# A Study to Assess the Level of Addiction and Attitude to Mobile Phone Use among Students of a Selected College – Chennai.

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***Abstract:*** *The study was conducted to assess the level of addiction and attitude towards mobile phone use among students of a selected college – Chennai. The overall aim of the study is to find out the various aspects of mobile phone addiction, and the level of mobile phone addiction and attitude towards mobile phone use among the students in a selected college. The objectives of the study were to assess the level of mobile phone addiction among college students, to assess the attitude of college students towards mobile phones, to assess the correlation between the level of addiction and attitude towards mobile phone use among the college students, to associate the level of addiction of college students to mobile phone use with the demographic variables and to associate the attitude of college students towards mobile phone use with demographic variables. The conceptual framework was developed based on NOLA J PENDER'S HPM (1982). CV for the tool has been obtained from experts. The reliability of the tool is 0.89 for addiction and 0.96 for attitude. After the pilot study the data collection procedure proceeded. The study was conducted in Loyola College of arts and science, Chennai. The data collected from the subjects were analyzed using descriptive (Frequency, percentage, mean and standard deviation), 't' test and inferential (chi square) statistical methods. The study showed that 73(52.1%) of them had moderate addiction, 57(40.7%) of them had mild addiction and 10(7.1%) of them had severe addiction. showed that 107 (76.4%) of sample had moderately favourable attitude, 30 (21.4%) of sample had favourable attitude and 3 (2.1%) had unfavourable attitude towards mobile phone use. The 'r' value 0.02 shows there is weak positive correlation between the level of addiction and attitude and the 'p' value of 0.86 shows there is no significant correlation between mobile phone addiction and attitude. There is significant association between the demographic variables such as year of study, type of mobile phone currently using, hours of usage of mobile phones per day, number of mobile phones currently using, number of sim cards currently using and the level of addiction to mobile phone. It indicates that mobile phone addiction among college students is influenced by the type of mobile phone, the hours of usage per day, number of mobile phones and number of sim cards used. The study concluded that more than half of the college students had moderate level of mobile phone addiction and two third of students had moderately favourable attitude towards mobile phone use. Keywords: HPM-Health Promotion Model, CV-Content Validity*

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## I. Introduction

A mobile phone (also called mobile, cellular phone, cell phone or hand phone is an electronic device used for full duplex two-way radio telecommunications over a cellular network of base stations known as cell sites. Mobile phones differ from cordless telephones, which only offer telephone service within limited range through a single base station attached to a fixed land line, for example within a home or an office. In addition to being a telephone, modern mobile phones also support many additional services, and accessories, such as SMS (or text) messages, email, Internet access, games, Bluetooth, infrared, camera, MMS messaging, MP3 player, radio and GPS. Cell phone users have fallen victim to addiction, based on the current development and continuous improvement, users are always left wondering what's next as they wait for the next big feature. Another area of cell phone use that has been studied deals with children and the use of cell phones. The number of children who have cell phones is amazing. In the United States, about two-thirds of all children have cell phones. In Japan, 80% of high schools students and 25% of junior high school kids are carrying these devices. Great Britain and Scandinavia also have high percentages of children with cell phones. According to a study conducted by Douglas Stewart (2008), 37% of Japanese teenage males and 30% of Japanese teenage female have used their cell phones to access dating sites, leading to some of these children having unwanted sexual relations. As well as becoming prey for sexual predators, unwanted cell phone messages from other children are also a problem. A study conducted in Britain regarding the ill effects of mobile phone usage concluded that 16% of young cell phone users have received threatening text messages from their peers, while another 7% have

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admitted to being harassed in chat rooms. 4% of these youngsters have been "bullied" via their cell phone. All these studies point to the problems that can arise from children having cell phones. In Japan, children who had cell phones did not make friends with peers who did not have them. In Hungary, three quarters of all children have these devices. Adolescents in Italy have multiple cell phones while in Great Britain 36% of all college students admitted that they could not live without these devices. 7% of the British students also stated that they had lost jobs or relationships due to their cell phone use. A survey by the Korean Association for Information Society in 2001 showed 74.9 percent of young people felt nervous without their cell phones. Besides this, many people are running after the latest mobile phones. New models of mobile phones are released almost every day. As stated by the WHO definition of health as 'health is a complete state of physical, mental and social wellbeing and not merely an absence of disease or infirmity' ,the health of the individual is being spoiled day by day physically, mentally and socially with the usage of mobile phones. The investigator had the personal experience of watching students talking on mobile phone till late night, without sleep and waking late in the morning, not attending the class and having poor academic performance. It has also been observed that many accidents happen because of people using mobile phone while driving. According to the investigator's observation people are not aware of physical and psychological hazards of mobile phone use and the student's life is being spoiled by excessive use of mobile phone. This instigated the investigator to identify the level of mobile phone addiction and its level of attitude among college students and educate them about the ill effects of mobile phones to prevent the hospital admission of mobile phones addictions as like alcohol and other addictions in the forth coming years.

