

Phone Addiction of Higher Secondary School Students in Relation to their Mental health

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Abstract:

The purpose of this research is to investigate phone addiction and mental health in students in higher secondary school. The focus of the present study is smartphone addiction, an issue that is becoming more and more prevalent. These days, our children's excessive smartphone use is distracting them. In order to teach pupils about the ethical use of phones, it was proposed that schools incorporate digital literacy into the curriculum. possible dangers of addiction. The study used the survey research approach. Using the Random Sampling approach, 350 people from the Puducherry region were chosen as the study's sample. The sample is composed of The Mental Health Checklist (MHC) by Pramod Kumar and the Phone Addiction Test by Subhashini .A & Dr. P. Ponraj was constructed and standardized by the investigator. The instruments utilised for the study. ANNOVA, Pearson's Product Moment Method of Correlation, and mean, SD, and ANNOVA were the statistical metrics employed for data analysis. The findings showed that there are notable differences in the degree of cell phone addiction among pupils in higher secondary schools. The degree of mental health among pupils in higher secondary school did not differ significantly. There was a strong and positive relationship between mobile phones and Mental Health.

Keywords: phone addiction, Mental health , higher secondary school students.

Introduction:

There are many facets of human behavior and psychology that have been significantly impacted by the ubiquitous nature of cell phones in today's always-on, always-connected society. Researchers, psychologists, and the general public have begun to pay more and more attention to the growing problem of smartphone addiction as one of the many negative effects. The complex interplay between smartphone addiction, mental health, and self-esteem is the subject of this dissertation. Excessive and obsessive smartphone usage that has detrimental effects in many areas of life is known as smartphone addiction, problematic smartphone use, or compulsive smartphone use. The ubiquitous nature of cell phones and the lightning-fast development of related technologies have led many people to lose

themselves in online activities, which may have negative effects on their psychological well-being and sense of self-worth.

Addiction to smartphones has a complicated and multi-dimensional impact on mental health. Anxiety, despair, and stress are just a few of the mental health disorders that have been linked to heavy smartphone usage, according to a plethora of research. Anxiety and stress levels might rise due to the constant flood of messages and the overwhelming urge to be connected and attentive at all times. There is a vicious cycle use poor mental health that may be exacerbated by the addictive nature of cell phones, which can alter sleep habits. A person's self-esteem, or their subjective assessment of their own value and worth, may also be severely affected by an addiction to smartphones. Social media's ease of comparison and the accompanying need for approval in the form of likes, comments, and follows may lead to poor self-esteem, inadequacy, and uncertainty. Also, people tend to compare their lives negatively to others' on social media, which may make them feel even worse about themselves because of the romanticized and false portrayal of reality that is typically included in these feeds. The connection between smartphone addiction, mental health, and self-esteem is complex, however, and must not be ignored. Smartphones have both positive and negative uses; on the one hand, they may be a source of connection, knowledge, and entertainment; on the other, they can improve health and promote a feeling of belonging. The effects of smartphone addiction on psychological well-being and self-esteem may be mitigated to some extent by individual variations in personality traits, coping mechanisms, and social support systems.

Review Related Literature:

Yang et al. (2022) conducted a study to explore the connection between disordered eating behaviors and body dissatisfaction, utilizing data from a sample of 5,986 individuals with an average age of 19.8 years, of which 54.1% were female. Their findings indicated that the relationship between body dissatisfaction and disordered eating is influenced by factors such as depression, smartphone addiction, and a recurring interplay of both. Nonetheless, the cross-sectional nature of the study necessitates further longitudinal research to fully clarify the causal relationships involved.

Liu et al. (2020), investigated body dissatisfaction and smartphone addiction among 1,036 Chinese adolescents, with a mean age of 12.41 years. Their results revealed that positive self-presentation on social media platforms mediates the relationship between body dissatisfaction and smartphone addiction. Furthermore, the quality of friendships was found

to moderate this relationship, significantly impacting the connection between effective self-presentation and body dissatisfaction.

