



# Internet Addiction, Sleep Quality and Loneliness among Young Adults in Bangalore.

Diya Vinod, Dr. Deepthi D. P.

Student, Assistant Professor  
Department of Psychology,  
Kristu Jayanti College, Bangalore, India

**Abstract :** The current study examined the relationship of internet addiction to the sleep quality and loneliness among young adults in Bangalore. Using convenience sampling method, the researcher collected the responses through Google forms and obtained 163 responses. The instruments employed in the study were the Internet Addiction Scale, Sleep Quality Scale and UCLA Loneliness Scale. Pearson Correlation, Regression analysis and t-test were used to analyze the data. The results indicated that there is a significant relationship between Internet Addiction, Loneliness and Sleep Quality among Gender and Employment status. The effectiveness of Psychotherapy interventions and psychoeducation intended to help people of all ages understand the long-term effects of prolonged internet or screen use on the quality of sleep and feeling of loneliness can be aided and improved by understanding these connections.

**IndexTerms – internet addiction, sleep quality, loneliness, young adults**

## I. INTRODUCTION

### INTRODUCTION

(Griffiths, 1998) Internet addiction is defined by inordinate or inadequately controlled prepossessions, urges, or behaviours related to computer use and internet access, which beget impairment or torture. It's accompanied by changes in mood, obsession with the Internet and digital media, the incapability to control the quantum of time spent uniting with digital technology, the need for further time or a new game to achieve a desired mood, withdrawal symptoms when not engaged, and a continuation of the behavior despite family conflict, a decreasing social life and adverse work or academic consequences.

(Hilarie, 2012) This study adds to our understanding of Internet Addiction among Young Adults by probing the various uses of the internet and their effects on Sleep Quality and Loneliness, as well as trying to determine whether there's a difference in the effect between the Gender population and the Working or Student population in Bangalore.

(Christopher Kline, 2013) Among the numerous factors that can be identified with Screen Time behaviour, one such is the Sleep Quality among the Young adults. Poor sleep quality can have a negative impact on physical, psychological, and social health. There have been various studies on how Screen media specifically used before bedtime is associated with sleep time and quality. Several studies set up relations between screen time and reduced sleep quality and increased day tiredness. According to some countries, up to one in three older people experience social isolation and loneliness. The physical and mental health, quality of life, and longevity of older people are significantly impacted by social isolation and loneliness, according to a large body of research. Numerous studies have discovered a negative relationship between smartphone use, communication app usage, need for affiliation, and emotional support and loneliness.

### NEED OF THE STUDY.

In today's time, Internet plays a very important and essential role in all of our lives which may be both positive or negative. While there are few advantages of engaging in screen time, there are also consequences for the same.

According to the research studies, Internet has been linked to both positive and negative factors. Positive factors would include gaining knowledge, able to connect with friends and peers. Negative factors would include leading to physical difficulties like Obesity, poor sleep quality, etc.

There are research studies favouring the Internet addiction to sleep quality and loneliness, very few studies have been conducted among young adults in Bangalore. Through this research study, it aims to understand if there is an influence in the sleep quality and social loneliness through internet addiction primarily among the Young adult population in Bangalore.

### 3.1 Population and Sample

The population consisted of Young adults of group range between 18 to 25 from Bangalore, India through convenience sampling to collect the data.

### 3.2 Data and Sources of Data

For this study primary data has been collected. The study first obtained the informed consent through Google forms to collect the data from participation online. Participants were given clear instructions about the questions and the nature of the study and reassured them that their information would be kept confidential. The Internet Addiction test, Sleep Quality Scale and the UCLA Loneliness Scale were used to assess on the same.

### 3.3 Theoretical framework

Variables of the study contains dependent and independent variable. The Internet Addiction was the independent variable, and the Sleep Quality and Loneliness were the dependent variables of this study.

## RESEARCH METHODOLOGY

The methodology section outline the plan and method that how the study is conducted. This includes Universe of the study, sample of the study, Data and Sources of Data, study's variables and analytical framework. The details are as follows;

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### 3.4 Statistical tools and econometric models

This section elaborates the proper statistical/econometric/financial models which are being used to forward the study from data towards inferences. The detail of methodology is given as follows.

#### 3.4.1 Correlation

Pearson correlation analysis was used to determine the relationship between internet addiction, sleep quality and loneliness.

#### 3.4.2 Regression

To understand the contribution of internet addiction to sleep quality and loneliness among young adults, linear regression is used.

#### 3.4.3 Independent Sample t-test

This test is used to understand if there are any significant difference between the means of two independent groups. Here, the independent sample t test was used to understand the gender difference and employment status towards internet addiction, sleep quality and loneliness.

## IV. RESULTS AND DISCUSSION

### 4.1 Results of Pearson's Correlation of study variables

Table 4.1: Pearson Correlation

Variable	Mean	Std. Deviation	r	p
Internet Addiction	33.67	15.50	.586	0.000
Sleep Quality	34.81	10.57		

Table 4.1 displayed mean, standard deviation, and the significance value of 163 participants. It was hypothesised that there is a significant relationship between Internet Addiction and Sleep Quality. Pearson's correlation analysis was separately conducted to test this hypothesis. The result showed that Internet Addiction positively correlated with Sleep Quality by obtaining an "r" value of 0.586 at the corresponding "p" value of .000 ( $p < .01$ ). This indicates that there is a significant relationship between Internet Addiction and Sleep Quality, hence accepting the hypothesis.

