



# A COMPARATIVE STUDY: GENDER DIFFERENCES ON SMARTPHONE ADDICTION AND HAPPINESS

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**Abstract:** This study presents the effect of gender on smartphone addiction and happiness. In the era of technology, smartphone addiction is very common and today finding happiness and being happy is not so easy. The study was conducted to explore the comparison of smartphone addiction and happiness among gender (boys & girls). This study was conducted in MGKVP, Varanasi (U.P.), on a sample of 52 students from Economics department of MGKVP. The data was divided in to two groups- boys & girls on the basis of gender. Both groups had equal no. of respondents. Smartphone addiction scale (SAS) and Happiness scale (HS) were used to collect data. Data was analysed by Analysis of Variance (ANOVA). The main conclusion is that boys have more smartphone addiction than girls.

**Index Terms** - Smartphone addiction, happiness, wellbeing, technology.

## INTRODUCTION

In the era of globalization, talking about technology and smartphone is not something new. Globalization has made us surrounded by technology. We are just one click away to connect to the world. In addition to this, the global pandemic times of covid compelled us to be more dependent on technology especially on our smartphones for communication and recreation, when restricted social interaction was a demand. According to Statista, in 2023, the current number of smartphone users in the world today is 6.92 billion, meaning 85.74% of the world's population owns a smartphone. This figure is up considerably from 2016, when only 3.668 billion users were 49.40% of that year's global population. We are constantly on our phones for some other reason or even with compulsion. Be it for office work, college, or school work, phones are an inseparable part. Initially, when technology/ smartphone was bursting out of the scene, those were the times when mobile phones were generally used for calling and text messages and were also considered a luxury but time has changed rapidly and we have come so far that smartphone has become a necessity. Almost every person has a personal phone for constantly messaging, calling, and surfing the internet. Data has revealed that smartphone users are increasing day by day mainly excessive usage is seen in the 18 to 25 age group. According to a survey conducted by the Mobile Ecosystem Forum from November to December 2019, the highest penetration rate among smartphone users was in the age group of 16 to 24 years, with 37 percent. This was followed by the users between 24 and 35 years old and least in older Indians. Although smartphones have made our life easier but uncontrolled and excessive usage can trigger smartphone addiction. According to APA, "Addiction is a state of psychological or physical dependence (or both) on the use of alcohol or other

drugs.” The term is often used as an equivalent term for substance dependence and sometimes applied to behavioural disorders, such as sexual, Internet, and gambling addictions. Smartphone usage is the need of the hour to stay updated and connected with this fast-moving world. But its excessive usage makes it a dangerous weapon because researchers have proven various psychological and physical problems that emerge like insomnia, musculoskeletal problems, lack of attention, anxiety and stress, and deteriorating one’s social life. Happiness is something that people seek for in life. According to Merriam-Webster, “Happiness is a state of well-being and contentment.” Happiness can be defined as an enduring state of mind consisting not only of feelings of joy, contentment and other positive emotions, but also of a sense that one’s life is meaningful and valued, Lyubomirsky (2001). Happiness is an emotion that plays a crucial role in one’s life. Seligman (2002) proposed that the unwieldy notion of "Happiness" has three components: positive emotion (the pleasant life), engagement (the engaged life), and meaning (the meaningful life). Three major types of happiness are high life satisfaction, frequent positive feelings, and infrequent negative feelings Diener (1984). Some people experience all three components of happiness and live a content life but there are people who do not experience all the above-mentioned components of happiness because of adversities of life. Researches have also shown that people who are happy are less prone to mental disorders than people who are unhappy.

### **REVIEW OF LITERATURE**

According to Shambare et. al (2012), recent time smartphone addiction is the one of the most non -drug addiction. Smartphone can make our daily life easier with variety of features, such like as video calls, GPS (maps), search engine and calculator. A study was conducted by King et. al (2010) Smartphones have their own advantages, with the help of which a person can easily communicate with loved ones. According to Thomee et. al (2011), using smartphone uncontrollably affects our ability to work. We spend more and more time checking notifications and due to its continuous usage, we have to face different types of problems like cervical pain, stress, anxiety, lack of attention, sleep and hunger related problem. Apart from this, our social interaction is also affected. Excessive usage of smartphones affects our happiness and subjective well-being. Kozan et. al (2019) have found in their study that smartphone addiction and happiness have a negative relationship. A study was conducted by Suresh VC, Silvia WD, Kshamaa HG, Nayak SB on Internet addictive behaviours and subjective well-being among 1<sup>st</sup> year medical students, showed subjective happiness and internet addiction have a negative relationship. At present time, almost all people are using smartphones. There is hardly anyone who is untouched by its use, especially young adolescents. Alexander Raymond and Sandi kartasasmita (2021) found in their study that young adolescents are more addicted people of smartphone addiction than old age people. There is more dependence on smartphone in boys than girls. Kocak Uyaroglu A et. al (2021) stated in their study that gender has an effect on Smartphone Addiction. Boys had scored more than girls. Individuals with higher levels of smartphone addiction they have symptoms of insomnia, stress and anxiety are seen more and those who have less Smartphone Addiction, they get less symptoms.

