

**A Study of Smartphone Addiction and Mental Health among Adolescents Preparing for
NEET at Allen Career Institute Kota Rajasthan**

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Abstract

The current research aims to study smartphone addiction and mental health among adolescents preparing for NEET at Allen Career Institute Kota Rajasthan. At present, the use of smartphone has become an essential for adolescents in their study. Adolescents are highly prone to smartphone addiction. Adolescence is a transitional and crucial period in itself. During this period everything looks good to them and becomes very hard to counsel and teach about right and wrong due to their egoistic temperament. Over the past few years, surge in use of smartphone among young generation has raised concerns about addiction and that's why, we can see the change in the mental health of Adolescents at present. In this research paper researcher tried to find the correlation between smartphone addiction and mental health of adolescents. Positive and significant correlation was found between smartphone addiction and mental health.

Keywords: smartphone addiction, mental health, adolescents.

1.Introduction

Due to current scenario, it has been compulsory to use smartphone or tablet for students in their study. Worldwide technology and its changes play a major role in study system and we can say in each student's life. Smartphone is considered as an important tool and integral part of the student's life. Number of surveys conducted on the youth worldwide have figured out that they consider cell phones an integral part of survival and some have even gone to the extent of saying that they would rather go without food for a day than without their cell phones (Vandana Goswami, Dr. Divya Rani Singh, 2016).

Mental health is a critical aspect of adolescents' well-being, impacting their academic performance, social interactions, and overall quality of life. Mental health is a state of mental well-being that enable people to cope with the stresses of life, affecting how we think, feel and act. It also helps to determine how we handle stress related situation and make healthy choices.

Adolescence as a development period is filled with many challenges which is more likely to undergo "storm and stress" (Arnett,2007). Adolescence is the transition stage between childhood and adulthood. It is the development period between the onset of puberty and the establishment of social independence (Steinberg,2014).

WHO has described, 'adolescence' as the period of enormous social and emotional changes those occur between the age of 10 to 19 years. It is not only an age of vulnerability but also a time of opportunity which mainly consists the quest for independence and identity formation (Caskey & Anfara, 2007).

Psychiatrist considered mobile phone addiction to be an obsessive-compulsive disorder (OCD). Mobile phone addiction can totally isolate its victims, ruin them economically and even turn them into criminals. A study shows that overuse of cell phones, especially smartphones, with mental health problems among adolescents. Problems revolving around attention, behaviour and self-regulation are more common among adolescents with high mobile phone usage.

2.Review of literature

S A Patel and P A Puri (2017) conducted a study of mobile phone addiction and mental health among adolescents girls. A total of 150 girls students from Aurangabad city were selected by random sampling method. Data was collected using Mobile phone addiction test by Dr. S. Velayudhan and Dr. S. Srividya and Mental health check-list (MHC) by Pramod Kumar. Mean, SD and Pearson's Product Moment Method of Correlation were employed for data analysis. They found that there was positive and significant correlation between mobile addiction and mental health which predicts that higher the level of mobile phone addiction lower will be the mental health.

Sawsan Abuhamdah and Abdallah Naser (2023) conducted a study of smart phone addiction and its mental health risks among university students in Jordan. A total of 2337 university

student's data from Jordan were collected by a cross-sectional online survey method. In this investigation, the psychological Distress scale of Kessler and the Smartphone Addiction Scale of Kwon were utilized for data collection. They found that Excessive problematic usage of smartphones and addiction to these devices have a significant negative impact on both physical and mental health.

Yang, Guo, Li, Gan and Luo (2023). Conducted a study of Mobile phone addiction and mental health: the roles of sleep quality and perceived social support. A total of 585 university student's data from two universities in Kunming, southwest China were collected by a cross-sectional survey method. Results suggested that mobile phone addiction was negatively associated with mental health, and sleep quality partially mediated the relationship between mobile phone addiction and mental health.

3. Objective of the study

- To examine the smartphone addiction and mental health of adolescents preparing for NEET examination.
- To analyse the relationship between smartphone addiction and mental health among adolescents preparing for NEET examination.