**Objectives:**
- To assess the level of mobile phone addiction among college students.
- To assess the attitude of college students towards mobile phones.
- To assess the correlation between the level of addiction and attitude towards mobile phones use among the college students.
- To associate the level of addiction of college students to mobile phone use with the demographic variables
- To associate the attitude of college students towards mobile phone use with demographic variables

## II. Methods

This Descriptive study was conducted at Loyola College Chennai which was founded in 1925 by a French Jesuit, Rev. Fr. Francis Bertram. There are approximately 5000 students studying in the college.
Study Design: The study is based on data collected from college students through a structured questionnaire to find out and describe the level of mobile phone addiction and attitude towards mobile phone use. So a descriptive design was chosen for the study
Sample: In this study the sample size were 140 students in sociology department doing under graduate course
Sampling Technique: A convenience sampling technique was adopted for the study
Inclusive Criteria:
Students who are willing to participate in this study.
Students aged between 17-24 years
Students who belong to sociology department
Exclusive Criteria:
Students who are doing Post graduate course
Students who belong to other department

**The Tool**
The instrument used was a questionnaire, which consists of three parts.
Section–A: It consisted of demographic details of college students. It includes age, religion, year of study, family income per month, type of mobile phone using, hours of usage of mobile phone per day, number of mobile phones currently using, number of sim cards currently using, amount of pocket money per day, place of residence and maximum time of usage of mobile phone
Section-B: The standardized tool "mobile phone addiction index (MPAI) scale" was used to assess the level of mobile phone addiction. It consists of the structured questionnaire to assess the level of mobile phone addiction under four aspects such as inability to control craving, feeling anxious and lost, withdrawal/escape, and productivity loss. In inability to control craving it has 7 items, in feeling anxious and lost there are 4 items, in withdrawal/escape there are 3 items and 3 items in productivity loss It was structured to indicate the responses on a 5 point likert scale with responses of not at all, rarely, occasionally, often and always.

Section- C: The investigator prepared the "attitude related to mobile phone use" to assess the attitude of college students towards mobile phone use. It consists of 24 items that reflects the advantages and disadvantages of mobile phones. It was structured to indicate the responses on a 4 point scale with responses of strongly agree, agree, disagree and strongly disagree.

Score Interpretation.
For the assessment of the level of mobile phone addiction, the responses of the subjects were assessed as:
Not at all     - 1
Rarely         - 2
Occasionally - 3
Often          - 4
Always         - 5
The maximum score was 85 and the minimum score was 17.

**The total score was categorized as follows:**

| Score | percentage | level of addiction |
|-------|-----------|--------------------|
| 17-40 | 20-47% | mild |
| 41-68 | 48-80% | moderate |
| 69-85 | 81-100% | severe |

For the assessment of the level of attitude towards mobile phone use the response of the subjects were assessed with the score of 1-4. The higher the score the attitude is favourable. The maximum score was 96 and the minimum score was 24

The total score was categorized as follows:

| Score | percentage | level of addiction |
|-------|-----------|--------------------|
| 17-40 | 20-47% | mild |
| 41-68 | 48-80% | moderate |
| 69-85 | 81-100% | severe |

**Validity of the Tool**

The content validity of the instrument was obtained from medical experts, clinical psychologist and sociologist. The medical experts were civil surgeon, IMH and senior resident, NIMHANS. The nursing experts were the principal Vel.R.S College of nursing, Avadi, nursing tutor from NIMHANS Bangalore, Reader in Sharmila College of nursing, Chennai social welfare officer, IMH and from the assistant professor in psychology, IMH

**Reliability of the Tool**

The reliability of the tool was assessed by split half method and the formulas used were Karl Pearson correlation coefficient and spearman-brown prophecy formula. The value for addiction was (r=0.89) and it showed positive significance. The value for attitude was (r=0.96) and it showed positive significance

**Data Collection Procedure**

A formal written permission for collecting data was obtained from the Vice Principal of Loyola College, Chennai. 140 samples from the department of sociology were selected by convenient sampling technique. The investigator introduced self and verbal consent was obtained. Samples were given opportunity to decline from participation in the study. All ethical principles were followed. The data was collected on 24-02-10.