#### 4.2 Results of Pearson's Correlation of study variables

Table 4.2: Pearson Correlation

Variable	Mean	Std. Deviation	r	p
Internet Addiction	33.67	15.50	0.336	0.000
Loneliness	42.13	9.818		

Table 4.2 displayed mean, standard deviation, and the significance value of 163 participants. It was hypothesised that there is a significant relationship between Internet Addiction and Loneliness. Pearson's correlation analysis was separately conducted to test this hypothesis. The result showed that Internet Addiction positively correlated with Loneliness by obtaining an "r" value of 0.336 at the corresponding "p" value of .000 ( $p < .01$ ). This indicates that there is a significant relationship between Internet Addiction and Loneliness, hence accepting the hypothesis.

#### 4.3 Results of Pearson's Correlation of study variables

Table 4.3: Pearson Correlation

Variable	Mean	Std. Deviation	r	P
Loneliness	42.13	9.818	0.312	0.000
Sleep Quality	34.81	10.578		

Table 4.3 displayed mean, standard deviation, and the significance value of 163 participants. . It was hypothesised that there is a significant relationship between Loneliness and Sleep Quality. Pearson's correlation analysis was separately conducted to test this hypothesis. The result showed that Loneliness positively correlated with Sleep Quality by obtaining an "r" value of 0.312 at the corresponding "p" value of .000 ( $p < .01$ ). This indicates that there is a significant relationship between Loneliness and Sleep Quality, hence accepting the hypothesis.

#### 4.4 Results of Linear Regression of study variables

Table 4.4 : Linear Regression

Independent Variable	Dependent Variable	Standardized $\beta$	t-value	Model Summary
Internet Addiction	Loneliness	0.336	4.534	$R^2 = 0.113$ F= 20.555 Sig= .000
	Sleep Quality	0.586	9.186	$R^2 = 0.334$ F= 84.375 Sig= .000

Table 4.4 examined the contribution of internet addiction on loneliness and sleep quality, a series of linear regression analysis was conducted. The results revealed that internet addiction among the young adults predicated their loneliness 11.3%,  $F = 20.555$ ,  $p < 0.01$  and sleep quality 34.4%,  $F = 84.375$ ,  $p < 0.01$ . The contribution of internet addiction is greater on sleep quality than loneliness among young adults in Bangalore.

#### 4.5 Results of t-test of study variables

Table 4.5 : Independent Sample t - test

Logistic Parameter	Males		Females		t	p
	M	SD	M	SD		
Internet Addiction	34.52	17.712	33.12	13.97	-.532	.596
Sleep Quality	34.88	10.593	34.77	10.622	-.063	.950
Loneliness	43.00	10.649	41.58	9.255	-0.904	.367

Table 4.5 shows the results of gender differences in internet addiction, sleep quality and loneliness. It was hypothesised there is a significant difference between internet addiction, sleep quality and loneliness based on Gender. To test this hypothesis, Independent Sample t-test was used. The mean value and standard deviation of internet addiction for Males are 34.52 and 17.71, the mean value and standard deviation for Females are 33.12 and 13.97. The “t” value obtained between the two groups for internet addiction is -.532 which corresponds to the “p” value as .596. It indicates that there is no significant difference in internet addiction between males and females. The mean value and standard deviation of Sleep Quality for Males are 34.88 and 10.593, the mean value and standard deviation for Females are 34.77 and 10.662. The “t” value obtained between the two groups for internet addiction is -.063 which corresponds to the “p” value as .950. It indicates that there is no significant difference in Sleep Quality between males and females. The mean value and standard deviation of Loneliness for Males are 43 and 10.649, the mean value and standard deviation for Females are 41.58 and 9.255. The “t” value obtained between the two groups for internet addiction is -.094 which corresponds to the “p” value as .367. It indicates that there is no significant difference in Loneliness between males and females. Therefore, there is no significant difference in internet addiction, sleep quality and loneliness among Gender, hence accepting the null hypothesis.

#### 4.6 Results of t-test of study variables

Table 4.6 : Independent Sample t - test

Logistic Parameter	Student		Working		t	p
	M	SD	M	SD		
Internet Addiction	34.21	14.847	32.73	16.672	-.587	.288
Sleep Quality	34.80	10.515	34.83	10.775	-.022	.973
Loneliness	41.95	10.039	42.45	9.504	-0.312	.910

Table 7 shows the results of gender differences in internet addiction, sleep quality and loneliness. It was hypothesised there is a significant difference between internet addiction, sleep quality and loneliness based on the Employment Status. To test this hypothesis, Independent Sample t-test was used. The mean value and standard deviation of internet addiction for Student are 34.21 and 14.847, the mean value and standard deviation for Working are 32.73 and 16.672. The “t” value obtained between the two groups for internet addiction is -.587 which corresponds to the “p” value as .288. It indicates that there is no significant difference in internet addiction between the Student and Working population. The mean value and standard deviation of Sleep Quality for Student are 34.80 and 10.515, the mean value and standard deviation for Working are 34.83 and 10.775. The “t” value obtained between the two groups for internet addiction is -.022 which corresponds to the “p” value as .973. It indicates that there is no significant difference in internet addiction between the Student and Working population. The mean value and standard deviation of Loneliness for Student are 41.95 and 10.039, the mean value and standard deviation for Working are 42.45 and 9.504. The “t” value obtained between the two groups for internet addiction is -.312 which corresponds to the “p” value as .910. It indicates that there is no significant difference in internet addiction between the Student and Working population. Therefore, there is no significant difference in internet addiction, sleep quality and loneliness among Employment status, hence accepting the null hypothesis

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