

## A Study of Smartphone Addiction among College Students

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### ABSTRACT

As portable advanced computing devices, smartphones enable Internet access, GPS capabilities, personal management tools, media playback, cameras, and a wide range of applications. In modern society, the smartphone has become an essential companion. Smartphones are widely used for their features and ability to create entertainment, which is evidenced by the prevalence of smartphone overuse problems, especially among students. Smartphones have had a huge impact on many areas of the world, including business, education, health, and social media. Smartphones change cultural norms and have positive and negative effects on human behavior. They encourage interaction with people while starting a microculture and make it easier to participate in activities previously considered risky. According to the relevant literature research, a lot of work has been done to integrate smartphones in education to improve the effectiveness and efficiency of the learning process. The purpose of this study was to find out whether there are differences in smartphone addiction among college students with respect to their area of residence. Dr. Vijayshri and Dr. Masaud Ansari's smartphone addiction scale was used. In this research paper, 200 students were randomly selected from various colleges in Panchmahal district. The result shows that there is no significant difference between gender (boys and girls) and area of residence (urban and rural areas) in relation to their smartphone addiction.

**Keywords:** *Smartphone Addiction, Addiction Effects, College students*

### SMARTPHONE ADDICTION

The 21st century is called the century of science and technology, so in the current era we see that technology is rapidly evolving into new dimensions of development, and especially the phone that was invented as a means of communication over the last two decades has now become a smartphone and has become a more influential instrument. Today, the use of smartphones is rampant in all human beings, from young to old, from youth to adults, as it is no longer confined to the means of communication but has become a means of entertainment, science, education, and the simplification of life's necessities. So, it has the most grip and influence in the market, and besides, most people nowadays consider smartphones as an instrument of fashion and hobby.

Humans have been doing research on new items to meet their needs, as today's smartphones are also a result of the conflict and the quest to satisfy human needs because of the Internet

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in various mediums, as well as social media platforms. Through WhatsApp, Facebook, Instagram, Telegram, etc., humans acquire knowledge and new information from all over the world. This is due to people choosing a normal phone rather than a smartphone, as it is to connect with the world around them, and so many people feel they do not have a smartphone; they have been robbed of their world, smartphones, the network absence, their mood change, they feel as if they have no means of entertainment, and as a result, they feel guilty, depression, and despair.

Regular mobile use has an impact on socialization and human physiology. There is disagreement among researchers over the existence of smartphone addiction; some believe the term "addiction" is not suitable for characterizing the disordered behaviors linked to excessive smartphone use. Addicts may spend many hours a week on the internet for personal use, even though the disorder is primarily defined by addictive behaviors, such as substituting social networking for friends. An insatiable craving that frequently results in a loss of control is referred to as an addiction. Therefore, people who become addicted to smartphones experience issues as a result of their compulsive use of these devices, which is linked to many illnesses such as social anxiety, sadness, and loneliness. It is true that the effects of smartphone addiction are known to include a variety of issues, including behavioral, occupational, physical, and psychological issues.

The current age of over-reliance on smartphones has led to many difficulties and problems; therefore, the purpose of this study is to examine the effects on students in college due to smartphone addiction. And to know the exact methods for examining its findings and research problem through psychological study, to equip and acquaint the academic staff working with the students of the college, and to protect and take care of the students from smartphone addiction. Thus, the aim of the current study is to examine smartphone addiction among college students.

### REVIEW OF LITERATURE

According to research by *Chaudhury P. and Tripathy Kr. H. (2018)* selected total of 222 University students. Data was analysed using machine learning techniques using classification models. The results encouraged to find the correlation between Smartphone Addiction and Academic performance. In this study, Pearson's correlation was used to establish that Smartphone usage had a negative impact on academic performance. Other attributes like internet connectivity and active involvement in outdoor sports activities were investigated. Experimental results confirmed a negative correlation of these attributes with academic performance.

According to research by *Bhandari et al.'s (2021)*, smartphone addiction and use among 16 to 19 years old teenagers. The purpose of the study was to determine how common smartphone use and addiction are among teenagers between the ages of 16 and 19. A cross-sectional research involving 496 students was carried out. The SAS and a self-administered questionnaire were utilized to get the necessary data from the subjects. The study's findings showed that smartphone use was related to parents' income, age, residential location, and level of education. It was shown that teenagers living in cities had a noticeably greater rate of smartphone addiction. The study also showed that the longer a person uses a smartphone and the more hours they use it per day, the risk of developing a smartphone addiction is higher. It has also been shown that metropolitan college students from well-educated families have a much greater prevalence of smartphone addiction.