OBJECTIVE OF THE STUDY:

1. To find out whether there is any significant difference between the mean scores of phone addiction of higher secondary students following sub-samples.
 - A. Male and Female
 - B. Urban and Rural
 - C. nuclear and joint family
2. To find out whether there is any significant difference between the mean scores of Mental health of higher secondary students following sub-samples.
 - D. Male and Female
 - E. Urban and Rural
 - F. nuclear and joint family
3. To find out whether there is any significant relationship between phone addiction and Mental health of the higher secondary students.

HYPOTHESES OF THE STUDY:

1. There is no significant difference between higher secondary students phone addiction with respect to their,
 - a. Gender
 - b. Locality
 - c. Type of family.
2. There is no significant difference between higher secondary students Mental health with respect to their,
 - d. Gender
 - e. Locality
 - f. Type of family
3. There is positive inter-relationship between the study on phone addiction and Mental health of the higher secondary students.

Method of study

In this research, the normative survey method is employed to collect precise data regarding the current state of various phenomena and to formulate dependable generalizations based on the observed facts. This methodological approach seeks to describe and elucidate the existing circumstances, methodologies, procedures, patterns, outcomes,

and mindsets. Essentially, it represents an endeavor to examine, assess, and replicate the prevailing conditions of a specific group or social institution. Data was collected from the sample utilizing random sampling techniques, with 350 upper secondary students from the Puducherry region selected through these random sampling methods.

The statistical Technique

The means and standard deviations for the subsamples were computed to assess phone addiction and mental health among higher secondary students. To evaluate whether there was a significant difference between the means of the pairs of subsamples concerning phone addiction and mental health among upper secondary pupils, a significance test (t-test) was utilized. Additionally, the Pearson's product moment correlation ("r") was calculated to examine the relationship between the mental health and phone addiction scores of higher secondary students.

TOOLS Used:

Phone Addiction Test by Subhashini .A & Dr. P. Ponraj was constructed and standardized by the investigator (2024) has been used in the present study. Mental Health scale has been standardized by Guide Dr.P.Ponraj & Subhasini.A.

Analysis and Interpretation Data

There is no significant difference between higher secondary students phone addiction with respect to their Gender.

In the present study the data collected from the 350 higher secondary school students were analyzed using descriptive, differential and correlation statistics. The analysis and interpretation are given the following tables.

Table – 1
Mean Difference between male and female higher secondary students phone addiction

Variable	Group	N	Mean	S. D	't' value	Level of significance
phone addiction	Male	150	185.87	23.59	1.90	Not Significant
	Female	200	190.30	19.81		

The 't' value is found to be 1.90 and it is not significant. It is concluded that there is no significant difference between male and female higher secondary students in their

level of phone addiction. Hence the null hypothesis is accepted. To find the significant difference between the phone addiction scores of the two sub-groups the 't' value has been found.

There is no significant difference between higher secondary students phone addiction with respect to their Locality.

Table – 2
Mean Difference between urban and rural college students phone addiction

Variable	Group	N	Mean	S. D	't' value	Level of significance
phone addiction	Rural	130	191.91	20.28	2.351	Significant
	Urban	220	186.33	22.12		

The 't' value is found to be 4.6 and it is significant. It is concluded that there is significant difference between urban and rural higher secondary students phone addiction. Hence the null hypothesis is rejected.

There is no significant difference between higher secondary students phone addiction with respect to their Type of Family.

Table – 3
Mean Difference between Joint and Nuclear Family phone addiction

Variable	Group	N	Mean	S. D	't' value	Level of significance
phone addiction	Joint	97	187.74	20.12	0.352	Not Significant
	Nuclear	253	188.65	22.16		

The 't' value is found to be 0.352 and it is not significant. It is concluded that there is no significant difference between joint and nuclear family students in their level of phone addiction scores. Hence the null hypothesis is accepted.

There is no significant difference between higher secondary students Mental Health with respect to their Gender.

Table – 4
Mean Difference between male and female college
Students Mental Health

Variable	Group	N	Mean	S. D	't' value	Level of significance
Mental Health	Male	150	81.77	11.55	0.41	Not Significant
	Female	200	82.27	11.136		

The 't' value is found to be .410 and it is not significant. It is concluded that there is no significant difference between male and female college students in their level of Mental Health. Hence the null hypothesis is accepted.