The data was collected with the help of a questionnaire. The investigator clearly explained about the questionnaire and after clarifying their doubts the questionnaire was given to the samples. The time taken by the sample to fill the questionnaire was 30-45 minutes. The samples cooperated well. After the data collection, slide regarding cell phone addiction syndrome was shown and the pamphlets on ill effects of mobile phone use was distributed to them. Clarification regarding the addiction syndrome and ill effects of mobile phone use were made clear to them. Students also expressed their view regarding the mobile phone use.

**Plan for Data Analysis**
The data collected was analyzed using descriptive and inferential statistics.
1.  Descriptive statistics – frequency, percentage, mean and standard deviation.

2. Inferential statistics – Karl Pearson's correlation coefficient was used to find out correlation between mobile phone addiction and attitude. Chi-square test was used for association of demographic variables with the level of mobile phone addiction and for association of demographic variables with the level of attitude towards mobile phone use.

### III. Results and Findings
    In this chapter the data are coded, analyzed and interpreted. Descriptive statistics (frequency, percentage mean and standard deviation) used for the demographic variables, level of addiction and attitude. The data are collected from a sample of 140 students to find out their attitude and level of addiction to mobile phones.

The distribution of samples according to the demographic variables

Age: More than half of sample 74 (52.9%) were in the age group of 20-22 years, 56 (40%) of the sample were in the age group of 17-19 years, and only 10 (7.1%) of sample were in the age group of above 22 years.

Religion: Majority of the sample 95(67.9%) were Hindus, 42 (30%) were Christians and only 3 (2.1%) of sample belong to other category.

**Year of study:** Among 140 sample, 55 (39.3%) were studying in I year, 50 (35.7%) were studying in II year and 35 (25%) were in III year.

**Family income per month:** Among the sample 46 (32.9%) were having family income of below Rs5,000 per month, 44 (31.4%) were having family income between Rs5,000-10,000, 28 (20%) were having family income between Rs 10,000-20,000 and 22 (15.7%) are having family income above 20,000 per month.

**Type of mobile phone using:** Out of 140 sample, 51 (36.4%) were using mobile phone of basic features with radio, 45 (32.1%) were using mobile phone with basic features, 23 (16.4%) were using mobile phone of basic features with multimedia and 21(15%) were using mobile phone of basic features with camera.

**Hours of usage of mobile phone per day:** Among the sample, 44 (31.4%) were using mobile phone for 1-2 hours per day, 43 (30.7%) were using mobile phone below 1 hour per day, 33 (23.6%) were using mobile phone above 4 hours per day and 20 (14.3%) were using mobile phone for 2-4 hours per day.

**Number of mobile phones currently using:** Majority of the sample 114 (81.4%) were using only one mobile phone currently, 23 (16.4%) were using 2 mobile phones currently and 3 (2.1%) were using more than 3 mobile phones.

**Number of sim cards currently using:** Most of the sample 85 (60.7%) were using only one sim card currently, 38 (27.1%) were using 2 sim cards currently, 13 (9.3%) were using 3 sim cards currently and only 4 (2.9%) were using more than 4 sim cards.

**Amount of pocket money per month:** Among the sample, 108 (77.1%) were getting pocket money below Rs 1000/month, 18 (12.9%) were getting pocket money of Rs 1000-2000/month, 7 (5%) were getting pocket money of Rs 2000-3000/month and 7 (5%) were getting pocket money above Rs 3000/month.
Place of residence: Most of the sample 104 (74.3%) were from urban areas and 36 (25.7%) were from rural areas.

**Time of maximum usage:** Nearly half of the sample, 63 (45%) were using mobile phone at night time maximum, 49 (35%) were using in evening time maximum, 18 (12.9%) were using in morning and only 10 (7.1%) were using in noon time.

