ONLINE FRIENDSHIP AND LONELINESS AMONG COLLEGE STUDENTS

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Abstract

The present study aimed to examine the relationship between loneliness, online friendship among college students. A correlational research design was adopted for the study. The sample consisted of 131 college students (male and female) aged 18–25 years. Data were collected using standardized tools, namely the Loneliness Scale, Social Connectedness Scale. Descriptive and inferential statistics were employed for data analysis. The findings revealed that the majority of students reported moderate levels of loneliness and online friendship. A negative but weak correlation was found between loneliness and online friendship, indicating that online friendship was associated with a slight reduction in loneliness. Significant age differences were observed in loneliness, whereas no significant differences were found based on gender. However, online friendship did not differ significantly across age or gender. The study highlights that while online friendships contribute to maintaining social connections, they may not be sufficient to significantly reduce loneliness among college students, emphasizing the need for strengthening meaningful social interactions to enhance psychological well-being.

Key words: Loneliness, social connections, Online friendship, College students.

Introduction

Online friendships have emerged as a primary means of interaction with others in social terms among college students, which allowed them to communicate and keep their relationships with each other despite the lack of physical contact. The process of adjusting to college life usually entails breaking off from family ties, adapting to new surroundings and handling more demanding academic activities; all these may cause the student to feel lonely. However, digital technologies provide avenues for people to interact socially, express their emotions and reveal their selves, thus possibly being a source of support for students during this phase of transition.

The concepts of online friendship and social connectedness are interrelated and vice versa in terms of students experiencing the social side of life. Social connectedness denotes an individual's perception of being included, having a close relationship and experiencing a profound interpersonal bond.

Online friendships, with the support of digital communication, increasingly take part of the face-to-face interaction by letting people keep the relationships going no matter the time limits, physical distance, or the person's fear of socializing. Loneliness is a personal feeling that one gets when there is a gap between the social relationships that the person wants and the ones that he or she actually has.

College students are often lonely because of academic pressures, relocation, and the difficulty of finding friends that can satisfy their emotional needs. At the same time, online communication may provide social support and create a sense of belonging, but it does not always help to lessen loneliness, especially when interactions are shallow. Thus, it is vital to comprehend the link between online friendship and loneliness as it will indicate whether digital social connections are a significant contributor to students' mental health.

Review of Literature

The following studies provide meaningful insight in to the various aspects of Online friendship and Loneliness, improving our understanding and highlighting the need for further research for this study.

Archana Kumari& Jyotsna (2010), Conducted study on "Impact of Social Networking Sites on Interpersonal Relationships". This study aims to present study was to find out the impact of use of social networking sites on their social relationship. Study used a descriptive survey method to examine how social networking sites influence students' social interactions. Their findings indicated that SNS platforms increased communication frequency and helped maintain existing relationships, but excessive use reduced face-to-face interactions and weakened certain real-life social ties. The study concluded social networking sites have changed how college students communicate by shifting most interactions to online platforms. They help students stay connected with friends, parents, and teachers, offering convenience and a sense of belonging. Overall, SNS use brings both benefits and challenges, highlighting the need for awareness and safe usage practices.

Aujla (2024), Conducted study on "Prevalence of Loneliness Among College-Going Students". This study aims to find prevalence of loneliness among college going students of three districts, Barnala Sangrur and Patiala of Punjab. Study used on descriptive survey design with 200 students from Punjab and assessed loneliness through the UCLA Loneliness Scale, a tool with strong reliability and validity. Findings indicated that most students experienced moderate to high levels of loneliness, with female students reporting significantly higher loneliness than males. The study concluded that loneliness is highly prevalent among college

students and female college going students are found to be more alone than male college going students. So, college going students should be engaged in extracurricular activities. Requires targeted counseling and supportive interventions.