There is no significant difference between higher secondary students Mental Health with respect to their Locality.

Table – 5
Mean Difference between urban and rural college
Students Mental Health

Variable	Group	N	Mean	S. D	't' value	Level of significance
Mental Health	Rural	130	82.88	11.89	1.05	Not Significant
	Urban	220	81.57	10.94		

The 't' value is found to be 1.05 and it is not significant. It is concluded that there is no significant difference between Urban and Rural higher secondary students in their level of Mental Health Hence the null hypothesis is accepted.

There is no significant difference between higher secondary students Mental Health with respect to their Type of Family.

Table – 6
Mean Difference between joint and nuclear family
college students Mental Health

Variable	Group	N	Mean	S. D	't' value	Level of significance
Mental Health	Joint	97	81.59	12.49	0.47	Not Significant
	Nuclear	253	82.23	10.83		

The 't' value is found to be 0.47 and it is not significant. It is concluded that there is no significant difference between joint and nuclear family students in their level of Mental Health. Hence the null hypothesis is accepted.

There is positive inter-relationship between the study on phone addiction and Mental Health of the higher secondary students.

Table-7

		phone addiction	Mental health
phone addiction	Pearson Correlation Sig. (2-tailed) N	1 350	.019 .725 350
Mental health	Pearson Correlation Sig. (2-tailed) N	.019 .725 350	1 350

The co-efficient correlation between the phone addiction and Mental health of the higher secondary students is found to be 0.19 and it is significant.

Thus it is concluded that there is a indifferent or negligible relationship exists between the higher secondary students phone addiction and Mental health. Hence the research hypothesis is rejected.

DISCUSSION:

The results of the regression studies that looked at how smartphone usage affects middle age adults' mental health and self-esteem were interesting. As a result, both regression models were not statistically significant, with p-values much higher than the usual 0.05 level. This means that smartphone usage by itself has no significant impact on either the middle age adults' mental health or self-esteem. For mental health, the value of the coefficient of determination (R Square) proved very low, which means that smartphone usage could only explain less than 1% of the variation in mental health. In the same way, smartphone addiction didn't explain very much about self-esteem either. It only explained about 0.6% of the differences in self-esteem. These results show that even though middle age people are often addicted to their phones, this might not be the only thing that affects their mental health or self-esteem. Other things, like social support, ways of coping, and differences between people, probably also play big roles in creating these mental results. It's also possible that the tests used to measure smartphone addiction, mental health, and self-esteem don't fully catch how complicated these things are. This means that they need to be looked into more using more complete tests.

Overall, these results show that we need to look at the effects of smartphone use upon middle age mental health in a lot of different ways in order to fully understand and help them. In the future, researchers could look into how smartphone addiction is related to other factors and how it might be possible to help people whose mental well-being and self-esteem are being negatively affected by too much smartphone use.

CONCLUSION:

The lives of high school students have undergone considerable transformation due to the rapid proliferation of smartphones and the growing concerns surrounding mental health. These devices are perceived as highly beneficial by students, offering access to high-speed internet, social media platforms, gaming, and various multimedia content. The constant connectivity provided by mobile phones allows students to easily access entertainment, participate in educational activities, and maintain ongoing communication with their peers. This has led to a pattern of addictive behavior among students. A significant consequence of this compulsive usage is the increase in screen time, which adversely affects social interactions, sleep quality, and overall academic performance.

Despite the swift advancements in technology, the responsibilities of parents and educators in regulating smartphone usage remain unchanged. Often, children are given

smartphones by their parents without clear guidelines, potentially underestimating the implications of unrestricted access. The findings indicated that smartphone usage alone does not exert a statistically significant influence on the mental health of this demographic. Although smartphone addiction is a noteworthy concern, it may not be the sole factor impacting the mental health of middle-aged individuals. Other elements, such as social support, coping strategies, and individual differences, likely play a substantial role in shaping mental health.

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