INVESTIGATION ON SMARTPHONE ADDICTION LEVEL AMONG STUDENT-TEACHERS

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Abstract

This study aimed to examine Smartphone addiction level, and the predictive factors of the Smartphone addiction in B.Ed. Programme student-teachers in Chennai. Survey method is used to select a sample of 300 students at the student-teachers. The research tools used are Smartphone addiction scale, developed and standardized by Dr. Vijayshri and Dr. Masaud Ansari is used for this study. This scale consists 23 items divided into six dimensions namely, Compulsion, Forgetfulness, Lack of Attention, Depression and Anxiety, Disturbed Hunger/Sleep and Social Withdrawal. The results of the statistical analyses show there is no significant difference between male and female student-teachers in the level of Smartphone addiction. There is significant difference between the student-teachers based on their educational level and internet access in Smartphone addiction. This study suggests that the student-teachers should reduce the intense use of Smartphone for smoothly doing their daily-life activities.

Keywords: Smartphone Addiction, Gender, Education, Internet Access

1. Title

The title of the study is **"Investigation on Smartphone Addiction Level among Student-Teachers."**

2. Introduction

The Internet is very useful for a variety of purposes, such as convenient electronic commerce, rapid sharing of information, contact with other cultures, emotional support, and entertainment (Kraut et al., 1998; Morahan-Martin, 1999; Scherer, 1997)**.** A Smartphone combines the services of the Internet and a mobile phone. Smartphones offer qualitatively different services in addition to the benefits that the Internet offers. Young people watch videos, express themselves, communicate with friends, and search for information using smartphones, while older people use their smartphone for having video calls with their children living in faraway places and for playing games. The portability and accessibility of a smartphone make it possible to use it anywhere, for any duration.

Smartphone addiction could be described as smartphone over-dependence or smartphone overuse. It is a form of addiction that has become one of the most prevalent non-drug addictions today. Smartphone use was nevertheless shown to imply various types of dysfunctional behaviors and adverse consequences such as (1) dangerous use, defined as the tendency to use the smartphone while driving; (2) prohibited use, defined as the tendency to use the smartphone in banned places; (3) dependence symptoms, based on features of addictive behaviors (for example, loss of control, occurrence of negative effect in situations or contexts in which the use of the smartphone is not possible or allowed); and (4) financial problems, which reflect the extent to which smartphone use resulted in tangible financial problems (Rutland, Sheets and Young, (2007). Gordon (2019) noted that in many ways, social media has enriched our lives by connecting and inspiring people. But there is a dark side as well. Aside from all the negative posts on social media, the cyberbullying, and the FOMO (fear of missing out) that exists, recent studies indicate that excessive social media use not only leads to poor decision-making, but people who use social media incessantly often have attitudes, thoughts, and behaviors that mimic those of a drug addict. Researchers at Michigan State University have found that people who report using social media a lot tend to struggle with decision-making.

3. Identification and Formulation of a Research Problem

It has been established that there is a negative correlation between addiction to smartphone and academic success and also a positive correlation between addiction to smartphone and the level of depression. Sheopuri and Sheopuri (2014) observed that extent of

addictive behavior towards the usage of smartphones and the relation between the users of the smartphones and the psychological behavior among adolescents in Bhopal, India. They showed that smartphone usage is so strongly integrated in to young people's behavior that symptoms of behavioral addiction, such as smartphone usage interrupting their day-to-day activities.

Hence in this pandemic situation, the investigator felt the dire need of studying the smartphone addiction level among student teachers.

4. **Review of Related Literature**

Hurley (2019) stated that as it turns out, parents have reason to worry. Results of a 2016 Common Sense Media Report found that 50 percent of teens "feel addicted" to mobile devices, while 59 percent of parents surveyed believe that kids are addicted to their smartphones. This survey also showed that 72 percent of teens and 48 percent of parents feel the need to immediately respond to texts, social-networking messages, and other notifications; 69 percent of parents and 78 percent of teens check their devices at least hourly. A 2018 Pew Research Report showed that 45 percent of teens said they use the Internet "almost constantly," and another 44 percent said they go online several times a day. According to this report, 50 percent of teenage girls are "near-constant" online users, compared to 39 percent of teenage boys. 95 percent of teens have access to a smartphone

Smartphone addiction is considered as the inability to control the smartphone use despite negative effects on users. The use of a smartphone not only produces pleasure and reduces feelings of pain and stress but also leads to failure to control the extent of use despite significant harmful consequences in financial, physical, psychological, and social aspects of life (Shaffer, 1996; Van Deursen et al., 2015; Young, 1999). Addiction to media has been characterized as excessive or poorly controlled preoccupations, and compulsive needs or behaviors that lead to impairment (Demirci et al., 2014; Shaw and Black, 2008). A study reported that media addicts could not manage real-life activities (Greenfield, 1999; Young, 2007). The people using the Internet longer had poor social support and higher levels of loneliness (Nie and Erbring, 2000). Children using the cell phone displayed more behavioral problems such as nervousness, temperament, mental distraction, and indolence, and these problems worsened if the children began using a cell phone at an early age (Divan et al., 2012).