Cipolletta, Ronconi, and Tomaino (2025), Conducted study on "Social connections combat loneliness and promote wellbeing among college students coming out of the COVID-19 pandemic". The aim of this study is to analyze college students' wellbeing and loneliness in relation to the impact of the COVID pandemic, social support, and the frequency of activities carried out with others following the period of strictest restrictions. Study used a cross-sectional design with 268 college students. The researchers used validated tools including the ULS-6 Loneliness Scale, MSPSS, GAD-7, PHQ-9, SWLS, and COV19-QoL, all showing strong reliability and validity. The study concluded that loneliness, anxiety, and depression increased with COVID-19 impact, while strong social support and social activities improved wellbeing among students.

Dongyuan Lu et al (2016), conducted study on " Who are you " real " friend analysing and distinguishing between offline and online friendship from social multimedia data ". This study aims to analyze and distinguish the offline and online friendship from social multimedia data. Survey based data were collected. Sample size was 701.Findings shows that Instagram onsite offline friends show significant difference in features related to reciprocity and ego proximity.

Hood, Creed, and Mills (2017), Conducted study on "Loneliness and Online Friendships in Emerging Adults". This study aims to online communication and friendships on Social Networking Sites (SNS) in emerging adults. Study used a questionnaire survey with 149 first-year university students to explore how loneliness relates to motives for Internet use online communication and online friendships. The findings showed that social and romantic loneliness predicted greater social-compensation and social-networking motives which led to more online communication and self-disclosure ultimately contributing to a higher number of online friendships. The study concluded that loneliness affects how emerging adults form online friendships mainly through their motives and communication behaviours on social networking sites. Overall, the findings highlight that different types of loneliness shape online friendship patterns in different ways and that motives and communication behaviours are key pathways connecting loneliness to online social outcomes.

Verma and Singh (2024), Conducted study on "Impact of Loneliness on Mental Health Among University Students". This study aims to investigate loneliness's impact on university students' mental health. Study used on employed a cross-sectional design with 200 university students selected through purposive sampling. Using the UCLA Loneliness Scale and the Mental Health Inventory, both showing strong reliability and validity, the study revealed a significant negative correlation between loneliness and mental health, indicating that higher loneliness is linked to poorer psychological well-being. The authors concluded that loneliness increase physical as well as psychological health issues. Students are more

vulnerable to mental health issues. In our study, loneliness is negatively correlated with mental health. Loneliness impacts the MH of university students.

Yu and Leung (2023), Conducted study on "Establishing Ties or Strengthening Friendships? Students'. This study aims to determine the differences and reasons for using outgroup OSNs by gender, age and students' group (Mainland and Hong Kong [HK] students). Online Social Networks in Intercultural Friendship Development". Study used on mixed-methods design with 198 survey participants and 24 interviews to examine how online social networks support friendships between Mainland and Hong Kong students. Their findings showed that instant messaging platforms help reduce communication anxiety and maintain friendships easily, while social networking sites support self-disclosure and showing care. The study concluded that online networks strengthen existing friendships but rarely create new ones. Overall, the OSNs play a pivotal facilitating role in intercultural friendship development from different perspectives. Moreover, we observed that some benefits of using outgroup-OSNs (e.g. reducing communication anxiety) are limited to the elementary level.

Zhou and Feng (2025), conducted study on "Social Anxiety and Smartphone Addiction Among College Students: The Mediating Role of Loneliness". This study this study explored how social anxiety and loneliness predict smartphone addiction, adding to prior research in this area. Study used a cross-sectional design with 2,113 Chinese college students selected through random sampling. Using standardized scales for social anxiety, smartphone addiction, and loneliness, all with acceptable reliability and validated through CFA, the study found that social anxiety significantly predicted smartphone addiction, and loneliness partially mediated this relationship. The finding shows that social anxiety is significantly correlated with smartphone addiction and loneliness partially mediating their relationship. Loneliness can prevent smartphone addiction among college students with social anxiety.

