

## A Comparative Analysis of Smartphone Addiction among Adolescents

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### ABSTRACT

The main aim of present study is comparative analysis of smartphone addiction among adolescents of Patna district with regards to residing status and gender. Total 100 adolescents randomly selected in relation to residing status (Hostel, Family) and gender (Male, Female) from different schools of Patna district. A sample were comprised 50 adolescents (25, male, 25 female) who live in a different type of hostels and 50 adolescents (25 male, 25 female) who live with family. For data collection Indian adaptation of short version of the smartphone addiction scale by M. Kwon, D-J. Kim, H. Cho, and S. Yang. To analysis the data two-way analysis of variance was used. Analysis was done by Excel. Results indicates that Significant difference found between adolescents residing in hostels and residing with family. Adolescents residing with family have higher ratio of smartphone addiction than adolescents residing in hostels. Not significant difference found between gender and interaction of residing status and gender.

**Keywords:** *Smartphone Addiction, Adolescents, Residential Status, Gender*

### Smartphone

Smartphones are the result of major technological progress in mobile devices. Over time, technology has developed slowly but surely, with each new invention being smarter and more creative than the last, changing how people think and imagine. One big reason why technology keeps improving is because smartphones have a strong effect on people's minds, making them rely on them a lot. Also, there's no single company controlling the making or development of new products. The smartphone market is one of the most competitive in the world, bringing in a lot of money both at home and abroad. Smartphones have become part of almost every part of life, from making calls and sending messages to using online maps, accessing information, playing games, and even using artificial intelligence.

Smartphone addiction is when people use their phones in a way that's compulsive, too much, and harmful. It happens when someone can't control how much they use their phone, even if it causes big problems in their daily life, their relationships, or their work. The reality of smartphone addiction is actually worse than most people realize. People are more attached to their phones than drug users are to their drugs. Sometimes, this is casually called

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Received: April 16, 2026; Revision Received: May 30, 2026; Accepted: June 04, 2026

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"nomophobia," which means the fear of being without a mobile phone. This issue is often linked to problems like excessive web use or internet dependency. If you find yourself constantly checking your phone, spending a lot of time on it, or sending and receiving many messages without a clear reason, it might be a sign of dependency or overuse.

### **Warning signs of smartphone overuse include: -**

- Spending too much time on your phone, to the point where it affects your relationships, work, school, hobbies, or other important parts of your life. If you're ignoring friends during lunch to check Facebook or are constantly checking your phone while driving or during class, it's time to rethink how much you're using your smartphone and find a better balance.
- Having trouble completing tasks at home or work. For example, if your laundry piles up or you don't have enough food for dinner because you've been chatting online, texting, or playing games. Or if you're working late because you can't finish your tasks on time.
- Being isolated from family and friends. If your social life is suffering because of the amount of time you spend on your phone, or if you're not paying attention during meetings or conversations with friends because you're checking your phone, or if your friends and family are worried about how much time you spend on your phone. You may feel like no one in your real life, even your spouse, understands you as well as your online friends.
- Hiding your phone use. If you sneak away to use your phone in private places, or lie to your boss or family about how much time you spend online. If you get angry or irritable when your online time is interrupted, that's another sign.
- Having a fear of missing out. If you feel anxious when you don't check your phone, or if you feel like you're missing out on important things if you don't constantly check social media. You might feel like others are having more fun or living better lives than you. Some people even wake up at night to check their phones.
- Feeling anxious, panicked or scared when you leave your phone at home, when the battery runs out, or when the phone crashes. Or if you feel like your phone is vibrating when it isn't, thinking there's a new message or update.

### ***Withdrawal symptoms from smartphone addiction***

A common sign that someone might be addicted to their smartphone or the internet is feeling uncomfortable or having symptoms when they try to use their phone less. These symptoms could include:

- Restlessness
- Anger or irritability
- Difficulty concentrating
- Sleep problems
- Craving access to your smartphone

### **Adolescents**

The Latin word "adolescence" means "to grow to maturity. " Adolescence starts when children become sexually mature and continues until they reach the age of legal adulthood. Although adolescence is generally linked with this period, its physical, mental, or cultural aspects might begin earlier and end later. For instance, puberty often starts during pre-adolescence, especially in girls. The way society views adolescence depends on information from different areas like psychology, biology, history, sociology, education, and anthropology. Adolescence is a time between childhood and adulthood, and its purpose is to

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help young people get ready for adult life. Among all life stages, adolescence is one of the most important. During this time, there is rapid development in thinking, and according to Piaget, adolescents start to think more abstractly and their egocentrism decreases.