### **MAIN OBJECTIVES OF STUDY**

- To find out smartphone addiction between girls and boys
- To find out happiness between girls and boys
- To find out career well-being between girls and boys
- To find out subjective well-being between girls and boys
- To find out social well-being between girls and boys
- To find out spiritual well-being between girls and boys
- To find out emotional well-being between girls and boys

### **Hypothesis**

- H.1-** There will be significant differences between girls’ and boys’ smartphone addiction
- H.2-** There will be significant differences between girls’ and boys’ happiness/wellbeing total
- H.3-** There will be significant differences between girls’ and boys’ career well-being
- H.4-** There will be significant differences between girls’ and boys’ subjective well-being
- H.5-** There will be significant differences between girls’ and boys’ social well-being

**H.6-** There will be significant differences between girls' and boys' spiritual well-being

**H.7-** There will be significant differences between girls' and boys' emotional well-being

## **METHOD**

The survey research method is used in this study. Survey research studies on smartphone addiction and happiness (career wellbeing, subjective wellbeing, social wellbeing, spiritual wellbeing and emotional wellbeing) by studying sample chosen from gender (boys & girls).

### **Type of Research and design**

It is an exploratory study using 1 way ANOVA design. There is one IV Gender and there are two dependent variables smartphone addiction and happiness.

### **Participants**

The sample consists of 52 undergraduate and postgraduate students of MGKVP, Varanasi (U.P.). The sample was divided into two groups on the basis of gender (male & female). Each of the two-group consisted of an equal number of boys' and girls' respondents. Each of the two-group consisted of 26 respondents. Only those young respondents were included in the sample who were of age group 18 to 25 years, using smartphones and without any major diagnosed chronic physical or mental illness.

### **Measures**

**Smartphone Addiction Scale** is a test booklet including both statements and alternatives to choose from. The statements/ questions are related to one's smartphone usage. Participants indicated their agreement to the 23 items using a 5-point scale (5 = Strongly agree to 1= Strongly disagree). There are no right and wrong answers. Researchers summed all responses; higher scores indicated higher smartphone addiction.

**Happiness Scale** is also a test booklet including both statements and alternatives to choose from. The statements/ questions are related to how one feels and think. Participants indicated their agreement to the 62 items using a 5-point scale (5 = Strongly agree to 1= Strongly disagree). There are no right and wrong answers. Researchers summed all responses; higher scores indicated higher smartphone addiction.

### **Procedure**

For recording subject's response, they were given Smartphone Addiction Scale which consists of 23 items and Happiness Scale consists of 62 items and measures on 5 dimensions of wellbeing. Data collection was done by administering two psychological tests. The subjects were told the purpose of this study and through informed consent, data was collected. They were also informed that the data collected will be kept confidential and will only be used for research purpose. The sample of 52 students (both boys & girls) aged between 18- 25 was selected. The subjects were handed over a copy of both the questionnaire to respond. They were helped if they faced any difficulty in understanding test items. The subjects were requested to respond honestly without leaving any item. After the completion of the test, they were thanked and the questionnaires were collected. In this study following tools were used- Smartphone Addiction Scale (SAS-VAM)- Hindi version by Dr. Vijayshri & Dr. Masaud Ansari and Happiness Scale (HS-RHMJ)- Hindi version by Dr. Himanshi Rastogi & Dr. Janki Moorjani.

## **RESULTS AND DISCUSSION**

A comparative study of smartphone addiction and happiness among gender is an interesting topic of interest. A total of 52 subjects, who met the inclusion criteria constituted the sample of the present study. The sample was divided into two groups on the basis of gender: boys and girls. Each group consisted of an equal number of 26 subjects. This study also takes into consideration the differences in various dimensions of happiness among gender.

Analysis of variance F. test is a statistical technique used to test the significance of difference between means of various groups. ANOVA deals with difference between sample means and has no restrictions on the number of means.

Analysis of variance methods- suitable for balanced data- were used to validate the difference in smartphone addiction and happiness among girls and boys. The level of significance is the maximum probability with which a researcher wills to risk the rejection of the null hypothesis, where in fact it

should have been accepted (Spiegel, 1972). In practice, a level of significance of 0.05 or 0.01 is customary. If a 0.01 (1%) level of significance is selected to test the hypothesis, the researcher will be 99% confident that right decision has been made. The level of significance used in this study was that of a significance level of 0.05 as the cut-off point for rejecting the hypothesis.

