

Internet addiction, loneliness and social anxiety among adolescents

Nithya. R^{1*}, Jith George²

ABSTRACT

Internet addiction is a major issue among adolescents over the recent years. This study aimed to investigate correlation between internet addiction with social anxiety and loneliness. The sample consisted of 100 adolescents. Internet Addiction Test (IAT) by Dr. Kimberly Young, UCLA Loneliness Scale and Leibowitz social anxiety scale were employed in the collection of data. Pearson correlation, regression analysis, and the student t-test were used for data analysis. Results revealed a significant positive correlation between social anxiety and loneliness with Internet addiction. Furthermore, social anxiety and loneliness were found to be significant predictors of Internet addiction. Research suggests that socially anxious and lonelier individuals are particularly susceptible to this problematic internet use. This vulnerability may relate to the perception of online communication as a safer means of interacting, due to providing anonymity, improved sense of social control and decreased risk of negative evaluation, social fears and social rejection.

Keywords: *Internet addiction, Social anxiety, Loneliness*

The rapid development of computers and the internet has greatly changed people's work, study methods, and lifestyle, and it has become an integral part of the modern world. The Internet is not only a tool, but also a social environment in which cognitive subjects exist wherein the use of the Internet is the basic action of people in the digital environment (Musetti and Corsano, 2018). It has been shown that the world's internet users have reached 2.5 billion (Spada, 2014). Young adults are especially attracted to new technological methods of communication, which offer interaction with others and at the same time provide anonymity, impression of belonging to a community, and a sense of social acceptability. The Internet as a global network connects millions of people throughout the world and enables users to exchange information, which remains available at any time and any place (Janiac, et al., 2009).

Internet Addiction

Internet addiction (IA) refers to the compulsive, excessive use of the internet and the irritation or dysthymic behavior that occurs during its deprivation. DSM-5 refers to the

¹B.Sc Psychology Student, Yuvakshetra Institute of Management Studies, Ezhakkad, Palakkad, Kerala, India.

²Assistant Professor and Head of the Department Psychology, Yuvakshetra Institute of Management Studies, Ezhakkad, Palakkad, Kerala, India

*Responding Author

Received: January 11, 2021; Revision Received: March 14, 2021; Accepted: March 25, 2021

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diagnostic criteria of the disorder as a situation that requires further investigation and is linked to gambling addiction (Karamista, 2015). According to several researchers, Internet addiction has been associated to depression, hostility, social phobia, suicidal ideation and loneliness. Emotional and physical Symptoms of Online Addiction are Backache, Headaches, Weight gain or loss, Disturbances in sleep, Carpal tunnel syndrome, Blurred or strained vision, Feelings of guilt, Anxiety, and Depression.

Loneliness

Loneliness refers to a subjective state of social isolation in which the individual perceives a mismatch between ideal and actual social relations (Caccioppo et al., 2015). Loneliness results from a mismatch between an individual's existing social relationships and what they view as ideal, which leads to a psychologically uncomfortable situation (Ponzetti, 1990). Those who perceive themselves as lonely may not necessarily lack social relationships; but, instead may consider their relationships as inadequate or poor in quality (Caccioppo et al., 2010).

Social anxiety

Social anxiety is marked by an extreme fear of being scrutinized and judged by others in social or performance situations (Stein & Walker, 2009). Individuals fear a range of social interactions, such as conversations with strangers, joining in groups or speaking on the telephone. Most things that involve being observed by others are difficult. These include walking into a room when other people are already seated, eating or drinking in public, and performing in front of an audience. Sufferers fear that they will say or do something that they believe will be humiliating or embarrassing. Common concerns include- fear of sweating, shaking, blushing, stumbling over words, looking anxious, or even the fear of appearing boring, stupid, or incompetent (Stein & Stein, 2008).

Definition of key terms

- **Internet addiction:** Internet addiction is characterized by excessive or poorly controlled preoccupations, urges or behaviors regarding computer use and internet access that leads to impairment or distress (Shaw et al., 2008).
- **Loneliness:** Loneliness refers to a subjective state of social isolation in which the individual perceives a mismatch between ideal and actual social relations (Caccioppo et al., 2015).
- **Social Anxiety:** Social anxiety is marked by an extreme fear of being scrutinized and judged by others in social or performance situations (Stein & Walker, 2009).

REVIEW OF LITERATURE

Arslantas et al., (2012) conducted a study on 'Assessment of internet addiction and loneliness in secondary and high school students'. This study investigates the frequency of Internet addiction and loneliness in secondary and high school students. The study group consisted of 1157 students. Young Internet Addiction Scale was used to assess the internet addiction. University of California, Los Angeles Loneliness Scale was used for the evaluation of the level of loneliness. SPSS 15 was used for statistical analysis. The results showed a positive correlation between loneliness and internet addiction.