Early adolescence is between the ages of 10 to 13, middle adolescence is from 14 to 17, while late adolescence is from 18 to 19/early 20s, which is also the age of legal maturity. Studies show that attitudes, behaviours, and values change quickly during both early and late adolescence. Moving from childhood to adolescence can be a challenging and stressful time for young people. They are going through a period where their bodies, minds, emotions, and social skills are all developing. This can be a confusing time for students, their families, and other adults who want to help them grow and learn.

### **LITERATURE REVIEW**

Research on age, gender, peers, lifestyle talents and excellent of lifestyles affect risk of cell phone addiction: epidemiological analysis. Studies have shown that factors like gender, peers, and quality of lifestyle are linked to a greater chance of becoming dependent on smartphone. Age, empathy, communication skills, and physical quality of life had been related to decrease probability of cell phone addiction (Pradeep et al., 2022).

Studies show that the use of smartphones is connected to factors like a person's age, where they live, their parents' level of education, and their income. Smartphone addiction was more amongst urban teens. The research also determined that Smartphone dependency increases with Smartphone usage length and everyday hours. Smartphone addiction is likewise more amongst well-educated urban college students (Bhanderi et al., 2021).

A study was conducted to understand how common smartphone addiction is among medical students and how it relates to their personality traits. Out of 150 medical students in Sawangi, Wardha, Maharashtra, 146 took part in the study. On average, the students were 18.50 years old. The study found that 24.65% of the students showed signs of smartphone addiction. Among them, 7.53% were male and 17.12% were female. The research also looked into smartphone usage habits, personality characteristics, and the level of mobile phone addiction among the students (Jain et al., 2019).

The study looked into how common mobile phone addiction is among students at technical institutions. Its main goals were to find out how widespread this issue is and to check if there are any links with different demographic factors. The survey results showed that 60 percent of the students were found to be addicted to their mobile phones, which caused them a lot of confusion and frustration. The findings did not show a strong connection between phone addiction and gender or other demographic characteristics. However, there was a noticeable link between mobile phone addiction and age groups. It was also found that mobile phone use had a bigger effect on girls compared to boys (Naser Abed et al., 2017)

A psychosocial study looked at how mobile phones affect young people. It included 200 teenagers, young adults, and young individuals from different household backgrounds in Delhi. Their ages ranged from 17 to 30. The survey found that there is a big difference in how mobile phones are used. Older people use media more than younger ones. It also showed that women aged 24 to 30 use more devices than men. However, boys between 17 and 23 use media and devices more than girls of the same age (Gupta & Kumar, 2016).

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### *Hypothesis*

1. There will be significant differences between residing in hostel and family adolescents with regards to smartphone addiction.
2. There will be significant differences between male and female adolescents with regards to smartphone addiction.
3. There will be significant impact of resident and gender on smartphone addiction.
4. There will be significant interaction effects between gender and residing status with regards to smartphone addiction.

### *Sample*

Keeping in view the nature of present study stratified random sampling was used. Sample consisting 100 adolescents (50 male,50 female) from different schools of Patna district. Half of the samples were comprised of those adolescents who live in hostels. Other half of the sample were comprised of those adolescents who live with family.

### *Tools*

1. Personal blank was used to know the name, gender, age, address etc. Of the respondents.
2. The Indian adaptation of short version of the smartphone addiction scale was developed by M. Kwon, D-J. Kim, H. Cho, and S. Yang.

### *Statistical analysis*

The statistical method applied for data analysis was two-way Analysis of Variance. Result obtained on the basis of this method were recorded in tables and discussed and interpreted with region and justification.

