

## EFFECT OF USE OF MOBILE PHONE ON MENTAL HEALTH OF HIGHER SECONDARY SCHOOL STUDENTS

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### ABSTRACT

The world of today is shrinking due to globalization as many scientific and technological development has stepped in all fields. Nowadays, mobile phone is widely used as a means of communication. Mobile phones are a fully- portable medium of electronic communication which enables the transmission of information in the form of sound, text or data interactively between users via a cellular network of relay stations. But it is a sad point to say that most of the students are addicted to the mobile phone. The main aim of the study is that, the students are not aware about their mental health by the use of mobile phones. To know about the effect of use of mobile phone on the mental health of the students, this study is essential. The tool used for the present study is 'Likert Attitude Scale' on mental health of students. 'Normative Survey method' is also used in this study. The result indicates the mental health of higher secondary students as they are affected by the use of mobile phones.

Keywords: Mobile Phone, Mental Health, Higher Secondary.

### INTRODUCTION

In the primitive ages, people have used smoke signals, jungle drums, carrier pigeons and semaphores to get a message from one point to another. Today, communication is very important for transmitting messages from one person to another. Great Scientist Alexander Graham Bell realized the importance of communication and invented the telephone in 1876. This is the only means of communication which has revolutionized the daily lives of ordinary people. Telephone comes from the Greek word "Tele" meaning from 'afar', and 'phone' meaning 'voice or voiced' sound. Telephone transmits sound mechanically and not electrically.

The third generation (3G) mobile phones provide an even greater variety of communication options, including mobile internet, mobile e- mail, world radio and television. New developments in mobile phone technology bring with them both new advantages and challenges to the class room teacher with respect to students' education. SMS allows a short item of text to be transmitted at very low cost compared to a mobile phone call. This new form of

written communication has implications on the teaching of literate practice in schools.

### Mental Health

According to Hadfield "mental health is the full and harmonious functioning of the whole personality". A mentally healthy person can live a fuller, happier, harmonious and effective life. It describes either a level of cognitive (or) emotional well-being or an absence of a mental disorder. From perspectives of the discipline of positive psychology or holism, mental health may include an individual's ability to enjoy life and procure a balance between life activities and efforts to achieve psychological resilience. Mental health is an expression of our emotions and signifies a successful adaptation to a range of demands.

### Impact of Mobile Phones on Students

Cell phone texting is the most favourite channel of basic communication among school students. They are gradually detaching themselves from family by losing emotional closeness & warmth. (Maier M. 2000). This leads to frequent conflict and disagreements between parents and adolescents. Mobile phone technology may have

an impact on student lives at a variety of levels. (Takao, et al., 2009). From the study, an use of mobile phones by school students, it is found that, mobile phone usage is increased progressively within the 10-15 age groups. (Coggon, D. 2005). It is also found that, there was widespread use of SMS text messages, especially children are using mobile to communicate with friends. (Bianchi, et.al., 2005).

Among all school students, text messaging has become a predominant form of interaction with their friends. They generally send 100 messages per day or 3000 SMS per month. Daily text messaging has increased rapidly since early 2008. Nearly, 87% of students use text messaging occasionally. Students typically make or receive five calls a day and 150 calls per month.

Parents encourage and support the use of cell phone by teenager due to its mixed blessings like accessibility and monitor the condition of the offspring. It makes them comfortable, easier to control, safer and convenient. (Martha, C. & Griffet, J. 2007). It helps to be connected continuously with their child. For students, it gives space and freedom to them. Students feel that, they can reach their parents through cell phone no matter where they are. Students do not understand the side effects of the radiation which is emitted from the mobile. (Hermann, D.A. & Hussmann, K.A. 2003).

At first, it was just a non coloured screen which developed into cellular phones with built-in cameras, music player, internet, games, television, GPS etc. Now we have tremendously increasing features like touch screen etc. It is useful but, it has also brought disadvantages among children and adolescence.

### Mobile Phone and Mental Health of Students

Students using mobile phones were seem to have different types of discomfort (Hutter, et al., 2006). Some of them are discussed below such as, sleep, depression, addiction, stress, fear of missing out, incivility and isolation, which are explained as follows, .