4. Hypothesis of the study

- There will be no significant difference in mental health of male and female adolescents
- There will be no significant difference in Smartphone Addiction in male and female adolescents.
- There will be no positive relationship between smartphone addiction and mental health of adolescents.

5. Methodology

Sample

The study was conducted on 42 students preparing for NEET examination at Allen Career Institute, Kota. They were selected by purposive sampling method for Pilot Study.

Measurement Tool

Mental Health Battery: The Mental Health Battery developed by Arun Kumar Singh and Alpana Sen Gupta (1983). This tool assesses various dimensions of mental health, including (1) emotional stability, (2) overall adjustment, (3) autonomy, (4) security-insecurity, (5) self-concept, and (6) intelligence.

Operational definition

Mental health: Mental health is defined as person's ability to make positive self-evaluation, to perceive the reality, to integrate the personality, autonomy group-oriented attitudes and environmental mastery.

Emotional Stability (ES): Emotional stability refers to a person's ability to remain stable and balanced.

Over-all Adjustment (OA): It refers to individual is achieving an overall harmonious balance between the demands of various aspects of environment.

Autonomy (AY): it refers to a stage of independence and self-determination in thinking.

Security-Insecurity (SI): It refers to a high (or low) sense of safety, confidence, freedom from fear, apprehension, or anxiety particularly with respect to fulfilling the person's present or future needs.

Self-Concept (SC): - It refers to the sum total of the person's attitude and knowledge towards himself and evaluation of his achievements.

Intelligence (IG): It refers to general mental ability which helps the person in thinking rationally, and in behaving purposefully in his environment

Data Analysis

Mean, SD, critical ratio (t-ratio) and Pearson's Product Moment Method of Correlation were calculated to analyse the data.

Results

	Variables	Gender	N	Mean	SD	SE _D	t-ratio	Significance
Hypothesis 1	Mental Health	Male	24	87.29*	7.67	2.83	0.59	Not Significant at 0.05 and 0.01 Level
		Female	18	85.61*	10.2			
Hypothesis 2	Smartphone Addiction	Male	24	29.64*	9.28	2.72	0.83	Not Significant at 0.05 and 0.01 Level
		Female	18	*	7.39			

Table A: Significance of Difference in Mean of Mental Health of (Male & Female) Adolescents and Smartphone Addiction.

*Average Mental Health (Score from 81 to 100 lies on Percentile Rank 'P₅₀ to P₆₉' are indicating Average Mental health)

**High Risk for Addiction (Score from 22 to 31 for Male and Score from 22 to 33 for female are indicating High Risk for Addiction)

Table A reveals that hypothesis for Mental Health, t-ratio comes out 0.59, which is less than significant value 2.02 at the 0.05 level, indicates that no significant difference in Mental Health of Male and Female adolescents. Hypothesis for Smartphone Addiction, t-ratio is 0.83, which is less than significant value 2.02 at the 0.05 level and Significant value 2.71 at 0.01 level, indicates that no significant difference in Smartphone Addiction of Male and Female adolescents.

But mean of male adolescent's mental health is 87.29, which comes between Percentile rank P₅₅ to P₆₀, indicates that Average Mental Health. (The Mental Health Battery developed by Arun Kumar Singh and Alpana Sen Gupta, 2014) and also mean of female adolescent's mental health is 85.61, which comes between Percentile rank P₅₅ to P₆₀, indicates that Average Mental Health. We can say mental health of male adolescents is little bit better than mental health of female adolescents. Mean of Smartphone addiction for Male is 29.64, which comes between 22 to 31, High Risk addiction for male and mean of smartphone addiction for female is 27.37, which comes between 22 to 33, High Risk addiction for female. (The Smartphone Addiction Scale by Kwon, 2013).

Table B: Showing relationship between Smartphone Addiction and Mental Health (Pearson 'r')

	N	Mental Health	Smartphone Addiction
Mental Health	42	0	-0.46**
Smartphone Addiction		-0.46**	0

* Significant at 0.05 Level, Significant value is 0.304 at 0.05 level

**Significant at 0.01 Level, Significant value is 0.393 at 0.01 level.

Table B shows that hypothesis for correlation between mental health and smartphone addiction, value of Pearson 'r' comes out -0.46, which indicates negative correlation between Smartphone addiction and Mental health. Value of Pearson 'r' is significant at both

levels at 0.05 and 0.01 level. Mental health will be better when level of smartphone addiction will become low.