A study on 'Relations among Loneliness, Social Anxiety, and Problematic Internet Use' conducted by Caplan (2007) involved 343 participants to test the relationship between social anxiety, loneliness and internet addiction. The study examined the extent to which

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social anxiety explains results previously attributed to loneliness as a predictor of preference for online social interaction and problematic Internet use. The results supported the hypothesis that the relationship between loneliness and preference for online social interaction is spurious, and that social anxiety is the confounding variable.

Weinstein et al., (2015) conducted a study on 'Internet addiction is associated with social anxiety in young adults'. The sample consisted of 120 university students (60 males and 60 females in each sample) and it investigated the association between Internet addiction and social anxiety. Social anxiety was measured using the Liebowitz Social Anxiety Scale and internet addiction using the Young Internet Addiction Test (IAT). The results of the study supported previous evidence for co-occurrence of Internet addiction and social anxiety, but further studies need to clarify this association.

A study on 'Smartphone addiction and its relationship with social anxiety and loneliness' conducted by Kose et al., (2016) it aimed to determine the relationship of smartphone addiction with social phobia and loneliness in a sample of university students in Istanbul, Turkey. 367 students who owned smartphones were given the Smartphone Addiction Scale (SAS), UCLA Loneliness Scale (UCLA-LS), and Brief Social Phobia Scale (BSPS). The results of this study indicated that social phobia was associated with the risk for smartphone addiction in young people. Younger individuals who primarily use their smartphones to access social networking sites also have an excessive pattern of smartphone use.

METHODOLOGY

Problem

The present study aims to assess the effect of social anxiety and loneliness on internet addiction among adolescents.

Objectives

- To examine the level of social anxiety, loneliness and internet addiction among adolescents.
- To study the relationship between social anxiety and internet addiction.
- To study the relationship between loneliness and internet addiction.
- To assess the effect of unlimited internet access on internet addiction.

Hypothesis

- There is no significant correlation between internet addiction and social anxiety.
- There is no significant correlation between internet addiction and loneliness.
- There is no significant difference in internet addiction among individuals with limited and unlimited internet access.

Research design

The present study was conducted as a correlational research design, where two or more sets of data were collected from the same group to determine whether any relationship between the research variables exist. The variables chosen to study were 'social anxiety', 'loneliness' and 'internet addiction' among young adults. It is to be noted that the correlational research design does not indicate a causation effect for the variables chosen. To further establish any correlation if found, a statistical linear regression was calculated.

Sample

The study sample is made up of 100 students in the age group of 16 to 19 years from various schools of Palakkad district. Adolescence can be defined as the period between puberty and adulthood, usually between the ages of 11 and 18 years. Events during this period greatly influence a person's development and can determine their attitudes and behavior in later life (Blos, 1999). Adolescence can be divided into three sub-stages: early, middle, and late. One of the most important changes of adolescence happens in one's own identity and view of life, such as changes due to inner conflict and the need to always act within acceptable moral standards, abide by parental authority, or meet peer expectations. Because teenagers are often in conflict with authority and cultural and moral norms of society, certain developmental effects can trigger a series of defense mechanisms. During adolescence, there is an increased risk of emotional crises, often accompanied by mood changes and periods of anxiety and depressive behavior, which adolescents attempt to fight through withdrawal, avoidance of any extensive social contact, aggressive reactions, and addictive behavior (Becker et al., 2008). Adolescents are exceptionally vulnerable and receptive during this period and can become drawn to the Internet as a form of release. Over time, this can lead to an addiction.

Instruments

- Internet Addiction Test (IAT) by Dr. Kimberly Young
- UCLA Loneliness Scale
- Leibowitz social anxiety scale

Statistical analysis

- Pearson's r
- t-test
- Regression

Ethical issue

- Informed consent of each and every participant was acquired.
- Confidentiality of the responses was maintained.
- The participants were informed before the study that all data collected would be solely used for research purpose.

RESULTS

The statistical analysis conducted in the present study is done using Pearson's r, Student's t tests and regression analysis.

Table No. 1 Relationship between internet addiction and social anxiety.

Variables	N	Mean Group	r	p
Internet addiction	100	Adolescents	.402**	.000
Social anxiety				

Table 1 indicates that social anxiety positively correlates with internet addiction among adolescents and thus, it can be inferred that when social anxiety is more internet addiction tend to be high. The hypothesis stating 'There is no significant relationship between social anxiety and internet addiction' is rejected.

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Table No. 2 Relationship between internet addiction and loneliness.

Variable	N	Mean Group	r	p
Internet addiction	100	Adolescents	0.479**	0.000
Loneliness				

Table 2 indicates that loneliness positively correlates to internet addiction among adolescents. It may be inferred that when loneliness increases internet addiction tends to be high. Thus, the hypothesis stating ‘There is no significant correlation between internet addiction and loneliness’ is rejected.