- Sleep: Using a laptop, cell phone, or iPad at late night can seriously mess with your sleep patterns and habits, potentially leaving you with a sleep disorder.

Late night use is also associated with stress and depressive symptoms.

- Depression: A Swedish study found that, participants who felt the need to have their cell phones constantly accessible were more likely to report depressive mental health symptoms. (Barany, et al., 2009)
- Addiction: Several studies have actually suggested that the brains of technology abusers develop a certain pattern of change over time. Studies also suggest that, the amounts of times technology abusers check their gadgets are just enough to trigger the addiction-oriented parts of our brains
- Stress: When people come home from school or work and immediately hop on the Internet or turn on the iPad, our brains don't get the chance to de-stress and unwind from the day's activities, so our brains get stuck in stress mode.
- FOMO aka (Fear of Missing Out): It's a real thing now. The popularity of social media and sharing everything has led to this new sensation where everyone feel the pressure to attend every event and share every experience.
- Isolation: Related to FOMO, excessive technology use can lead to feelings of isolation or the eventual isolation of a person due to so much time spent with technology as opposed to making real connections with human friends.
- Incivility: Research has shown that with the ascent of Internet and technology use, rudeness and incivility on social media sites has also increased. This is bad, as being rude to someone is wrong on its own, but it can also lead to Internet bullying
- Insecurity: Such things like FOMO, social media, and constant access to it through our phones, tablets and laptops mean, that people are constantly plugged into insecure things.
- Anxiety: Social media on our gadgets can give us anxiety about everything from FOMO to fear which shows that human life is not "interesting" enough.

## Objectives of the Study

The following are the objectives of the present study to find out the effect of use of mobile phones on mental health of higher secondary students.

- To find out the effect of use of mobile phone on mental health of higher secondary school students.
- To find out the mental health of higher secondary school students by the use of mobile phones with respect to gender, locality, type of school and group taken.

## Hypotheses

- The mental health of higher secondary students are affected by the use of mobile phones.
- There is no significant difference between the mental health of higher secondary male and female students with respect to the use of mobile phones.
- There is no significant difference in the mental health of rural and urban higher secondary by the use of mobile phones.
- There is no significant difference in the mental health of government and self-financing higher secondary school students by the use of mobile phones.
- There is no significant difference between the mental health of Arts and Science higher secondary students by the use of mobile phones.

## Methodology

'Normative Survey Method' is used in this study. The Survey method is used for gathering data from a relatively large number of cases at a particular time. Data were tabulated and conclusions are derived on the basis of calculations and analysis.

## Selection of Sample

240 higher secondary school students belonging to Villupuram Taluk of Tamilnadu State are taken as the sample for the study.

## Tool Used in the Study

In this present study, the investigator has used the 'Attitude Scale', prepared and standardized by the researcher herself. It is similar to 'LIKERT scale'.

## Analysis of Data

### Hypothesis-1

The mental health of higher secondary students are affected by the use of mobile phones.

From Table 1, it is found that, the mean value of Higher Secondary students is 68.88 and the standard deviation is 10.605. It is observed that, the higher secondary students have average level of mental health. Hence the hypothesis is accepted, and the mental health of higher secondary students are affected by the use of mobile phones.

### Hypothesis-2

There is no significant difference between the mental health of higher secondary male and female students with respect to the use of mobile phones.

From Table 2, it is observed that, the 't' value (2.739) is greater than the table value (1.96) at 0.05 level. It is also inferred that, the null hypothesis is rejected. There is significant difference between the mental health of higher secondary male and female students with respect to the use of mobile phones. Male Higher secondary students are affected more by the use of mobile phone than the female higher secondary students.

Group	N	Mean	Median	Standard Deviation
Higher Secondary Students	240	68.88	70.00	10.605

Table 1. Showing the mean score and standard deviation of higher secondary students in the mental health.