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### *Objectives of the Study:*

The objectives decided for the present research are as follow:

1. To study of Smartphone Addiction among boys and girls students.
2. To study of Smartphone Addiction among urban and rural areas students.
3. To study of Smartphone Addiction among urban boys and rural boys students.
4. To study of Smartphone Addiction among urban girls and rural girls students.

### *Hypothesis of the Study:*

- **HO<sub>1</sub>:** There is no significant difference of Smartphone Addiction among Boys and Girls Students.
- **HO<sub>2</sub>:** There is no significant difference of Smartphone Addiction among Urban and Rural Students.
- **HO<sub>3</sub>:** There is no significant difference of Smartphone Addiction among Urban Boys and Rural Boys Students.
- **HO<sub>4</sub>:** There is no significant difference of Smartphone Addiction among Urban Girls and Rural Girls Students.

## **MATERIALS AND METHODS**

### *Sample and Data Collection*

The researcher has selected 200 students as a purposive sample from Panchmahal district of Gujarat. Out of 200 students, 100 students are selected from urban area and 100 students are selected from rural area. Out of all students, 50% are boys and 50% are girls. Students have been selected simple random sampling method for both the categories.

### *Variables of the study:*

Sr. No.	Name of Variable	Types of Variables	Levels of Variables	Level Name of Variables
1.	Gender	Independent Variable	2	Boys Girls
2.	Types of Area	Independent Variable	2	Urban Rural
3.	Smartphone Addiction	Dependent Variable	1	Scores of Various Level of Smartphone Addiction

### *Control variables:*

- The study was conducted in Panchmahal district only.
- Only College students were included in the present study.
- The study was delimited to the sample of 200 (100 boys and 100 girls) College students.
- The study was delimited to the usage of smartphone among students.

### *Instruments*

One measure was used in this study,

**Smartphone Addiction Scale:** The data collection utilized the Smartphone Addiction Scale developed by Dr. Vijayshree and Dr. Masaud Ansari in 2020. The scale consists of twenty-three questions categorized into six dimensions: I. Compulsion, II. Forgetfulness, III. Lack of Attention, IV. Depression and Anxiety, V. Disturbed Hunger/Sleep, VI. Social Withdrawal. Students between the ages of 14 and 24 were assessed in order to create the

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exam. Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree are the options on the Likert scale. Reliability was determined using Cronbach's Alpha, which came out to be 0.857 at the 0.01 significant level. The test's validity was determined using construct and content validity.

### *Procedure*

In order to uphold the ethical standards of the research, prior permission was obtained the principal from different college of Panchmahal Subsequently, an informed consent letter was created and attached to the survey. This consent letter provided a comprehensive explanation of the research objectives, the criteria for participant inclusion, the ethical guidelines that would be followed throughout the study, and the rights of the participants. Following this, students from various college students were approached and provided with hardcopies of the survey forms. They were instructed to complete the forms in accordance with their own lifestyle and ideologies. Alongside the consent form, the participants were also required to provide their demographic details, which were relevant to the study. A total of 200 participants were sampled from various colleges in Panchmahal District. The data collected during the research was then entered into data tab online analyzed accordingly.

## RESULTS

The raw scores were statistically analyzed in terms of mean, standard deviation, 't' test was used to compare Smartphone Addiction among Students in relation to their area of residence.

**HO<sub>1</sub>:** There is no significant difference of Smartphone Addiction among Boys and Girls Students.

*Table No: 1 Showing the Mean, SD and 't' value of Smartphone Addiction in relation to Gender*

Sr. No.	Gender	N	Mean	SD	't'	Table Value	Level of Signification
1	BOYS	100	62.82	10.41	1.10	1.98	N.S.
2	GIRLS	100	61.19	12.08			

*\*Significant levels 0.05*

The above result table no.1 we can see that 't' test was used to find out the smartphone addiction among boys and girls students, here the mean score of smartphone addiction scale 100 boys students is **62.82** and SD is **10.41**. Similarly, the mean score of smartphone addiction scale 100 girls students is **61.19** and SD is **12.08**. The computed 't' value is **1.10** is no significant with **0.05** level. So, the null hypothesis "There is no significant difference of Smartphone Addiction among Boys and Girls Students" is accepted. Result shows that the types of gender do not play a defining role in the smartphone addiction of boys and girls students.