    Table 1 shows distribution of sample on level of addiction among college students N=140

Table 1

| S.No | Level of Addiction | Frequency (n) | Percentage % |
|---|---|---|---|
| 1 | Mild Addiction(17-40) | 57 | 40.7 |
| 2 | Moderate Addiction (41-68) | 73 | 52.1 |
| 3 | Severe Addiction(69-85) | 10 | 7.1 |

Figure.1
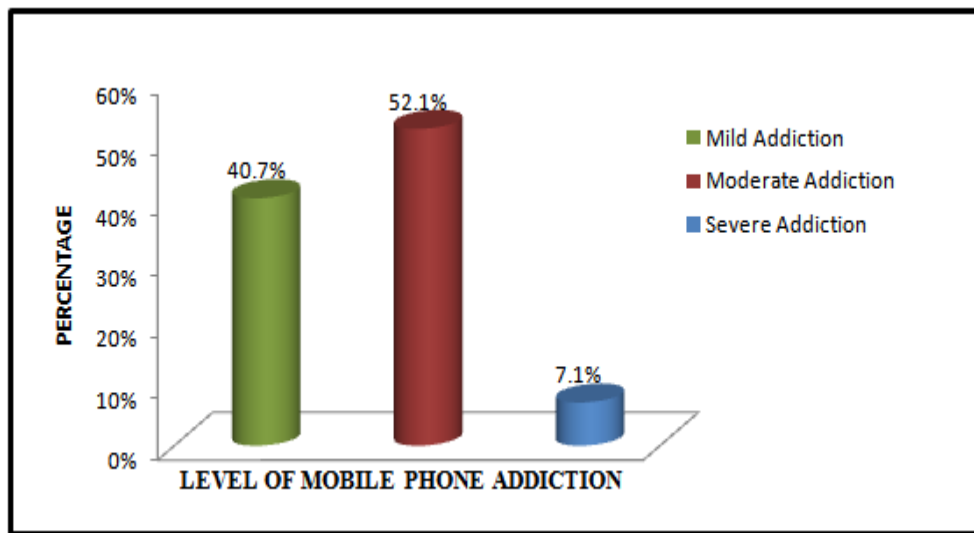


It reveals that 73(52.1%) of them had moderate addiction, 57(40.7%) of them had mild addiction and 10(7.1%) of them had severe addiction. It concluded that more than half of the samples had moderate level of mobile phone addiction.

Table – 2 shows distribution of sample on level of attitude among college students N=140

Table :2

| S.No | Level of Attitude | Frequency (n) | Percentage % |
|------|-------------------|---------------|--------------|
| 1. | Favourable(24-48) | 30 | 21.4 |
| 2. | Moderately Favourable(49-72) | 107 | 76.4 |
| 3. | Unfavourable(73-96) | 3 | 2.1 |

