

An Explorative Study to Assess the Usage of Smart Phone and its Impact on the Health among Adolescents Attending Selected Colleges of Gurugram, Haryana

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Abstract: A cell is a device that can make & receive telephone calls over a radio link whilst moving a wide geographic area. As every innovation and technology has pros and cons, mobile use has advantages and disadvantages. At present, India has 791 million cell phone users. BY the end of 2017, this figure is estimated to rise 700 million. There are many other evil connected with use of mobile phones users especially among teenagers. Objective was to assess the patter of usage of smart phone among adolescents attending selected colleges & to determine the impact of usage of smart phone on health among adolescents attending selected college of Gurugarm. An explorative study was conducted by using pen & paper method & the data was analyzed by using descriptive statistic method. Finding reveals that the impacts of using smart phone among adolescents were moderate according to the scoring criteria given by the experts. The prevalence of mobile phone usage was moderate. There was significance association between selected health problems & mobile phone usage.

Keywords: Assess, Usage of smart phone, impact on health, adolescents and health

1. Introduction

A cell is a device that can make receive telephone calls over a radio link whilst moving a wide geographic area. It does so by connecting to a cellular network provided by a mobile phone operator allowing access to the public telephone network with cell phones for safety reasons. Cellular phones have impacted society. The mobile phone addiction means that, usage of mobile in a compulsive repeated manner which the person cannot resist. It is one of the biggest non drug addictions in the world. They have left an ever lasting impression on our culture. (Laporta, L.D. 2006). Cell phones had started out as gadget for adults, but they have now become necessary item for the entire family. The number of smart phone users in the United States is estimated to reach 224.3 million, with the number of smart phone users worldwide forecast to exceed 2 billion users by that time.

To understand the role that cell phones play in teens' lives, the Pew Research Center's Internet & American Life Project and Michigan's Department of Communication Studies conducted a survey and focus groups in the latter part of 2009. The phone survey was conducted on landline and cell phones and included 800 youth ages 12-17 and one of their parents. It was administered from June 26-September 24, 2009. The overall survey has a margin of error of 4 percentage points; the portion dealing with teen cell owners involved 625 teens in the sample and has a margin of error of 4 percentage points; the portion dealing with teen texters involved 552 teens in the sample and has a margin of error of 5 percentage points. (Goggin, G. 2006).

Cell phones have grown at an unprecedented rate in the Indian subcontinent in the past few years. The Telecom and Regulatory Authority of India (TRAI, 2008-09) reported that over the last year, cell phone subscriptions have grown almost 50 % from 261 million to 506 million.

A study was conducted to examine use of mobile phones, social networks and academic performance among high school students in the U.S.A .Heavy mobile phone users reported that they had a better relationship with their friends and parents. Additionally, frequent mobile users also reported that highly consistent use of their mobile phones affected their academic performance and learning. As every innovation and technology has pros and cons, mobile use also has advantages and disadvantages. Ignorance of the disadvantage among children has led to a long way health hazards. Hence the investigator feels that there is a need to assess the mobile usage among children and to educate these future young populations to minimize or prevent the impact on one's health.

1.1 Objectives of the study

- 1) To assess the pattern of usage of smart phone among adolescents attending selected colleges at Gurugram
- 2) To determine the impact of usage of smart phone on health among adolescent attending selected college at Gurugram.

2. Research Methodology

2.1 Research Design

In this study non-experimental exploratory study has been approached for our research study purpose.

2.2 Subjects and setting

The sample for the present study consists of 140 adolescents of selected colleges of Gurugram, Haryana.

2.3 Sampling Technique

The sample was selected by non-probability purposive sampling technique.

2.4 Variables under study

The variables under the study were usage of smart phone, impact on health, adolescents and college.

2.5 Description of Tool

The tools used in the study are:

Section-I: Socio-demographic variables. It includes 12 categories, gender, age, religion, educational status, area of living, most common place of using mobile phone, monthly income in the family, reported mobile recharge per month, mobile use per day in hour, purpose of mobile use and how many calls are made per day.