### Descriptive Analysis

An analysis of variance was conducted to explore the impact of gender on the evaluation of Smartphone addiction and happiness (career wellbeing, subjective wellbeing, social wellbeing, spiritual wellbeing and emotional wellbeing).

**Table 1: Mean and SD Table of all Dimensions**

GENDER		Smartphone Addiction	Career Wellbeing	Subjective Wellbeing	Social Wellbeing	Spiritual Wellbeing	Emotional Wellbeing	Wellbeing Total
Girls	Mean	54.4231	58.0769	53.8462	43.3846	41.1154	49.4615	245.8846
	N	26	26	26	26	26	26	26
	SD	19.30217	5.80292	9.03191	5.69264	4.14079	5.55144	22.62269
Boys	Mean	65.5385	54.6538	54.2692	43.0385	41.2692	47.0769	240.3077
	N	26	26	26	26	26	26	26
	SD	18.06263	7.99971	8.64203	6.14154	6.58822	8.38534	32.74724
Total	Mean	59.9808	56.3654	54.0577	43.2115	41.1923	48.2692	243.0962
	N	52	52	52	52	52	52	52
	SD	19.34059	7.13189	8.75464	5.86561	5.44865	7.14312	28.00858

Table.1 shows the mean and SD of boys and girls on various dimensions. It shows the mean value of Smartphone addiction, career wellbeing, subjective wellbeing, social wellbeing, spiritual wellbeing emotional wellbeing, and overall wellbeing/ happiness with reference to gender. On smartphone addiction the mean of boys is greater than girls ( $B=65.53 > G=54.42$ ). This suggests that boys have more addiction of smartphones as compared to girls because they show more compulsive behaviour towards mobile phones. On overall wellbeing the mean of girls is greater than boys this is because girls are more capable to deal with daily hassles, emotions, relationships effectively and experience a sense of better wellbeing than boys.

On career wellbeing the mean of girls is greater than boys ( $G=58.07 > B=54.65$ ). According to this, girls are more satisfied and confident with their career, they are fortunate to grab different opportunities to achieve their goal through hard work. On subjective wellbeing the mean of boys is greater than girls ( $B=54.26 > G=53.84$ ). This shows that boys evaluate their lives and aspects of life more positively than girls. Boys are more satisfied with their lives and consider oneself a happy individual. On Social wellbeing the mean of girls is greater than boys ( $G=43.38 > B=43.03$ ). The result shows that girls build and maintain healthy relationships and have meaningful interactions with others in the society. On the dimension spiritual wellbeing the mean of boys is greater than girls ( $B=41.26 > G=41.11$ ). This suggests that boys have a purpose and meaning in life, accept life challenges and grow with them. In emotional wellbeing the mean of girls is greater than boys ( $G=49.46 > B=47.07$ ). The result shows that girls are more capable to manage their emotions and effectively cope with difficult, stressful situations of life.

Table 2 shows the effect of gender on smartphone addiction. The mean of boys and girls on smartphone addiction  $M(B)=65.53$  and  $M(G)=54.42$ . The interaction effect between boys and girls is found significant at 0.05 level ( $F=4.597$ ). Boys have more smartphone addiction than girls. It suggests that boys have compulsion towards smartphone. They show forgetfulness, lack of attention, disturbed hunger and sleep, some symptoms of depression and anxiety and social withdrawal. On the basis of gender there is no significant differences in career wellbeing.

The mean of girls is greater than boys on career wellbeing. This suggests that girls have better career wellbeing than boys but the interaction effect between boys and girls is not found significant at 0.05 level ( $F=3.119$ ). On the basis of gender there is no significant differences in subjective wellbeing. The mean of boys and girls on subjective wellbeing  $M(B)=54.26$  and  $M(G)=53.84$ . This shows that boys have better subjective wellbeing as compared to girls.

**Table 2: ANOVA Table of all Dimensions**

			Sum of Squares	df	Mean Square	F	Sig.
SMARTPHONE ADDICTION GENDER *	Between Groups	(Combined)	1606.173	1	1606.173	4.597	.037
	Within Groups		17470.808	50	349.416		
	Total		19076.981	51			
CAREER WELLBEING GENDER *	Between Groups	(Combined)	152.327	1	152.327	3.119	.083
	Within Groups		2441.731	50	48.835		
	Total		2594.058	51			
SUBJECTIVE WELLBEING GENDER *	Between Groups	(Combined)	2.327	1	2.327	.030	.864
	Within Groups		3906.500	50	78.130		
	Total		3908.827	51			
SOCIAL WELLBEING GENDER *	Between Groups	(Combined)	1.558	1	1.558	.044	.834
	Within Groups		1753.115	50	35.062		
	Total		1754.673	51			
SPIRITUAL WELLBEING GENDER *	Between Groups	(Combined)	.308	1	.308	.010	.920
	Within Groups		1513.769	50	30.275		
	Total		1514.077	51			
EMOTIONAL WELLBEING GENDER *	Between Groups	(Combined)	73.923	1	73.923	1.462	.232
	Within Groups		2528.308	50	50.566		
	Total		2602.231	51			
WELLBEING_TOTAL * GENDER	Between Groups	(Combined)	404.327	1	404.327	.510	.478
	Within Groups		39604.192	50	792.084		
	Total		40008.519	51			