Need for the Study

Although various studies have investigated loneliness, online behavior, and the usage of social networking platforms among students, studies that have directly examined the relationship between online friendship and loneliness are scant. Existing studies have either focused on loneliness in relation to mental health, smartphone addiction, or post-pandemic wellbeing, or on online communication patterns without measuring the quality or impact of online friendships. Furthermore, most findings come from foreign samples, and hardly any evidence has been reported from Indian college students, whose digital habits and social dynamics may be vastly different. Past research also reports mixed conclusions in that some suggest online interactions lessen communication anxiety and improve friendships, while others report that excessive uses of SNS weaken offline relationships. Very few studies have considered whether online friendships help in reducing loneliness or whether loneliness is a reason for students to seek more online relationships. A clear research gap thus exists with regard to how online

friendships influence loneliness among college students within the Indian context, and this brings into focus the need for the present study.

Objectives of the Study

- To assess the level of Online friendship and loneliness among college students.

- To examine the relationship between online friendship and loneliness among college students.

- To find out the significant difference in the mean score of online friendship and loneliness among college students based on gender and age

Hypotheses of the Study

- There is no significant relationship between online friendship and loneliness among college students.

- There is no significant difference in the level of online friendship and loneliness among college students.

- There is no significant difference in the mean score of loneliness among college students based on age

- There is no significant difference in the mean score of online friendship among college students based on age

- There is no significant difference in the mean score of loneliness a among college students based on gender

- There is no significant difference in the mean score of online friendship among college students based on gender

Methodology

Research design

Descriptive Research design was undertaken, the survey method was used in this study to choose the participants and a simple random sampling technique was used. 131 University students between the ages of 18 and 26 were selected as samples for this study.

Tools

UCLA Loneliness Scale Version 3 developed by Russell, D, Peplau, L.A, & Ferguson.L.

A 20-item scale designed to measure one's subjective feelings of loneliness as well as feeling of social isolation. Participants rate each item on a scale from 1 (never) to 4 (often).

The Social Connectedness Scale- Revised. Developed by Lee, R. M., & Robbins, S. B.,1995

A 20- items scale designs to assess the degree to which youth feel connected to others in their social environment.

Online friendship is measured using social connectedness referred by Grieve et. al, (2013).

Result& Discussion

Descriptive Table

The objective was to calculate statistical measures such as mean, median, mode, standard deviation skewness and kurtosis. The summarizes of these statistical details are presented in Table

Table 1: Mean, Median, Mode, SD, Skewness, Kurtosis of loneliness and online friendship among college students.

Variables	NO	Mean	Median	Mode	SD	Skewness	Kurtosis
Loneliness	131	50.4	51	55.0	9.47	-0.68	1.00
Online friendship	131	28.09	26	24	8.74	0.52	-0.006

Table 1 provides the data of descriptive statistics on Loneliness and Online friendship among college students. The descriptive analysis indicates that Loneliness Mean is 50.4, the Median is 51, the Mode is 55.0, the SD is 9.47, the skewness is -0.68which represents the distribution is negatively skewed and the kurtosis is 1.00 indicates the leptokurtic. In online friendship the Mean is 28.09, the Median is 26, the Mode is 24, the SD is 8.74, the skewness is 0.52 which represents the distribution is positively skewed and the kurtosis is -0.006 indicates mesokurtic. The descriptive statistics adherence to the normal distribution allows the study to continue.

Table 2: Level of loneliness and online friendship among college students.

Level	High		Moderate		Low	
	N	%	N	%	N	%
Loneliness	22	17	95	72	14	11
Online friendship	19	14	95	72	17	13

The levels were concluded using mean SD of Loneliness and online friendship. In loneliness 22(17%) of participants showed high level of loneliness and in online friendship the 19 (14%) of participants showed high level of online friendship. In Loneliness the 14 (11%) of participants showed low level of loneliness and in online friendship 17 (13%) of the

participants showed low level of online friendship. In Loneliness and online friendship 72% of participants showed moderate level of loneliness

Table 3: Mean difference 't' test analysis of loneliness among college students based on demographic variables age and gender.