Group	N	Mean	Standard Deviation	't' Ratio	Level of Significance	Significant/ Not Significant
Male	120	70.73	9.993	2.739	0.05	S
Female	120	67.03	10.914			

Table 2. Showing the Mean, Standard Deviation, 't' Ratio, Level of Significance of Male and female students in mental health.

Group	N	Mean	Standard Deviation	't' ratio	Level of Significance	Significant/ Not Significant
Rural	31	69.29	11.634	0.229	0.05	NS
Urban	209	68.82	10.473			

Table 3. Showing the mean, Standard Deviation, 't' Ratio, Level of Significance of Rural and Urban students in the mental health.

### Hypothesis-3

There is no significant difference in the mental health of rural and urban higher secondary by the use of mobile phones.

From Table 3, it is observed that, the 't' value (0.229) is lesser than table value (1.96) at 0.05 level. It is inferred that, the null hypothesis is accepted. There is no significant difference between the mental health of higher secondary rural and urban areas by the use of mobile phones. The Locality of the sample does not have an impact over their mental health with respect to the usage of mobile phone.

### Hypothesis-4

There is no significant difference in the mental health of government and self-financing higher secondary school students by the use of mobile phones.

From Table 4, it is observed that, the 't' value(0.170) is lesser than the table value (1.96) at 0.05 level. It is inferred that, the null hypothesis is accepted. There is no significant difference between the mental health of government and self-financing school students by the use of mobile phones. The type of school does not have an impact over their mental health with respect to the usage of mobile phone.

### Hypothesis-5

There is no significant difference between the mental health of Arts and Science higher secondary students by

Group	N	Mean	Standard Deviation	't' Ratio	Level of Significance	Significant/Not Significant
Government	120	69.00	10.617	0.170	0.05	NS
Self-financing	120	68.77	10.637			

Table 4. Showing the Mean, Standard Deviation, 't' Ratio, Level of Significance of Government and Self- Financing students in the mental health

Group	N	Mean	Standard Deviation	't' Ratio	Level of Significance	Significant/Not Significant
Arts	120	71.38	8.806	3.750	0.05	S
Science	120	66.38	11.651			

Table 5. Showing the mean, Standard Deviation, 't' Ratio, Level of Significance of Arts and Science students in the mental health

the use of mobile phones.

From Table 5, it is observed that, the 't' value(3.750) is greater than the table value (1.96) at 0.05 level. It is inferred that the null hypothesis is rejected. There is significant difference between the mental health of Arts and science students by the use of mobile phones. The mental health of Arts group higher secondary students was affected more than the science group higher secondary students by the use of mobile phones.

### Findings of the Study

- The higher secondary school student's mental health is affected by the use of mobile phones.
- Male Higher secondary students are affected more by the usage of mobile phone than the female higher secondary students.
- The locality of higher secondary students does not have an impact over their mental health with respect to the usage of mobile phone.
- The type of school does not have an impact over their mental health with respect to the usage of mobile phone.
- The mental health of Arts group higher secondary students are affected more than the science group higher secondary students by the use of mobile phones.

### Recommendations

The present study is an attempt to know the effect of use of mobile phones on the mental health of higher secondary students. The researcher furnished some of the recommendations for further researches which are given by,

- Awareness should be created among the students about the mental health.
- The curriculum of the subject should include the merits and demerits of mobile phone usage.
- Students should be made to understand the significance of their mental health in the day-to-day life activities.
- Schools should take necessary steps regarding the ban of mobile phones within the campus of school.

- The government should take necessary steps regarding the prevention of handling of mobile phones for children of age below 18.

## Conclusion

The results and finding of the hypotheses exhibit that, the mental health of higher secondary students is affected by the use of mobile phones. The result concludes that, mental health of the male students is more affected by the use of mobile phones than the female students. The result deduces that mental health of the rural students is more affected by the use of mobile phones than the urban students. The result supposes that, mental health of Government school students are more affected than that of the self- financing school students. Hence it is in the hands of the parents and second parent of the students who are the teachers, to take necessary steps to change the attitude of the students and guide them in the right path of using the mobile phone. Thus the objectives of this study are fulfilled.

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