**HO<sub>2</sub>:** There is no significant difference of Smartphone Addiction among Urban and Rural Students.

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**Table No: 2 Showing the Mean, SD and 't' value of Smartphone Addiction in relation to Area of Residence.**

Sr. No.	Area of Residence	N	Mean	SD	't'	Table Value	Level of Signification
1	URBAN AREA	100	62.76	10.61	1.00	1.98	N.S.
2	RURAL AREA	100	61.25	11.91			

\*Significant levels 0.05

The above result table no.2 we can see that 't' test was used to find out the smartphone addiction among urban and rural areas students, here the mean score of smartphone addiction scale 100 urban area students is **62.76** and SD is **10.61**. Similarly, the mean score of smartphone addiction scale 100 rural area students is **61.25** and SD is **11.91**. The computed 't' value is **1.00** is no significant with **0.05** level. So, the null hypothesis "There is no significant difference of Smartphone Addiction among Urban and Rural Students" is accepted. Result shows that the residence of area does not play a defining role in the smartphone addiction of urban and rural students.

**HO<sub>3</sub>:** There is no significant difference of Smartphone Addiction among Urban Boys and Rural Boys Students.

**Table No: 3 Showing the Mean, SD and 't' value of Smartphone Addiction in relation to Urban Boys and Rural Boys Students.**

Sr. No.	Area of Residence (Boys)	N	Mean	SD	't'	Table Value	Level of Signification
1	URBAN BOYS	50	63.40	6.34	0.54	2.00	N.S.
2	RURAL BOYS	50	62.24	13.25			

\*Significant levels 0.05

The above result table no.3 we can see that 't' test was used to find out the smartphone addiction among urban and rural areas students, here the mean score of smartphone addiction scale 50 urban areas boys students is **63.40** and SD is **6.34**. Similarly, the mean score of smartphone addiction scale 50 rural areas boys students is **62.24** and SD is **13.25**. The computed 't' value is **0.54** is no significant with **0.05** level. So, the null hypothesis "There is no significant difference of Smartphone Addiction among Urban Boys and Rural Boys Students" is accepted. Result shows that do not play a defining role in the smartphone addiction of urban areas boys students and rural areas boys students.

**HO<sub>4</sub>:** There is no significant difference of Smartphone Addiction among Urban Girls and Rural Girls Students.

**Table No: 4 Showing the Mean, SD and 't' value of Smartphone Addiction in relation to Urban Girls and Rural Girls Students.**

Sr. No.	Area of Residence (Girls)	N	Mean	SD	't'	Table Value	Level of Signification
1	URBAN GIRLS	50	62.12	13.57	0.87	2.00	N.S.
2	RURAL GIRLS	50	60.26	10.29			

\*Significant levels 0.05

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The above result table no.4 we can see that 't' test was used to find out the smartphone addiction among urban and rural areas students, here the mean score of smartphone addiction scale 50 urban areas girls students is 62.12 and SD is 13.57. Similarly, the mean score of smartphone addiction scale 50 rural areas girls students is 60.26 and SD is 10.29. The computed 't' value is 0.87 is no significant with 0.05 level. So, the null hypothesis "There is no significant difference of Smartphone Addiction among Urban Girls and Rural Girls Students " is accepted. Result shows that do not play a defining role in the smartphone addiction of urban areas girls students and rural areas girls students.

### *Findings of the Study*

Major findings of the present study are:

1. There is no significant difference of Smartphone Addiction among Boys and Girls students.
2. There is no significant difference of Smartphone Addiction among Urban and Rural areas students.
3. There is no significant difference of Smartphone Addiction among Urban area Boys and Rural area Boys students.
4. There is no significant difference of Smartphone Addiction among Urban area Girls and Rural area Girls students.

### *Limitations*

1. In this study there were not taken any sample of those male and female who are mentally retarded or handicap, hence results of research cannot applicable to other disable male and female.
2. The college students of Panchmahal district have been distinguished as samples, so the results of the research cannot be applied to other districts or areas.

### *Suggestions for Future Research*

1. Research was done with 200 samples to be researched with more than 200 samples.
2. This research can be found at the state level to know about the correct position A Study on Smartphone Addiction with Reference to Urban and Rural Student.
3. Finding the extent of smartphone addiction based on age in search.

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### ***Conflict of Interest***

The author(s) declared no conflict of interest.

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