Loneliness		N	Mean	SD	t- value
Age	18-21	64	40.89	9.51	6.59*
	22-25	67	51.82	9.45	
Gender	Female	91	50.45	9.48	0.016@
	Male	40	50.48	9.55	

The above table, the obtained t value (t = 6.59) $p < .05$, with students aged 22–25 years (M = 51.82, SD = 9.45) reporting higher loneliness than those aged 18–21 years (M = 40.89, SD = 9.51) indicates statistically significant difference, suggesting college students experience higher levels of loneliness. This difference may be attributed to increased academic pressure career related concerns or reduced peer interactions as students progress through college life. In terms of gender difference female students (M= 50.45, SD=9.48) reported a slightly higher level of loneliness compared to male students. How ever the obtained t value (t = 0.016) indicates that the difference is not statistically significant suggesting that loneliness is experienced similarly by both male and female students. Overall, the finding reveal that age plays a significant role in loneliness, whereas gender does not show significant influence. This highlights needs for age specific interventions and support systems in college.

Hence the stated hypothesis "There is no significant difference in the mean score of loneliness among college students based on age" is rejected. And the hypothesis stated "There is no significant difference in the mean score of loneliness an among college students based on gender" is accepted.

Table 4: Mean difference 't' test analysis of online friendship among college students based on demographic variables age and gender.

Online Friendship		N	Mean	SD	t-value
Age	18-21	64	28.10	8.82	0.006@
	22-25	67	28.11	8.77	
Gender	Female	91	28.08	8.79	0.16@
	Male	40	28.26	8.80	

 Note- @ - not significant, * - 0.05

From analyzing the data this table shows the mean score of online friendship based on age is 0.006, the obtained t value indicates that the difference between the two age groups is not statistically significant, suggesting that age is does not have a significant influence on online friendship among college students. Similarly, the analysis based on gender revealed that female

students (M= 28.08, SD = 8.79) and male students (M = 28.26, SD = 8.80) reported comparable levels of online friendship. The obtained level (t = 0.16) further confirms that the difference is not statistically significant. This finding indicates that both female and male students experience similar level of online friendship.

Overall, the suggest that online friendship among college students does not significantly vary based on age or gender. Hence the hypothesis. "There is no significant difference in the mean score of loneliness an among college students based on gender" is accepted. And also, the hypothesis stated "There is no significant difference in the mean score of online friendship among college students based on gender" is accepted.

Table 5: Correlation between loneliness and online friendship among college students

Variables	r value
Loneliness	-0.149
Online friendship	

Table 5 explores the data on the correlation between loneliness and online friendship among college students. Correlation analysis revealed a weak negative relationship between loneliness and online friendship, $r = -0.149$, $p = .089$, indicating that higher online friendship is associated with a slight reduction in loneliness. However, this relationship was not statistically significant.

Limitation of the Study

The current research possesses limitations that need to be recognized. Firstly, the use of self-report measures might have caused some response bias, as the answers given by the participants could have been affected by their need to be appreciated socially or by their personal understanding of the question. The cross-sectional research design restricts the ability to make causal inference concerning the association between online friendship and loneliness. Longitudinal or experimental studies are recommended to more accurately determine the directionality of this relationship. Moreover, the participants were only college students from one context, which might limit the applicability of the results to other populations.

Conclusion

The current research showed a slight negative and non-significant correlation between online friendships and loneliness among university students. Digital friendships help to keep up social contacts, but they were not strong enough to reduce loneliness significantly. Differences in loneliness were found based on age with the older students reporting higher levels of loneliness, while gender had no effect on loneliness or online friendship. The findings imply that the existence of strong emotional attachment and quality of interaction whether online or offline are very essential in dealing with loneliness. The mindset of interventions that aim at improving social support and emotional connectedness may result to increased psychological well-being for students in universities.

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