

Original Article

A Study of Internet Addiction and Loneliness of Adolescents

Dr. Anil Balaso Balugade

Assistant Professor, Department of Psychology, Shri Shahaji Chhatrapati Mahavidyalaya, Kolhapur (MS)

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Abstract

The present study investigated internet addiction and loneliness of adolescents. A total 50 boys and 50 girls adolescents (Age range 16 to 19 years) of junior college students of Kolhapur city, Maharashtra state, India were selected through random sampling method. The variables of the study were assessed through Internet Addiction Test developed by Dr. Kimberly Young and Loneliness Inventory developed by Uma & Meenakshi, R. (2010). The obtained data was analyzed by using mean, SD, t test and Pearson product moment correlation coefficient. The result reveals that there is no significance gender difference found among adolescents in relation to internet addiction and loneliness. The result also reveals that there is no correlation found between internet addiction and loneliness among adolescents.

Keywords: Adolescents, internet addiction and loneliness

Introduction:

Adolescence is a key stage in human development. Many psychologists have remarked that this is a crucial stage in human development. Therefore, special attention should be paid to adolescents' development. However, in the present condition, many problems are increasing daily in adolescence. Internet addiction is a burning issue among adolescents not only in India but also in today's digital world. Internet use among adolescents is increasing significantly. We can clearly say that the Internet is growing exponentially, and it has taken over our bodies and minds. This has changed the daily routine of individuals. In the 21st century, the entire world is connected to information and technology. In other words, they have become a part of human life. The Internet is a medium for entertainment, communication, and educational purposes. However, in the recent era, excessive Internet use has led to Internet addiction among adolescents. A lot of watching video games, social media platforms, entertainment videos, interesting blogs, etc., attract adolescents, and they have hooked for hours in it. Spending so much time on the Internet is harmful to other important parts of adolescents' lives, such as health, relationships, school performance, work, and playing ground games. It can cause sleep problems, weight loss, tiredness, loneliness, anxiety, and sadness. Moreover, there is a new type of mental disorder called Internet addiction.

Loneliness is another issue among adolescents, which is increasing daily. This might be caused by failure, emotional disturbance, health problems, family problems, and so on. However, adolescents addicted to the Internet experience loneliness, which can lead to Internet addiction. Thus, we can conclude that both are interconnected. Loneliness is not only being alone but it also defines an unpleasant psychological state. (Tugce, 2014). This decreases family communication and relationships with parents, friends, and other relatives. It also decreases an individual's self-confidence and self-esteem. It can affect cognitive factors, such as thinking, perception, decision making, and creativity (Dehghani et al., 2008). Loneliness can cause several mental illnesses such as anxiety, anger, sadness, depression, isolation, and suicide among adolescents.

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Address for correspondence:

Dr. Anil Balaso Balugade, Assistant Professor, Department of Psychology, Shri Shahaji Chhatrapati Mahavidyalaya, Kolhapur (MS)

Email: balugadeanil@gmail.com

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Literature Reviews:

Pontes et al. (2014) investigated internet addiction and loneliness among children and adolescents. A total of 131 Portuguese school students participated in this study, and the major finding indicated a positive association between Internet addiction and loneliness among children and adolescents.

Elona Hasmujaj (2016) examined Internet addiction and loneliness among students at the University of Shkodra. The sample consisted of 151 students aged 18–23 years. An effective tool for the Internet addiction test developed by Dr. Kimberley Young (1998) and the UCLA Loneliness Scale developed by Russel were administered to the selected samples. The obtained data were analyzed using mean, standard deviation (SD), linear regression, and t-test. The results of this study indicated a mild correlation between Internet addiction and loneliness. He also found a gender difference in the relationship between Internet addiction and loneliness.

Dr. Gill (2019) conducted a study on loneliness in relation to Internet addiction among adolescents. There were 200 senior secondary school students (100 males and 100 females). The age range of the adolescents was 15–18 years old. The study variables were assessed using the loneliness scale prepared by Dr. Anjali Arora (2008) and the Internet addiction test prepared by Dr. Kimberley Young (1998). The obtained data were analyzed using Pearson's correlation coefficient and t-test. The researcher found a positive correlation between loneliness and Internet addiction among adolescents. He also found that adolescent girls show higher levels of loneliness than adolescent boys; adolescent boys are more highly addicted to the Internet than adolescent girls.