5. Scope of the study

This study will help the student teachers to know how the smartphone is useful for online classes and it has many advantages and disadvantages. Parents give their smartphone to their children even from the young age which can cause health hazards and they get addicted to games. Recent news has revealed that addiction towards smartphone has been increased among children and this has to be taken care off for their better future. There is a lot of scope to know how the smartphone can be used for good purposes.

6. Operational Definition of the Variables

Smartphone: A cell phone that has functions like that of a computer**.**

Addiction: An addiction is an urge to do something that is hard to control or stop.

Student-Teachers: A student who is studying to be a teacher and whom, as part of the training, observes classroom instruction or does closely supervised teaching in a school.

7. Theoretical Background of the Study

Modern era is not only limited to the addiction of drugs and alcohol but also to the technology like smartphone. Smartphone is a cellular mobile device which is designed to provide more comfort to human being with modern technology like touch screen, internet access, operating systems, web browsing, clicking photos and downloading apps etc. it is like a pocket computer which is easily accessible and can be carried out everywhere that results in more and more usages of smartphone.

Smartphone addiction is also known as mobile phone dependency, problematic use of mobile phone and mobile phone overuse. It is a physical and psychological state of mind where the person has strong and uncontrolled desire to use his phone, neglecting its harmful effects and daily activities. According to WHO expert committee (1964), addiction is considered as dependence, as the continuous use of something for the sake of relief, comfort or stimulation, which often causes craving when it is absent. "Substance addiction" involving drug or alcohol addiction and "behavioral addiction" like mobile phone are the two major categories of addiction (Kim, 2013).

In a survey study done by Comscore (2018), it was found that Indians spent 89% of their time on mobile phones. The research done by Aligarh Muslim University highlights that 14 percent of the surveyed people used Smartphones for less than three hours in a day, 63

percent use Smartphone for 4 and 7 hours whereas 23 percent use Smartphones for more than 8 hours daily.

The person with Smartphone addiction spends much of his time on social media, texting, browsing or playing games using his Smartphone. Overuse of Smartphone can lead to other problematic behaviors and psychological problems like lack of concentration, increased stress, depression, anxiety, social withdrawal, feeling of isolation and disturbed daily routine. Particularly, it can be a risk factor for depression, loneliness, anxiety and sleep disturbances (Gao et. Al., 2016).

Thus, it is necessary to investigate on academic consequences of smartphone addiction among the young generation, especially student teachers who are responsible for shaping the future citizens.

8. Objectives of the study

1. To investigate if there is any difference between male and female student teachers in the addiction level of smartphones.
2. To investigate if there is any difference between the student teachers in the addiction level of smartphones based on their level of education.
3. To investigate if there is any difference between student teachers in the addiction level of smartphones based on their internet access.

9. Hypotheses of the Study

The following hypotheses were formulated to guide this study.

1. There is no significant difference between male and female student-teachers in addiction level of smartphones.
2. There is no significant difference between student-teachers in addiction level of smartphones based on their level of education.
3. There is no significant difference between student teachers in addiction level of smartphones based on their internet access.

10. Research Design

This is an empirical study for the identification of the level of Smartphone addiction of student teachers in Chennai. A standardized tool has been used to find the smartphone addiction level of student teachers. The academic performance of student teachers has been taken from the mark register. After data collection, statistical analyses have been performed

and interpreted. Based on the findings of the study, conclusions have been arrived. The sample design is given as follows.

11. Selection of Sample

The sample for this study comprised of 300 student-teachers studying in five Teacher Education Institutions of Chennai. Sample was raised by employing simple random technique.

12. Method of Investigation

Descriptive survey method was used in this investigation to study the level of smartphone addiction among student-teachers in Chennai.

13. Selection of Tools for Data Collection

The **Smartphone Addiction Scale** developed and standardized by **Dr. Vijayshri and Dr. Masaud Ansari** is used for this study**.** This scale consists 23 items divided into six dimensions namely

1. **Compulsion:** It is an uncontrolled and irresistible urge to perform certain behaviors. These behaviors are persistent and repetitive which may or may not lead to pleasure. It may be an option to go away the obsessions or reoccurring thoughts.