The interaction effect between boys and girls is not found significant at 0.05 level ( $F=.030$ ). On the basis of gender there is no significant difference in social wellbeing. The interaction effect between boys and girls is not significant at 0.05 level ( $F=.044$ ). The mean of boys and girls on social wellbeing shows girls have greater social wellbeing than boys,  $M(B)=43.03$  and  $M(G)=43.38$ . On the basis of gender there is no significant difference in spiritual wellbeing. The interaction effect between boys and girls is not significant at 0.05 level ( $F=.010$ ). The mean of boys and girls on spiritual wellbeing shows boys have greater spiritual wellbeing than girls,  $M(B)=41.26$  and  $M(G)=41.11$ . There is no significant difference in emotional wellbeing in gender. The interaction effect between boys and girls is not significant at 0.05 level ( $F=1.46$ ). The mean of boys and girls on emotional wellbeing shows girls have greater emotional wellbeing than boys,  $M(B)=47.07$  and  $M(G)=49.46$ . On the basis of gender there is no significant difference in overall wellbeing. The interaction effect between boys and girls is not significant at 0.05 level ( $F=.47$ ). The mean of boys and girls on overall wellbeing(happiness) shows girls are happier than boys,  $M(B)=240.30$  and  $M(G)=245.88$ .

This study aimed to study the gender differences on smartphone addiction and happiness with different wellbeing dimensions.

### **H.1- There will be significant differences between girls' and boys' smartphone addiction**

In table no. there are significant differences between girls and boys on smartphone addiction at 0.05 level ( $F= 4.597$ ) thus boys have more smartphone addiction than girls. On the basis of this study, we can conclude that boys are more addicted to smartphones than girls.

### **H.2- There will be significant differences between girls' and boys' happiness**

In table no. there are no significant differences between girls and boys in happiness at 0.05 level ( $F=.47$ ) thus girls are happier than boys. On the basis of this study, we can conclude that girls are happier than boys but there are no significant differences in happiness between girls and boys.

**H.3- There will be significant differences between girls' and boys' career well-being**

In table no. there are no significant differences between girls and boys in career wellbeing at 0.05 level ( $F=3.11$ ) thus girls have better career wellbeing than boys. On the basis of this study, we can conclude that girls have better career wellbeing than boys but there are no significant differences in career wellbeing between girls and boys.

**H.4- There will be significant differences between girls' and boys' subjective well-being**

In table no. there are no significant differences between girls and boys in subjective wellbeing at 0.05 level ( $F=0.30$ ) thus boys have better subjective wellbeing than girls. On the basis of this study, we can conclude that boys have better subjective wellbeing than girls but there are no significant differences in subjective wellbeing between girls and boys.

**H.5- There will be significant differences between girls' and boys' social well-being**

In table no. there are no significant differences between girls and boys in social wellbeing at 0.05 level ( $F=0.044$ ) thus girls have better social wellbeing than boys. On the basis of this study, we can conclude that girls have better social wellbeing than boys but there are no significant differences in social wellbeing between girls and boys.

**H.6- There will be significant differences between girls' and boys' spiritual well-being**

In table no. there are no significant differences between girls and boys in spiritual wellbeing at 0.05 level ( $F=0.10$ ) thus boys have better spiritual wellbeing than girls. On the basis of this study, we can conclude that boys have better spiritual wellbeing than girls but there are no significant differences in spiritual wellbeing between girls and boys.

**H.7- There will be significant differences between girls' and boys' emotional well-being**

In table no. there are no significant differences between girls and boys in emotional wellbeing at 0.05 level ( $F=1.46$ ) thus girls have better emotional wellbeing than boys. On the basis of this study, we can conclude that girls have better emotional wellbeing than boys but there are no significant differences in emotional wellbeing between girls and boys.

**CONCLUSION**

On the basis of present study, it can be concluded that boys have more smartphone addiction in comparison to girls on Smartphone Addiction Scale. There are significant differences between girls and boys on smartphone addiction. Whereas girls have better overall wellbeing (happiness), career wellbeing, social wellbeing and emotional wellbeing but there are no significant differences between gender on these dimensions of wellbeing. Boys have better subjective and spiritual wellbeing than girls but there are no significant differences between boys and girls on subjective wellbeing and spiritual wellbeing.

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