Rainson et al. (2019) defined the relationship between internet addiction and loneliness among young adults. A total of 120 participants (60 male and 60 female) were included in this study. To assess the study variables, the Internet addiction test developed by Dr. Kimberley Young (1998) and the UCLA Loneliness Scale developed by Russel were administered to the selected samples. The obtained data were analyzed using Pearson's correlation coefficient and t-test. The results of the study showed no gender differences between Internet addiction and loneliness. It also showed a

moderate positive correlation between Internet addiction and loneliness.

Objectives:

1. To examine the internet addiction of adolescents.
2. To measure the loneliness of adolescents.
3. To assess the relationship between internet addiction and loneliness of adolescents.

Hypotheses:

1. There will be no significance gender difference in the level of internet addiction among adolescents.
2. There will be no significance gender difference in the level of loneliness among adolescents.
3. There will be positive relationship between internet addiction and loneliness among adolescents.

Methodology:

1. Sample:

Random sampling was used in this study. The study sample consisted of 100 adolescents (50 boys and 50 girls) who were junior college students in Kolhapur City. The age range of the adolescents was 16–19 years.

2. Variables:

Research Variables: Gender

Mobile Addiction

Loneliness

Controlled Variables: Age

Area of Residence

Family and Economic Status

3. Operational Definitions:

Internet Addiction:

It is an extreme and excessive use of the Internet that leads to physical, mental, emotional, and social problems.

Loneliness:

It is a state of mind. This makes it more difficult to connect family and peer groups.

4. Tools:

The following standardized two scales were used to data collection in this study.

1. Internet Addiction Test (IAT):

This test was developed by Dr. Kimberly Young. It consists of 20 items that measure mild, moderate, and severe levels of internet addiction. The test items assess problems related to personal,

occupational, and social functioning stemming from Internet use. All the items were collected using a five-point Likert scale. The scoring procedure is

simple. Table indicates the scoring procedure for the inventory.

Table No. 2
Scoring Procedure

Score for Positively Worded Items	Not Applicable	Rarely	Occasionally	Frequently	Often	Always
Scoring Procedure	0	1	2	3	4	5

The maximum possible score on the scale was 100, and the minimum score was 0. The lower range of the scale indicates a mild level of Internet addiction (range 0 to 49), the medium score range of the scale indicates a moderate level of Internet addiction (range 50 to 79), and the higher score range of the scale indicates a severe level of Internet addiction (range 80 to 100). The Chronbach's alpha and construct validity is 0.93 and 0.95 respectively. There was no time limit to solve the test, but it could be solved in 15 min.

2. Loneliness Inventory (LI):

This scale was constructed by Uma and Meenakshi (2010) to measure the level of loneliness among adolescents, especially undergraduate students. It consists of 19 items, including 11 positive and eight negative items. Each item has

five responses: Never, Rarely, Sometimes, Many times, and always. Scoring was performed using a simple scoring key. The score of the scale ranged from 19 to 95. The low loneliness range was 19 to 36, the average loneliness range was 37 to 49, and the high loneliness range was 50 to 95.

Table No. 3
Showing Positive and Negative Items of Perceived Loneliness Scale

Items	Response	Total Items
Positive	2,3,4,7,8,10,11,12,13,15,17	11
Negative	1,5,6,9,14,16,18,19	08
Total		19

There is no time limit to solve this inventory, but it can be solved within 15 minutes. The reliability coefficient was 0.72 and high concurrent validity was high.

5. Statistical Analysis:

The very effective statistical tools such as Mean, SD, 't' test and Pearson product moment correlation coefficient were adopted for analyzing the obtained data.