Figure.2
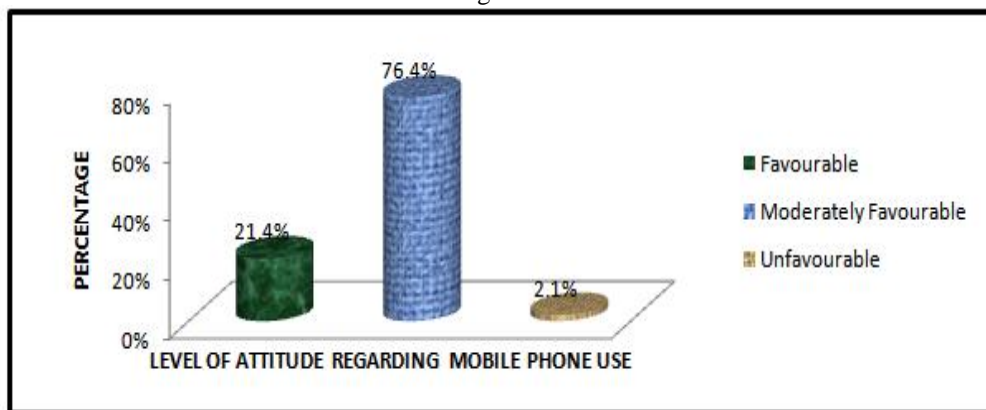


On the basis of scoring, the attitude of college students was analysed with favourable, moderately favourable and unfavourable attitude. 107 (76.4%) of sample had moderately favourable attitude, 30 (21.4%) of sample had favourable attitude and 3 (2.1%) had unfavourable attitude towards mobile phone use.This concludes that two third of samples had moderately favourable attitude towards mobile phone use.
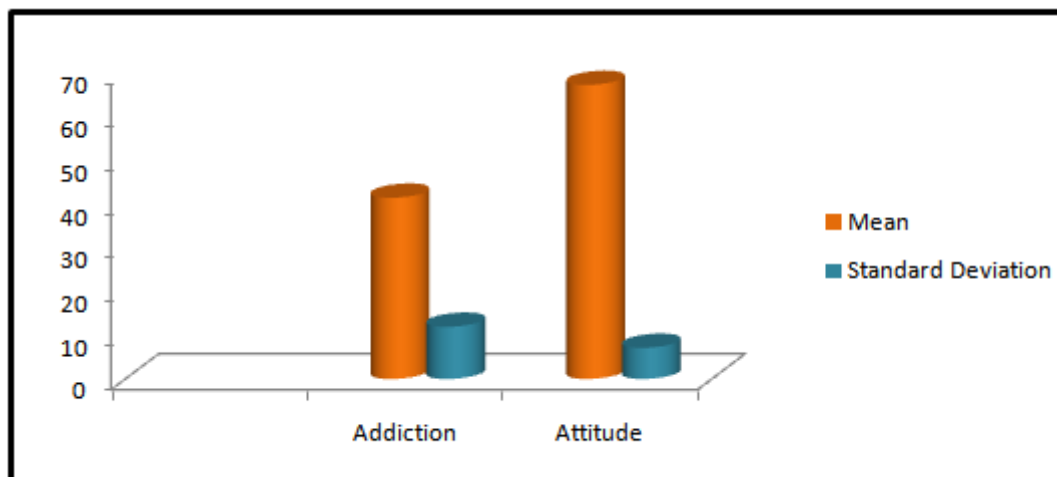
Table – 3: mean, standard deviation and correlation of addiction and attitude of students towards mobile phones
N=140

Table-3

| S.No | Levels | Mean | Standard Deviation | |r| value | 'p' value |
|------|--------|------|--------------------|----------|-----------|
| 1. | Addiction | 41.56 | 11.97 | 0.02 | 0.86 (NS) |
| 2. | Attitude | 67.44 | 7.14 | | |

NS- non significant

Figure-3



It shows the mean and standard deviation of overall addiction and attitude of college students towards mobile phones. Mean score of addiction is 41.56 with a standard deviation of 11.97; Mean score of attitude is 67.44 with a standard deviation of 7.14 the correlation between addiction and attitude was analyzed by using Karl Pearson's method. The 'r' value 0.02 shows there is weak positive correlation between the level of addiction and attitude and the 'p' value of 0.86 shows there is no significant correlation between mobile phone addiction and attitude. Hence hypothesis Ho is accepted. This concludes that even though the sample knows the advantages and disadvantages of mobile phone use, they are more prone for addiction to mobile phones.

Table – 4 Shows the Association of Demographic Variables with the Level of Addiction to Mobile Phones N=140

| S.No | Demographic variable | Level of Addiction | | | | | | χ2' value | 'p' Value |
|------|----------------------|-----|-----|-----|-----|-----|-----|-----------|-----------|
| | | Mild | | Moderate | | Severe | | | |
| | | n | % | n | % | n | % | | |
| 1. | Age | | | | | | | | |
| | 17-19 | 21 | 37.5 | 33 | 58.9 | 2 | 3.6 | | |
| | 20-22 | 32 | 43.2 | 35 | 47.3 | 7 | 9.5 | 2.76 | .60 |
| | Above 22 | 4 | 40 | 5 | 50 | 1 | 10 | | (NS) |
| 2. | Religion | | | | | | | | |
| | Hindu | 31 | 32.6 | 55 | 57.9 | 9 | 9.5 | | |
| | Christian | 24 | 57.1 | 17 | 40.5 | 1 | 2.4 | 8.97 | .062 |
| | Others | 2 | 66.7 | 1 | 3.3 | - | - | | (NS) |
| 3. | Year of study | | | | | | | | |
| | I year | 12 | 21.8 | 38 | 69.1 | 5 | 9.1 | | |
| | II year | 26 | 52.0 | 22 | 44.0 | 2 | 4 | 14.23 | .007 |
| | III year | 19 | 54.3 | 13 | 37.1 | 3 | 8.6 | | (S)* |
| 4. | Family income per month: | | | | | | | | |
| | Below Rs 5000 | 21 | 45.7 | 22 | 47.8 | 3 | 6.5 | | |
| | Rs 5000-10,000 | 18 | 40.9 | 22 | 50.0 | 4 | 9.1 | 2.83 | .91 |
| | Rs 10,000-20,000 | 12 | 42.9 | 15 | 53.6 | 1 | 3.6 | | (NS) |
| | Above 20,000 | 6 | 27.3 | 14 | 63.6 | 2 | 9.1 | | |
| 5. | Type of mobile phone using: | | | | | | | | |
| | Basic features | 18 | 40.0 | 26 | 57.8 | 1 | 2.2 | | |
| | Basic features with radio | 26 | 51.0 | 24 | 47.1 | 1 | 2.0 | 15.59 | .016 |