Section II: Self-administered questionnaire on the Usage of smart phone. It includes 20 questions regarding the usage of smart phone. 20 different questions are explained in the annexure briefly. Scoring criteria has been given according to response, agree (A), disagree (DA) and neither disagree nor agree (NA).

Section III: Self-administered questionnaire on the Health impacts among adolescents by using smart phone. It includes 15 questions regarding the impacts of using smart phone on the health among adolescents. Scoring has been given to the response by specifying strongly agree (A), Neutral (N) and disagree (DA). Scoring criteria was given for agree it was 3, for neutral it was given 2 and for disagree it was given 1 to each individual adolescents. Scoring criteria given on the basis of level of impacts, that is for mild it was 15-25, for moderate it was given 26-35 and for severe it was given 36-45.

2.6 Validity and reliability

The prepared tool along with a request letter, validation certificate, statement of problem, objectives, criteria checklist was submitted to 6 experts in the field of psychiatry nursing, psychiatry and psychology. They were requested to give their opinion on the appropriateness and relevance of the items in the tool. Tool was prepared in English. All tools were returned by the experts, out of which 60% suggested no changes. Rest 40% gave minor changes on socio-demographic variables. The suggestions given by

experts was discussed with the guide and incorporated and final questionnaire was prepared.

2.7 Data Analysis

Explorative informational statistics was planned for analysis. Frequency and percentage was computed to describe the demographic variables.

3. Results and Analysis

3.1 Sample Characteristics

Highest percentage 67.9% of adolescents were females Majority of adolescents 81.5% were in the age group of 18-19 years of age. Highest percentage of adolescents was Hindu 90%. Majority of the adolescents 82.2% were from urban area. Monthly family income of 32.1% adolescents was above 60k; 34.2% had 41k-59k and 33.7% had 16k-40k. 42.8% of adolescents had mobile recharge of >300, 44.2% had recharge of 150-300. Highest percentage 41.4% of adolescents mostly use their mobile phone at home, 34.2% of adolescents mostly use their mobile phone at college. Majority of the adolescents 60.7% use their mobile phone for 3-6 hours, 38.6% adolescents use their mobile phone for >6 hours & 70.2% adolescents used their mobile phone for all the above reasons combined. Majority of the adolescents 51.4% owned the mobile phone for 1-3 years. 36.4% adolescents makes 6-10 calls per day, 32.1% adolescents makes >5 calls per day.

3.2 Self-administered questionnaire on the usage of smart phone

Table 1: Frequency and percentage distribution of usage of smartphone, N=140

Statement	Agree %	Disagree %	NA/ND %
My use of smart phone is more than expectations	66%	27%	7%
I use smart phone while walking	36%	54%	10%
Use of smart phone while eating meal	38%	58%	4%
Use of smart phone while traveling	18%	74%	7%
It is hard for me not to use my smartphone when I feel like it	59%	29%	12%
I get bored with same smartphone within the use of six months	31%	60%	9%
I watch movies and videos in my smart phone	75%	16%	9%
I use my smart phone for downloading games & videos	57%	36%	7%
I use my phone for videos calling	45%	47%	8%
I use my smart phone to use PAY Tm and other apps for money transferring	63%	25%	12%
Use of smart phone helps me a lot in my studies to access internet anytime in my college hour	80%	12%	8%
It is helping to connect with the whole world	78%	18%	4%
I use smart phone for whatSapp messages and video calling	61%	32%	7%
I use smart phone to take selfie's	47%	49%	4%
I use smart phone to keep myself updated with new technology and news	45%	46%	9%

I use smart phone accessibly	54%	39%	7%
I use smart phone to watch TV serials and reality shows	63%	26%	11%
I use smart phone because it is a good time pass	51%	26%	5%
I get to learn new things by using smart phone	48%	46%	6%