6. Result and Discussion:

Table No. 4
Mean, SD and 't' value of Internet Addiction among Adolescents

Dependent Variable	Independent Variable	N	Mean	SD	't' Value	Significance
Internet Addiction	Boys	50	58.94	14.83	0.219	NS
	Girls	50	55.60	12.04		

Figure No. 1

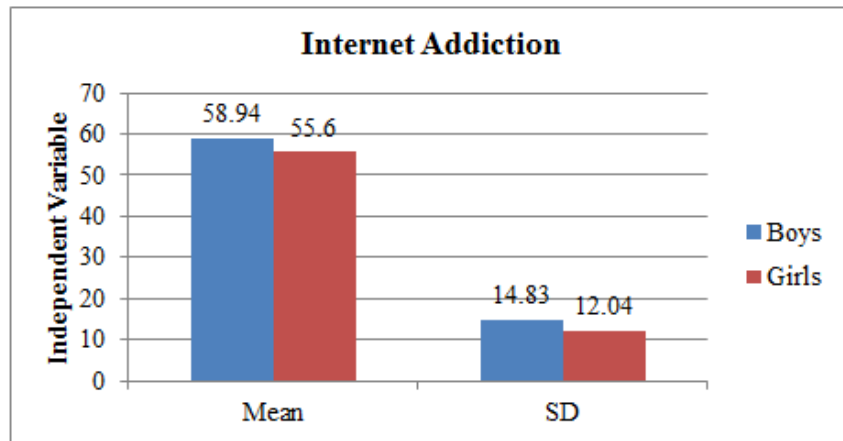


Table No. 4 and Figure No. 1 depicts that mean, SD and 't' value of internet addiction of boy and girl adolescents. Mean score of boys adolescents is 58.94 and SD is 14.83. Mean score of girl adolescents is 55.60 and SD is 12.04. The obtained 't' value is 0.219 which statistically not significant. It means that **hypothesis no. 1 "There will be no gender difference in the level of internet addiction among adolescents" is accepted.**

This result might have occurred because both boys and girls showed equal interest in and attitudes towards Internet activity. Both have equal emphasis on the Internet for educational purposes, entertainment, use of leisure time, social media,

watching and playing video games, fashion, beauty, etc. In addition, they were equally bored, depressed, exhausted, lonely, anxious, and more socially deprived. According to data from **Global Population Accessing** the Internet from 2019 to 2022 by Gender (Ani Petrosyan, February 2023), nearly 70% male and 63% female use the Internet worldwide. Similar studies shows that, Rainson et al (2019) found that there is no significance difference between male and female adolescents. Hasmujaj Elona (2016) also found no gender differences between Internet addiction and loneliness.

Table No. 5
Mean, SD and 't' value of Loneliness among Adolescents

Dependent Variable	Independent Variable	N	Mean	SD	't' Value	Significance
Loneliness	Boys	50	56.92	12.08	0.812	NS
	Girls	50	56.34	12.32		

Figure No. 2

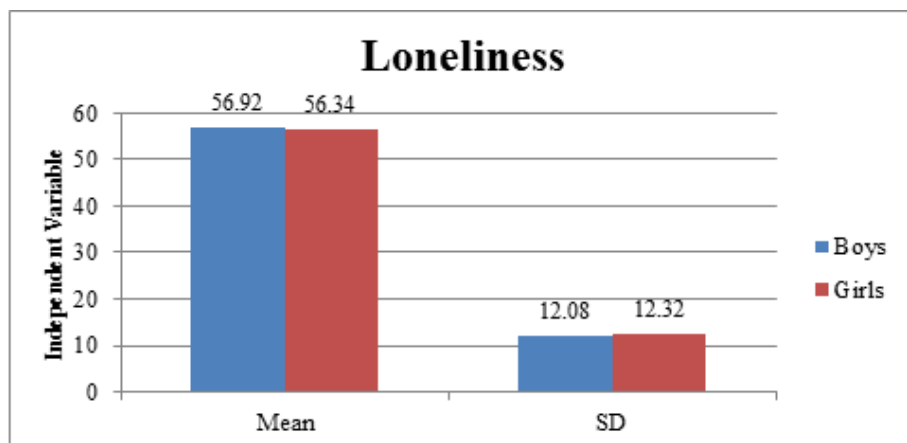


Table No. 5 and Figure No. 2 depicts that mean, SD and 't' value of loneliness of boy and girl

adolescents. Mean score of boy adolescents is 56.92 and SD is 12.08. Mean score of girl adolescents is

56.34 and SD is 12.32. The obtained 't' value is 0.812 which statistically not significant. **It means that hypothesis no. 2 "There will be no significance gender difference in the level of loneliness among adolescents." is accepted.**

This result might be because both boys and girls show isolation, sex, physical problems,

lack of self-esteem, lack of self-confidence, lack of support, lack of desired relationships, negative thinking, mood swings, anxiety, and depression. Similar studies by Gursay et al. (2006) and Sezer et al. (2011) also highlighted that there is no statistically significant gender difference between boys and girls.