| S.No | Demographic variable | n | % | n | % | n | % | χ² | p |
|---|---|---|---|---|---|---|---|---|---|
| | Basic features with camera | 8 | 38.1 | 9 | 42.9 | 4 | 19.0 | | (S)* |
| | Basic features with multi media | 5 | 21.7 | 14 | 60.9 | 4 | 17.4 | | |
| 6. | Hours of usage of mobile phone per day: | | | | | | | | |
| | Below 1 hour | 27 | 62.8 | 15 | 34.9 | 1 | 2.3 | | |
| | 1-2 hours | 16 | 36.4 | 27 | 61.4 | 1 | 2.3 | 23.02 | .001 |
| | 2-4 hour | 3 | 15.0 | 15 | 75.0 | 2 | 10.0 | | (S)* |
| 7. | Above 4 hours | 11 | 33.3 | 16 | 48.5 | 6 | 18.2 | | |
| | Number of mobile phones currently using, | | | | | | | | |
| | 1 | 50 | 43.9 | 59 | 51.8 | 5 | 4.4 | | |
| | 2 | 5 | 21.7 | 13 | 56.5 | 5 | 21.7 | 11.38 | .023 |
| 8. | Above 3 | 2 | 66.7 | 1 | 33.3 | - | - | | (S)* |
| | Number of sim cards currently using, | | | | | | | | |
| | 1 | 47 | 55.3 | 37 | 43.5 | 1 | 1.2 | | |
| | 2 | 7 | 18.4 | 26 | 68.4 | 5 | 13.2 | 33.29 | .000 |
| | 3 | 3 | 23.1 | 6 | 42.2 | 4 | 30.8 | | (S)* |
| 9. | 4+ | - | - | 4 | 100 | - | - | | |
| | Amount of pocket money per month: | | | | | | | | |
| | Below Rs 1000 | 49 | 45.4 | 53 | 49.1 | 6 | 5.6 | | |
| | Rs 1000-2000 | 3 | 16.7 | 13 | 72.2 | 2 | 11.1 | 6.90 | .330 |
| | Rs 2000-3000 | 2 | 28.6 | 4 | 57.1 | 1 | 14.3 | | (NS) |
| 10. | Above Rs 3000 | 3 | 42.9 | 3 | 42.9 | 1 | 14.3 | | |
| | Place of residence: | | | | | | | | |
| | Rural | 12 | 33.3 | 22 | 61.1 | 2 | 5.6 | 1.56 | 45 |
| 11. | Urban | 45 | 43.3 | 51 | 49.0 | 8 | 7.7 | | (NS) |
| | Maximum time of usage | | | | | | | | |
| | Morning | 8 | 44.4 | 9 | 50.0 | 1 | 5.6 | | |
| | Noon | 4 | 40.0 | 6 | 60.0 | - | - | 2.16 | .90 |
| | Evening | 22 | 44.9 | 24 | 49.0 | 3 | 61.0 | | (NS) |
| | Night | 23 | 36.5 | 34 | 54.0 | 6 | 9.5 | | |

Statistically the results shows that there is significant association between the demographic variables such as year of study, type of mobile phone currently using, hours of usage of mobile phones per day, number of mobile phones currently using, number of sim cards currently using and the level of addiction to mobile phone. It concludes that since they are young, the college students are more interested to possess and use 2 to 4 mobile phones as well as sim cards and they spend more time in using the mobile phones.

