80 \pm 13.316$ .

### **Section IV**

Finding related to find out the association of study habits and selected variables of pattern of smart phone use among students.

Table 4 reveals that association of impact of study habits and selected variables of pattern of smart phone use among students. The result showed that use of mobile phone at college ( $\chi^2 = 24.363$ , P = 0.001), use of social site ( $\chi^2 = 19.356$ , P = 0.001), use of mobile phone for video call ( $\chi^2 = 18.651$ , P = 0.001), most common purpose of using internet by mobile (Fisher's exact value = 19.281, P = 0.001), playing games ( $\chi^2 = 84.826$ , P = 0.001), watching movie ( $\chi^2 = 39.719$ , P = 0.001), online banking ( $\chi^2 = 18.045$ , P = 0.001), duration of usage per day (fisher's exact value = 74.168, P = 0.001), and found significant at 1%. While, Listening music ( $\chi^2 = 0.036$ , P = 0.849), online shopping ( $\chi^2 = 2.482$ , P = 0.115), and reading news ( $\chi^2 = 3.048$ , P = 0.081)

**Table 2:** Finding related to assess the pattern of smart phone use among students. *n*=250

| Variables                          | OPTS          | Frequency (f) | Percentage |
|------------------------------------|---------------|---------------|------------|
| Use of mobile phone                | Smart phone   | 250           | 100.0      |
| Use of mobile phone at             | Yes           | 100           | 40.0       |
| college                            | No            | 106           | 42.4       |
| 3                                  | Sometimes     | 44            | 17.6       |
| Use of social site                 | Facebook      | 131           | 52.4       |
|                                    | Instagram     | 75            | 30.0       |
|                                    | Twitter       | 22            | 8.8        |
|                                    | All the above | 22            | 8.8        |
| Use of mobile phone for video call | Very often    | 107           | 42.8       |
| video cali                         | Sometimes     | 143           | 57.2       |
| Purpose of using internet          | Social        | 205           | 82.0       |
| by mobile                          | networking    |               |            |
| ,                                  | Chatting      | 23            | 9.2        |
|                                    | Educational   | 22            | 8.8        |
| Playing games                      | Yes           | 199           | 79.6       |
|                                    | No            | 51            | 20.4       |
| Listening music                    | Yes           | 202           | 80.0       |
|                                    | No            | 48            | 19.2       |
| Watching movie                     | Yes           | 211           | 84.4       |
|                                    | No            | 39            | 15.6       |
| Online shopping                    | Yes           | 121           | 48.4       |
|                                    | No            | 129           | 51.6       |
| Online banking                     | Yes           | 155           | 62.0       |
|                                    | No            | 95            | 38.0       |
| Reading news                       | Yes           | 71            | 28.4       |
|                                    | No            | 179           | 71.6       |
| Using e-mail in mobile             | Yes           | 250           | 100.0      |
| Duration of usage per              | <30 min       | 68            | 27.2       |
| day                                | 1–2 h         | 110           | 44.0       |
|                                    | 3–4 h         | 59            | 23.6       |
|                                    | >4 h          | 13            | 5.2        |

**Table 3:** Impact of smart phone use on study habit among students n=250

|                       | 11-230 |      |              |
|-----------------------|--------|------|--------------|
| Impact on study habit | f      | %    | Mean±SD      |
| Bad impact            | 65     | 26.0 | 47.80±13.316 |
| Good Impact           | 185    | 74.0 |              |
|                       |        |      |              |

found non-significant at 5%. Hence, the null hypothesis is rejected. It is concluded that pattern of smart phone use among students had significant association on study habits.

#### Discussion

The present study was to assess Impact of Smart Phone use on study habits among Students: A study of Self-Financing Nursing Colleges of J&K. Descriptive study designed was adopted for this study. Purposive sampling technique was used to enroll the study subjects. 250 students were enrolled from selected nursing college of J&K. Out of 250 students, according to the age; the majority of students were between 19 and 21 years of age. Students had an average age of 20.51 ± 2.308. According to sex, the majority of 86.4% of students were female. According to family patterns, the majority of 70.8% of people lived in the nuclear family. Based on the monthly household income (Rs), the majority of people had 45.2% of Rupees with 16K to 30K. The monthly average household income was Rs. 32,880  $\pm$  15,635.96/month. Similar study was conducted by Rai et al.[4] The effects of excessive use of smart phones among Nursing College Students. They found that the age of students was 18-25 years. The findings of present study were in relevance to the study of Dongre et al. (2017)<sup>[5]</sup> to evaluate mobile phone dependence and impact of cell phone on health among

**Table 4:** Association of impact of study habits and selected variables of pattern of smart phone use among students. *n*=250