Table No. 6

Correlation between Internet Addiction and Loneliness among Adolescents

Correlation	Dependent Variable	Mean	SD	'r' value	Significance
Correlation between Internet Addiction and Loneliness	Internet Addiction	57.27	13.54	-0.032	NS
	Loneliness	56.63	12.14		

Figure No. 3

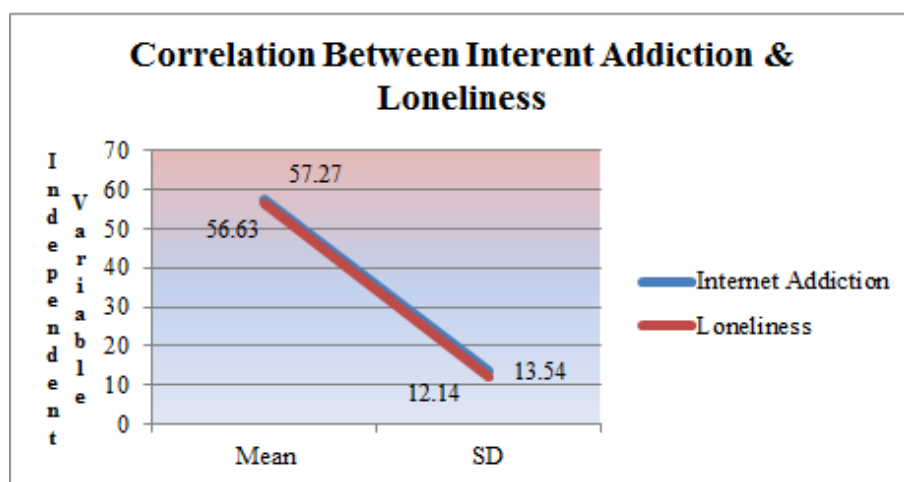


Table No. 6 and Figure No. 3 depicts that correlation between internet addiction and loneliness of boy and girl adolescents. The obtained 'r' value is -0.032 which statistically not significant. It means that **hypothesis no. 3 "There will be positive relationship between internet addiction and loneliness among adolescents." is rejected.**

This result may be due to the lack of interconnection between Internet addiction and loneliness among adolescents. Different causes lead to internet addiction and loneliness among adolescents. Thus, there is a negative association between internet addiction and loneliness. Hasnugaj (2016) found a negative correlation between Internet addiction and loneliness in relation to gender. Alqahtani et al. (2020) also found no correlation between internet addiction and loneliness in relation to gender.

Conclusions:

There were three hypotheses tested in this study and following conclusions were drawn.

1. No significant difference was found between adolescent boys and girls in relation to Internet addiction.
2. There is no significance difference found between boy girl adolescents in relation to loneliness.
3. There is no gender significance correlation found between internet addiction and loneliness

Limitations:

1. The sample of the study related to only Kolhapur city.
2. The sample size was very small
3. Present study focused on only age group of 16 to 19 years.

Recommendations:

In the future, more studies and research should be conducted on other variables (such as religion, age, socio-economic status, education, etc.) and samples for generalization of the results.

Implications:

- Improve the self-esteem and social skills among the adolescents.
- Role of parents are also important. Parents should communicate to their children.
- Emphasis on Physical exercise and meditations
- There is also a need to establish counseling cells in schools and colleges. The government should appoint counselors to schools and colleges. Schools must organize awareness

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Conflicts of interest

The authors declare that there are no conflicts of interest regarding the publication of this paper.

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programs regarding how to cope with loneliness and the proper use of the internet.

- Seminars, workshops, and group discussion activities should be organized to improve the overall personality development of adolescents.
- Government should prepare proper policies to prevent internet addiction among the adolescents.

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