**Table-5 shows the association of demographic variables with the level of attitude to mobile phones**
**N=140**

| S.No | Demographic variable | Level of Attitude favourable | | Moderately favourable | | unfavourable | | χ²' value | 'p' Value |
|---|---|---|---|---|---|---|---|---|---|
| | | n | % | n | % | n | % | | |
| 1. | Age | | | | | | | | |
| | a) 17-19 | 9 | 16.1 | 46 | 82.1 | 1 | 1.8 | | |
| | b) 20-22 | 16 | 21.6 | 56 | 75.7 | 2 | 2.7 | 6.07 | 0.19 |
| | c) Above 22 | 5 | 50.0 | 5 | 50.0 | 0 | 0 | | NS |
| 2. | Religion | | | | | | | | |
| | a) Hindu | 20 | 21.1 | 74 | 77.9 | 1 | 1.1 | | |
| | b) Christian | 9 | 21.4 | 31 | 73.8 | 2 | 4.8 | 2.24 | 0.69 |
| | c) Others | 1 | 33.3 | 2 | 66.7 | 0 | 0 | | NS |
| 3. | Year of study | | | | | | | | |
| | a) I year | 7 | 12.7 | 47 | 85.5 | 1 | 1.8 | | |
| | b) II year | 16 | 32.0 | 32 | 64.0 | 2 | 4.0 | 7.82 | 0.099 |
| | c) III year | 7 | 20.0 | 28 | 80.0 | 0 | 0 | | NS |
| 4. | Family income per month: | | | | | | | | |
| | a) Below Rs 5000 | 9 | 19.6 | 36 | 78.3 | 1 | 2.2 | | |
| | b) Rs 5000-10,000 | 11 | 25.0 | 33 | 75.0 | 0 | 0 | 5.24 | 0.51 |
| | c) Rs 10,000-20,000 | 5 | 17.9 | 21 | 75 | 2 | 7.1 | | NS |
| | d) Above 20,000 | 5 | 22.7 | 17 | 77.3 | 0 | 0 | | |
| 5. | Type of mobile phone using: | | | | | | | | |
| | a) Basic features | 8 | 17.8 | 35 | 77.8 | 2 | 4.4 | | |
| | b) Basic features with radio | 12 | 23.5 | 38 | 74.5 | 1 | 2.0 | 2.84 | 0.82 |
| | c) Basic features with camera | 4 | 19.0 | 17 | 81.0 | 0 | 0 | | NS |
| 6. | d) Basic features with multi media | 6 | 26.1 | 17 | 73.9 | 0 | 0 | | |
| | Hours of usage of mobile phone | 11 | 25.6 | 29 | 67.4 | 3 | .71 | | |

| No. | Variable | | | | | | | χ² | p-value |
|---|---|---|---|---|---|---|---|---|---|
| | per day: | 9 | 20.5 | 35 | 79.5 | 0 | 0 | 9.46 | 0.15 |
| | a) Below 1 hour | 2 | 10.0 | 18 | 90.0 | 0 | 0 | | NS |
| | b) 1-2 hours | 8 | 24.2 | 25 | 75.8 | 0 | 0 | | |
| 7. | c) 2-4 hour | | | | | | | | |
| | d) Above 4 hours | | | | | | | | |
| | Number of mobile phones currently using, | 27 | 23.7 | 85 | 74.6 | 2 | 1.8 | | |
| | | 2 | 8.7 | 20 | 87.9 | 1 | 4.3 | 3.29 | 0.50 |
| | a) 1 | 1 | 33.3 | 2 | 66.7 | 0 | 0 | | NS |
| 8. | b) 2 | | | | | | | | |
| | c) Above 3 | 19 | 22.4 | 63 | 74.1 | 3 | 3.5 | | |
| | Number of sim cards currently using, | 8 | 21.1 | 30 | 78.9 | 0 | 0 | 5.53 | 0.48 |
| | | 1 | 7.7 | 12 | 92.3 | 0 | 0 | | NS |
| | a) 1 | 2 | 50.0 | 2 | 50.0 | 0 | 0 | | |
| 9. | b) 2 | | | | | | | | |
| | c) 3 | 24 | 22.2 | 81 | 75.0 | 3 | 2.8 | | |
| | d) 4+ | 3 | 16.7 | 15 | 83.3 | 0 | 0 | 1.68 | 0.95 |
| | Amount of pocket money per month: | 2 | 28.6 | 5 | 71.4 | 0 | 0 | | NS |
| 10. | a) Below Rs 1000 | 1 | 14.3 | 6 | 85.7 | 0 | 0 | | |
| | b) Rs 1000-2000 | 4 | 11.1 | 31 | 86.1 | 1 | 2.8 | 3.10 | 0.21 |
| | c) Rs 2000-3000 | 26 | 25.0 | 76 | 73.1 | 2 | 1.9 | | NS |
| 11. | d) Above Rs 3000 | | | | | | | | |
| | Place of residence: | 5 | 27.8 | 11 | 61.1 | 2 | 11.1 | 13.82 | 0.032 |
| | a) Rural | 4 | 40.0 | 6 | 60.0 | 0 | 0 | | (S) |
| | b) Urban | 6 | 12.2 | 42 | 85.7 | 1 | 2.0 | | |
| | Maximum time of usage | 15 | 23.8 | 48 | 76.2 | 0 | 0 | | |
| | a) Morning | | | | | | | | |
| | b) Noon | | | | | | | | |
| | c) Evening | | | | | | | | |
| | d) Night | | | | | | | | |