| of pattern of s         | <u>-</u> _                             | none use among         |                     |         | 50                  |
|-------------------------|--|------------------------|---------------------|---------|---------------------|
| Variables               | Impact of study habits $\chi^2$ values |                        | df                  | P-value |                     |
|                         | Bad                                    | Good                   |                     |         |                     |
| Use of mobile           |  |                        |                     |         | -                   |
| phone at college        |  |                        |                     |         |                     |
| Yes                     | 39                                     | 61                     | 24.363              | 2       | 0.001**             |
| No                      | 26                                     | 80                     | 21.505              | -       | 0.001               |
| Sometime                | 0                                      | 44                     |                     |         |                     |
| Use of social site      | Ü                                      |                        |                     |         |                     |
| Facebook                | 39                                     | 92                     | 19.356              | 3       | 0.001**             |
| Instagram               | 26                                     | 49                     | . , , , , ,         |         | 0.00                |
| Twitter                 | 0                                      | 22                     |                     |         |                     |
| All the above           | 0                                      | 22                     |                     |         |                     |
| Use of mobile           | -                                      |                        |                     |         |                     |
| phone for video call    |  |                        |                     |         |                     |
| Very often              | 13                                     | 94                     | 18.651              | 1       | 0.001**             |
| Sometime                | 52                                     | 91                     | 10.051              |         | 0.001               |
| Most common             | 32                                     | 71                     |                     |         |                     |
| purpose of using        |  |                        |                     |         |                     |
|                         |  |                        |                     |         |                     |
| internet by mobile      | 6.5                                    | 140                    | 19.281              | 2       | 0.001**             |
| Social networking       | 65                                     | 1 <del>4</del> 0<br>23 | 19.281              | 2       | 0.001               |
| Chatting<br>Educational | 0                                      | 23<br>22               |                     |         |                     |
| Playing games           | U                                      | 22                     |                     |         |                     |
| Yes                     | 26                                     | 173                    | 84.826              | 1       | 0.001**             |
| No                      | 39                                     | 173                    | 04.020              | '       | 0.001               |
| Listening music         | 39                                     | 12                     |                     |         |                     |
| Yes                     | 52                                     | 150                    | 0.036               | 1       | 0.849 <sup>NS</sup> |
| No                      | 13                                     | 35                     | 0.030               | '       | 0.049               |
| Watching movie          | 13                                     | 33                     |                     |         |                     |
| Yes                     | 39                                     | 172                    | 39.719              | 1       | 0.001**             |
| No                      | 26                                     | 13                     | 33.713              | '       | 0.001               |
| Online shopping         | 20                                     | 15                     |                     |         |                     |
| Yes                     | 26                                     | 95                     | 2.482               | 1       | 0.115 <sup>NS</sup> |
| No                      | 39                                     | 90                     | 2.102               |         | 0.115               |
| Online banking          | 37                                     | 30                     |                     |         |                     |
| Yes                     | 26                                     | 129                    | 18.045              | 1       | 0.001**             |
| No                      | 39                                     | 56                     | 10.015              | •       | 0.001               |
| Reading news            | 3,                                     | 30                     |                     |         |                     |
| Yes                     | 13                                     | 58                     | 3.048               | 1       | 0.081 <sup>NS</sup> |
| No                      | 52                                     | 127                    | 5.0.0               | ·       | 0.00                |
| Duration of usage       |  |                        |                     |         |                     |
| per day                 |  |                        |                     |         |                     |
| <30 min                 | 0                                      | 68                     | 74.168 <sup>F</sup> | 3       | 0.001**             |
| 1–2 h                   | 39                                     | 71                     | , 1.100             | J       | 3.001               |
| 3–4 h                   | 13                                     | 46                     |                     |         |                     |
| >4 h                    | 13                                     | 0                      |                     |         |                     |
| - r m                   |  | <u> </u>               |                     |         |                     |

 $\chi^2$  = Chi square, df = degree of freedom, F= Fisher's exact Test, NS= Non-significant, \*\*= Significant at 1%, \*=Significant at 5%

adults. The result is shown that the mean age of the respondents was  $21.23 \pm 9.44$  years. They found majority of male i.e. (82.91%).

Our finding suggests that the majority of 42.4% did not use a phone at college. According to social sites, the majority of just over half 52.4% of students used Facebook. In terms of mobile internet use, most of 82.0% of the students used social networking. A majority of 79.6% played mobile games. Most of 80.8% of the students listened to mobile music. Just over half, 51.6% of users did not shop through the mobile app while 48.4% did buying online. The majority 62% of students was using the online banking app. Based on the duration of use each day; the majority of 44% of students spend 1–2 h. Supported study by Ndubuaku *et al.*<sup>[6]</sup> has shown that 52.2% represent males and 47.5% females. 310 (77.5%) of the respondents confirm using social media for academic purposes of research and downloading of academic materials. Facebook (27.3%), WhatsApp (26.3%), Twitter (20.6%), Instagram (12.3%), and Telegram (8.3%) were the most popular platforms.

Our finding showed that majority of 74% students had good impact on study habit while 26% had bad impact. The average impact on study habit was  $47.80 \pm 13.316$ . Winskel *et al.*<sup>[7]</sup> stated that there were no significant correlations between specific smart phone applications used while studying and GPA. Ezemenaka  $(2013)^{[8]}$  indicated that telephone use by the internet does not impact the academic student performance.

The present study finding shows the association of impact of study habits and selected variables of pattern of smart phone use among students. As result showed that use of mobile phone at college ( $\chi^2 = 24.363$ , P = 0.001), use of social site ( $\chi^2 = 19.356$ , P = 0.001), use of mobile phone for video call ( $\chi^2 = 18.651$ , P = 0.001), most common purpose of using internet by mobile (fisher's exact value = 19.281, P = 0.001), playing games ( $\chi^2 = 84.826$ , P = 0.001), watching movie ( $\chi^2 = 39.719$ , P = 0.001), online banking ( $\chi^2 = 18.045$ , P = 0.001), duration of usage per day (Fisher's exact value = 74.168, P = 0.001), and found significant at 1%. Hence, the null hypothesis is rejected. It is concluded that pattern of smart phone use among students had significant association on study habits.

#### Conclusion

The study concluded that pattern of smart phone use had significant impact on study habits. Nurses role are very important to understand, management and prevention of these of these problems among students.

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