Discussion

- There is no significant difference in mental health of male and female adolescents.
- There is no significant difference in smartphone addiction of male and female adolescents.
- There is moderate negative correlation between mental health and smartphone addiction.

Level of smartphone addiction will increase then mental health will go down. Smartphone addiction among adolescents is probably going to have both good and bad consequences on their mental health (D. Souza,2019).

Conclusion

Male adolescents of institute have good mental health than females but overall mental health of adolescents (male & female) is lies on average level and smartphone addiction for adolescents is in high risk for addiction.

References

Ali, Sara & Qasim, Aisha (2021). Effect of use of Mobile Phones on Mental Health of Secondary School Students, International Journal of Science, and Innovative Research. 2(3):4-9.

Archna (2011). A study of mental health of adolescents in relation to moral judgement, intelligence, and personality. Unpublished Ph.D. Thesis. Department of Education and Community Service Panjab University, Patiala. retrieved from <http://hdl.handle.net/10603/13>. on 17 Jan 2014.

D'Souza, L. (2019). Instagram addiction among students pursuing medical and dental courses: a comparative study. International Journal of Indian Psychology, 7(1), 443-448.

Patel S A & Puri P A (2017). A Study of Mobile Phone Addiction and Mental Health among Adolescent Girls Studying in Various Streams, International Journal of Indian Psychology, Vol. 5, (1).

Abuhamdah S & Naser A (2023). Smart phone addiction and its mental health risks among university students in Jordan: a cross-sectional study, BMC Psychiatry, 23:812.

Fatima, Nazneen & Chibb, Monika (2023), Addiction of Smartphone: Effects on Mental Health. *Journal of Emerging Technologies and innovative Research*. 10(7):768-773.

Goswami, Vandana & Singh, Dr Divya (2015), Impact of mobile addiction on adolescent's life: A literature review. *International journal of Home Science*. 2(1):69-74.

Kaplan, L. (1971). *Education and Mental Health*. New York; Harper and Row Pub.

Kwon M, Kim DJ, Cho H, Yang S (2013). The smartphone addiction scale: development and validation of a short version for adolescents. *PLoS ONE*;8(12):1-7.

Kumar VA, Chandrasekaran V, Brahadeeswari H (2019). Prevalence of smartphone addiction and its effects on sleep quality: a cross-sectional study among medical students. *Industrial Psychiatry Journal*. 28(1):82-5.

Singh, A. K. and Gupta, A. Sen., 2005, *Manual for mental health battery*, published by National Psychological Corporation, Agra.

Srivastava, A., & Tiwari, R. P. (2013). Effect of excess use of cell phone on adolescent's mental health and quality of life. *Int Multidiscip eJ*, 2(1), 1-0.

Yang L-L, Guo C, Li G-Y, Gan K-P and Luo J-H (2023). Mobile phone addiction and mental health: the roles of sleep quality and perceived social support. *Front. Psychol*. 14:1265400. doi: 10.3389/fpsyg.2023.1265400.

Seo, D. G., Park, Y., Kim, M. K., and Park, J. (2016). Mobile phone dependency and its impacts on adolescents' social and academic behaviors. *Comput. Hum. Behav*. 63, 282-292. doi: 10.1016/j.chb.2016.05.026

Mahmoodi, H., Nadrian, H., Shahaghi, A., Jafarabadi, M. A., Ahmadi, A., and Saqqezi, G. S. (2018). Factors associated with mental health among high school students in Iran: does mobile phone overuse associated with poor mental health? *J. Child Adolescent Psychiatr. Nurs*. 31, 6-13. doi: 10.1111/jcap.12202.

WHO (2001). *Strengthening mental health promotion*. World Health Organization (Fact sheet, No. 220), Geneva.

WHO (2004). *Promoting mental health: concepts, emerging evidence, practice (Summary Report)*. World Health Organization, Geneva.

World Health Organization (1994). *The health of young people: A challenge and a promise*. Geneva, WHO.