It shows the association between the demographic variables and level of attitude towards mobile phones. Statistically the results shows that there is no significant association between the demographic variable such as age, religion, year of study, family income per month, type of mobile phone using, hours of usage of mobile phone per day, number of mobile phones currently using, number of sim cards currently using, amount of pocket money per month and place of residence except maximum time of usage and level of attitude towards mobile phone use. It concludes that most of the students use mobile phones during the evening and night time.

## IV. Conclusion

The study concluded that more than half of the college students had moderate level of mobile phone addiction and two third of students had moderately favourable attitude towards mobile phone use. The findings indicate that mobile phone addiction among college students is influenced by the type of mobile phone, the hours of usage per day, number of mobile phones and number of sim cards used. Although mobile phone communications have benefited the contemporary societies, but the negative aspects of this technology cannot be ignored. Students mostly indulge themselves intentionally or unintentionally in the inappropriate use of mobile phone. Similarly since mobile phone use is increasing among college students, but no efforts are made to protect the vulnerable high users from the negative consequences, inappropriate and excessive use of mobile phone technology by any modes. Thus there is a great need to educate the college students about appropriate and inappropriate mobile phone use in relation to the time, place and purpose of communication By this study the investigator concluded that the college students may go for mobile phone addiction if there is no proper awareness about the ill effects of mobile phones. Therefore prevention and management programs for mobile phone addiction among college students should be developed. There could be different ways to educate college students like a campaign in educational institutions or deliver messages through mass media, providing pamphlets and leaflets to users at the time of selling mobile phone sim cards and top up cards and completely banning the use of mobile phone inside the college campus. The investigator also distributed pamphlets regarding the ill effects of mobile phone use. All these will help the students to know the appropriate and inappropriate use of mobile phones and to live their life with minimal and safe usage of mobile phones.

**Nursing Implication**

The present studyaddressed the problems of mobile phone use and to take measures such as using it only for communication, not used while driving, keeping the mobile phone calls short and not carry the mobile phone close to the body when it's switched on etc. The findings will also throw light on students to identify the factors that influence the individual to become addicted to mobile phone. The findings of the study have implication to nursing service, administration, education and research

## Implications for nursing service

The psychiatric nurse being aware of mobile phone addiction needs to adopt a preventive measure to know about the ill effects of mobile phones. By educating about promotion of physical and mental health, conduct awareness Programme on ill effects of mobile phone use.

## Implication for nursing education

It has been noted that mobile phone addiction is set to become one of the biggest non drug addiction by 21st century. So it is necessary that basic psychiatric nursing curriculum should include a topic on mobile phone addiction. This will aid in enhancing the students to reduce mobile phone use in future and also with that knowledge they can educate the community.

## Implication for nursing administration

In this growing modernization not only the college students, many are becoming addicted to mobile phone without knowing the ill effects of its use. It becomes mandatory for the health personnel to involve themselves actively inorder to create awareness regarding the ill effects among the people in the community and this will help them to use the mobile phone with caution.

## Recommendation for nursing research

- A comparative study can be done between the male and female users of mobile phones
- The study can be done among the teenagers.
- This study can be replicated in various setting with large sample to facilitate generalization of results

## Acknowledgement

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