1. **Forgetfulness:** It is a state of mind where the person in unable to store/recall the information or he faces difficulty to input new information. Distraction plays an important role in forgetfulness.

2. **Lack of Attention:** It is the state where a person is unable to concentrate, fail to be attentive and feels hard to listen to others and conversation. Due to attention distraction, he is unable to complete the task.

3. **Depression and Anxiety:** Depression is lowering the mood for a longer period of time, lacking interest in daily activities, numbness towards emotions, disturbed routine and pessimistic attitude towards self and society. Anxiety is the persistent fear and worry towards any situation or behavior. Increased heart rate, rapid breath, restlessness and tiredness are the common symptoms of anxiety.

4. **Disturbed Hunger/Sleep:** When regular pattern of hunger and sleep is disturbed; the person feels no hunger, forgets to take meal on time or don't have an urge for food is the disturbed pattern of hunger. Similarly, irregularity in sleep pattern, unable to sleep, waking up again and again at night or feels no need to sleep is called disturbed sleep

5. **Social Withdrawal:** Any person who avoids social gatherings; don't want to communicates with family members, friends and relatives; who wants to be alone is facing social withdrawal. It is a stage of total or partially lack of contact with any individual or society.

14. Statistical Analysis

The collected data was analyzed using SPSS. For comparison to two groups, 't' test and the Pearson product moment correlation test has been used for analyzing the data and interpreted to arrive at a conclusion.

15. Analyses of Data

The result of the analyses of data collected are compiled and presented in tables below:

Statistical analyses will be based on the hypotheses formulated for the present study.

Hypothesis 1: There is no significant difference between male and female student-teachers in addiction level of smartphones.

Table-1

Mean difference of male and female student teachers in smartphone addiction level

Variable	Groups	N	Mean	SD	SEM	SED	CR	Level of Significance
Smartphone Addiction	Male	150	44.26	14.773	1.206	1.738	.840	NS
	Female	150	42.80	15.327	1.251	1.738		

From the values presented in the above table, it is inferred that there is no significant difference between male and female student-teachers in the level of smartphone addiction. It is observed that both male and female student-teachers are similar in the level of addiction towards smartphone.

Hence, the formulated hypothesis is accepted.

Hypothesis 2: There is no significant difference between student-teachers in addiction level of smartphones based on their level of education.

Table-2

Mean difference between student teachers in addiction level of smartphones based on their education

Variable	Groups	N	Mean	SD	SEM	SED	CR	Level of Significance
Smartphone	UG	122	48.17	12.06	1.092	1.712	7.82**	

Addiction							0.001
	PG	178	40.35	16.06	1.204	1.625	

**Significant at 0.01 level

From the values presented in the above table, it is inferred that there is significant difference between the student-teachers based on their educational level in smartphone addiction and is significant at 0.01 level. It is observed from the mean scores that student-teachers who are having UG degree are more addicted towards smartphones when compared to PG qualified student teachers.

Hence, the formulated hypothesis is rejected.

Hypothesis 3: There is no significant difference between student-teachers in addiction level of smartphones based on their internet access.

Table-3

Mean difference between student teachers in addiction level of smartphones based on their Internet Access

Variable	Groups	N	Mean	SD	SEM	SED	CR	Level of Significance
Smartphone Addiction	High	122	42.15	14.99	0.95	2.24	2.11**	0.001
	Low	178	49.98	13.68	1.88	2.11		

**Significant at 0.01 level

From the values presented in the above table, it is inferred that there is significant difference between the student-teachers in Smartphone addiction based on their internet access and is significant at 0.01 level. It is observed from the mean scores that student-teachers who have low internet access are more addicted towards Smartphone than the student-teachers who have high internet access.

Therefore, the formulated hypothesis is rejected.

16. Major Findings

From the analysis of Smart Phone Addiction of students studying in different categories of colleges namely the government and government-aided, colleges, the following observation have been made:

- On comparing the male and female student-teachers in smartphone addiction level, it is observed that there is no significant difference in the level of smartphone addiction based on gender.

- On comparing the student-teachers based on level of education, it is observed that the student-teachers who are having UG have more addicted towards smartphones than the student-teachers having PG qualification.

- On comparing the student-teachers based on internet access, it is observed that the student-teachers who are using less internet have more addicted towards smartphone than the student-teachers who are using high internet access.

17. Conclusion

This study would be useful for finding the level of addiction of smartphones among the student-teachers. As the destiny of the Nation is being shaped in the classrooms, it is the teachers who are responsible for moulding the future citizens. This study may be useful for the student-teachers to suggest ways and techniques to use technology in a productive way rather than destructive way so that the same may be imparted to the students who are going to shoulder the responsibility of our Nation.

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