## **RESULT AND DISCUSSION**

There are two independent variables: residential status and gender. The study uses smartphone addiction as the dependent variable. The smartphone addiction test was given to respondents, who male and female lived in hostels and those male and female who lived with their family. Their scores were collected separately. Then, a two-way ANOVA was used. The results are shown in the table below:

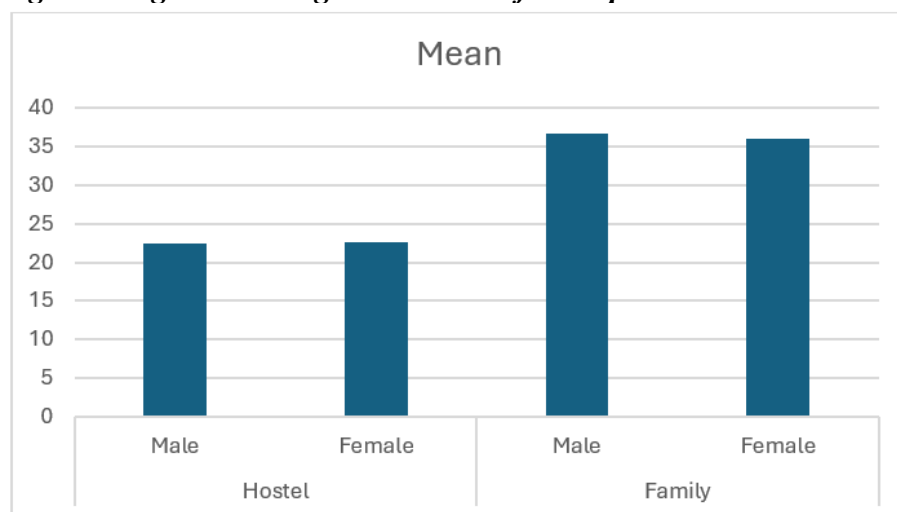
*Table 1 Result of the analysis of variance of the scores of smartphone addiction with reference to residential status and gender*

	Male	Female	Total
<i>Hostel</i>			
Count	25	25	50
Sum	559	566	1125
Average	22.36	22.64	22.5
Variance	94.32333	86.07333	88.37755
<i>Family</i>			
Count	25	25	50
Sum	916	902	1818
Average	36.64	36.08	36.36
Variance	40.82333	56.91	47.94939
<i>Total</i>			
Count	50	50	
Sum	1475	1468	
Average	29.5	29.36	
Variance	118.2143	116.1127	

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Looking at the Table No.1, it is seen that the mean score of smartphone addiction of adolescents residing in hostels is 22.5 and means scores of smartphone addiction of adolescents residing with family is 36.36. These results show that adolescents residing with family have higher ratio of smartphone addiction than adolescents residing in hostel. This can be seen in Figure no-1 also.

**Figure 1** Figure showing Mean score of smartphone addiction



**Table 2 ANOVA**

	SS	df	MS	F	P-value	F crit
<b>Residing Status</b>	4802.49	1	4802.49	69.0683	6.22E-13	6.90647
<b>Gender</b>	0.49	1	0.49	0.00705	0.93327354	6.90647
<b>Interaction</b>	4.41	1	4.41	0.06342	0.801702795	6.90647
<b>Within</b>	6675.12	96	69.5325			
<b>Total</b>	11482.51	99				

Looking at the Table No.2, F ratio of the scores of smartphone addiction with respect to the residing status of adolescents is 69.06 which is significant at 0.01 level. It means there is significant difference between adolescents residing in hostel and residing with family. The f ratio of the scores of Smartphone Addiction with respect to the gender of adolescents is 0.007 which is not significant. It means there is no significant difference between male and female adolescents. The f ratio of interaction effect of gender and residing status is 0.063 which is not significant.

### CONCLUSION

According to the finding and discussion, it can be said that my current study found that significant difference found between adolescents residing in hostels and residing with family. Adolescents residing with family have higher ratio of smartphone addiction than adolescents residing in hostel. No significant difference found between male and female. No significant interaction effect found among gender and types of residence.

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### **Acknowledgment**

The author(s) appreciates all those who participated in the study and helped to facilitate the research process.

### **Conflict of Interest**

The author(s) declared no conflict of interest.

**How to cite this article:** Kumar, G. & Kumari, P. (2026). A Comparative Analysis of Smartphone Addiction among Adolescent. *International Journal of Indian Psychology*, 14(2), 1819-1824. DIP:18.01.168.20261402, DOI:10.25215/1402.168