To further analyze the relationship between the two variables (X or independent variable= ‘loneliness’ and Y or dependent variable = ‘internet addiction’), a statistical linear regression was conducted.

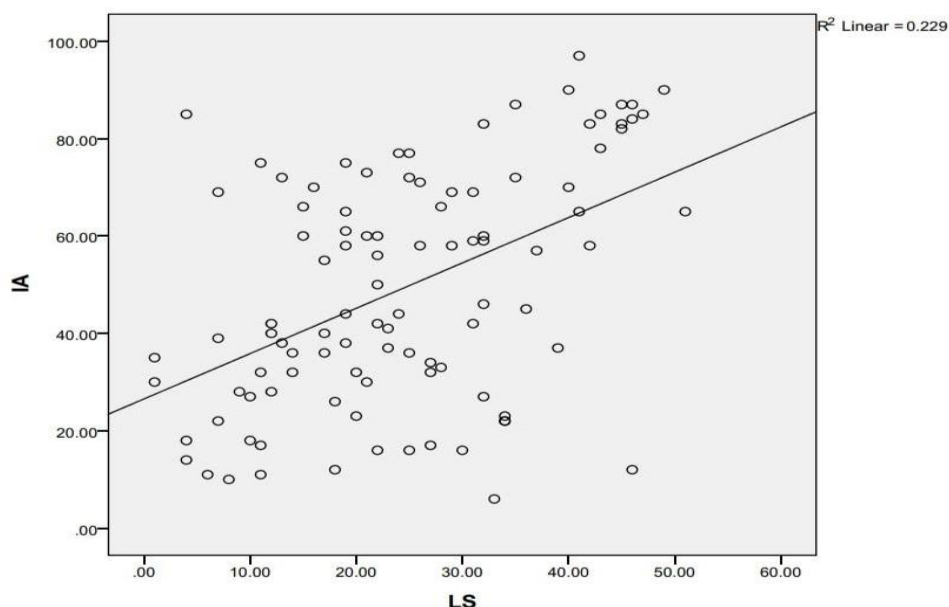
Variable	B	95%CI	β	t	P
Constant	26.527	[17.079-35.976]	0.479	5.572	0.000
Loneliness	0.931	[0.589 – 1.273]		5.398	0.000

Note R^2 adjusted = 0.221, CI= confidence interval for B

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GRAPH
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  /MISSING=LISTWISE.
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Graph

[DataSet0]



A simple linear regression was calculated to predict internet addiction based on loneliness. A significant regression equation was found stating that, $F(1,98) = 29.134$, $P = .000$ with an R^2 of 0.221. Participants predicted internet addiction is equal to $26.527 + 0.931(\text{loneliness})$.

Table No. 3 Difference in level of internet addiction among individuals with limited and unlimited internet access.

Variable	Group	N	Mean	SD	t	P
Internet addiction	No unlimited access	45	43.8723	22.90397	-2.219	0.029
	Unlimited access	53	54.4528	24.56511	-2.228	0.028

Table 3 indicates that there is significant difference in level of internet addiction among individuals with limited and unlimited internet access. Hence the hypothesis that stated ‘There is no significant difference in internet addiction among individuals with limited and unlimited internet access’ is rejected.

DISCUSSION

Major findings

- There is significant relationship between social anxiety and internet addiction among adolescents.
- There is significant correlation between internet addiction and loneliness among adolescents.
- There is a significant difference in internet addiction among individuals with limited and unlimited internet access.

Implications

The study provides an understanding about the effect of loneliness and social anxiety on internet addiction among adolescents. As the internet addiction became incredibly popular among adolescents which can affect them in many respects. Awareness programs on the effect of internet addiction can reduce the risk. Parents and teachers should be aware of the problem situation so that they can care for their children and deal well with it.

Online relationship is the one of the rare communication fields that an individual with social anxiety prefers over loneliness. However, the tendency of the individual with social anxiety by taking advantage of less threatening communication and also overcoming their feeling of loneliness.

Social anxiety can be decreased by practicing deep breathing every day, visiting a therapist creating a list of situations that cause anxiety and try to avoid them and setting goals for yourself. Loneliness can be reduced by interacting in a better manner with family and friends. Increasing social contact thus improves the peer relationships.

Limitation

- The general population is limited by the sample number (N=100).
- The present study did not analyze gender differences.

Suggestions

- The effect of internet addiction on other variables could be found.
- Psychological interventions can be implemented.
- The study did not analyze results stemming from specific subscales score of the Leibowitz social anxiety scale. Which can be academically explored in future studies.

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Acknowledgement

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

Conflict of Interest

The author declared no conflict of interest.

How to cite this article: Nithya. R & George J. (2021). Internet addiction, loneliness and social anxiety among adolescents. *International Journal of Indian Psychology*, 9(1), 1059-1065. DIP:18.01.109/20210901, DOI:10.25215/0901.109