The above table depicts that the majority of users agreed that the use of smart phone is more than expectations. Majority of users disagreed that they do not use phone while walking. Maximum no of users disagreed of using mobile phone while eating meal. Majority of users disagreed about the use of smart phone while traveling. Majority of them agreed that it is hard for them to not to use their smartphone when they feel like. Maximum users disagreed with the statement of getting bored with the same phone after using it for 6 months. Majority of them agreed about watching movies & videos downloading games on their phone. Maximum of them disagreed of using their smart phone for video calling. Majority of them agreed of using their phone for using paytm & other mobile apps for money transferring. Maximum of them agreed on the statement about the use of smart phone helps them a lot in their studies to access internet anytime in their college hour. Majority of them agreed about the use of smart phone connecting them with the whole world. Maximum of users agreed about the use smart phone for whatSapp messages and video calling. Majority of them disagreed of using their smart phone to take selfie. Maximum of them disagreed of the statement about these smart phone to keep them updated with new technology and news. Maximum of them agreed that they use their smartphone accessibly. Most of them agreed on using smart phone to watch TV serials and reality shows. Maximum of them agreed about these smart phone because it is a good time pass. Majority of them agreed on the statement about they get to learn new things by using smart phone.

3.3 Self-administered questionnaire on the health impacts among adolescents by using smart phone

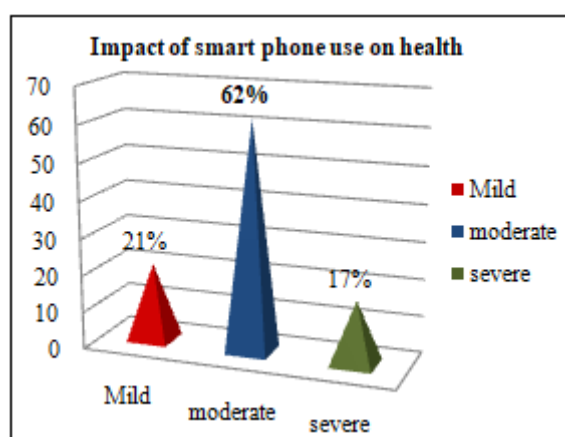


Figure 1: Frequency and percentage distribution of impact of smart phone on health

The above figure shows that the majority (62%) had moderate level of impact of using smart phone on health, 21% had mild level of impact on health whereas only 17% had severe level of impact on health.

4. Discussion

Usage of smart phone among adolescents

The present study shows that most of the mobile phone user's were using the mobile phone for various purpose and had moderate and mild level of health problems due to the usage of mobile phone. The findings of the study were similar to study conducted by P. Stalin, Sherin Billy Abraham, K. KaniMozhy in 2016 at villipuram South India among community people. The findings of study reveal that the prevalence of mobile phone usage was 70%. Calling facility (94.2%) was used more than the SMS (67.6%). Health problems like headache, earache, tinnitus, painful fingers and restlessness etc., were found to be positively associated with mobile phone usage.

Impact of smart phone on health among adolescents

In our study, we found that mobile phone usage had a protective moderate effect which is similar to study conducted by P. Stalin, Sherin Billy Abraham, K. KaniMozhy in 2016 at villipuram South India among community people. The present study revealed that the majority (62%) had moderate level of impact of using smart phone on health, 21% had mild level of impact on health whereas only 17% had severe level of impact on health.

5. Limitations

- The sample of the study were taken form one selected University of Gurugram only.
- The study was confined to only 140 adolescents which limit the generalization of the study.

6. Conclusion

The present study attempted to find out the patterns of using smart phone and to determine the health impacts of using smart phone among adolescents attending selected colleges of Gurugram, Haryana.

The sample consisted of 140 adolescents from four different colleges of Amity University, Haryana. Self-administered structured questionnaire were used to assess the patters of using smart phone among them. Tool was divided in 3 various section including demographic variables, self-structured questionnaire on usage of smart phone and self-structured questionnaire on the impacts of using smart phone.

The result was analyzed in terms of the difference seen in the level of self-administrative pen and paper questionnaire method.

The present study shows that most of the mobile phone users were using the mobile phone for various purposes and had moderate and mild level of health problems due to the usage of mobile phone.

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