Loneliness, social anxiety, social support, and internet addiction among postgraduate college students

Abstract

Background: There is little evidence that loneliness, social anxiety, and social support can cause excessive use of internet addiction in college students. The present study is just an attempt to show a relationship between loneliness, social anxiety, social support, and internet addiction among college students. **Methodology:** Cross-sectional study design was used to select sample from four departments (History, Philosophy, Hindi, and English) of Ranchi University using simple random sampling. A total of 100 students were included and informed consents were taken for further assessment. Sociodemographic datasheet, the revised UCLA (University of California, Los Angeles) Loneliness Scale, the Social Interaction Anxiety Scale (SIAS), the Multidimensional Scale for Perceived Social Support (MSPSS), and the Internet Addiction Test (IAT) were administered. Study was undertaken with the permission of scientific and ethics committee of Central Institute of Psychiatry, Ranchi. Data was analysed by using Statistical Package for the Social Sciences (SPSS) version 23.0. **Results:** High level of loneliness (92%), social anxiety in 21%, social phobia in 22%, and severe internet addiction was present in 15% of the respondents. Loneliness has a significant positive correlation with social anxiety (r=0.285, p<0.01). In regression analysis, social anxiety, perceived social support, and internet addiction contributed significantly to the prediction of loneliness among college students [F(3,96)=4.492, p=0.005] accounting at 1.23% variance. Social anxiety strongly contributes to the variance on the loneliness (Beta=0.358, t=3.389, p=0.001). **Conclusion:** Social anxiety has a significant relationship with loneliness and act as prominent predictors for loneliness. Prevalence of internet addiction was high among college going students.

Keywords: Phobia. Predictor. Prevalence.

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INTRODUCTION

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.[1] Those who perceive themselves as lonely may not necessarily lack social relationships; but, instead may consider their relationships as inadequate or poor in quality.[2] Social anxiety also has been important predictors in college adults. A study conducted by Purdon and colleagues[3] concluded that vast majority of individuals experience symptoms of anxiety in social situations from time to time. Social support plays a vital role in enhancing social competence among college adults.[4] But, there is little evidence on relationship between loneliness, social anxiety, and social support, and internet addiction in college students. A study conducted by Hardie and Tee[5] stated that over-users and internet addicts spending increasingly more time in online activities, being more socially anxious and emotionally lonely, and gaining greater support from internet social networks than average internet users and perceived support was one of the significant predictors of excessive internet use. In a study on relationship among loneliness, social anxiety, and problematic internet use, loneliness and social interaction had found to be counterfeit and social anxiety was mystifying variable.[6] A study conducted by Shaw and Gant[7] concluded that internet use was found to decrease loneliness significantly, while perceived social support increased significantly. The present study is to assess loneliness, social anxiety, social support, and internet addiction among postgraduate college students.

Objectives

- To assess loneliness, social anxiety, social support, and internet addiction among college students.
- To find relationship between loneliness, social anxiety, social support, and internet addiction.

METHODS AND MATERIALS

This research study was a university-based cross-sectional study among postgraduate college students. The departments (History,

Hindi, English, and Philosophy) of the Ranchi University were selected through convenient sampling. Total number of students were 960 in all the four departments during the study period. After inclusion and exclusion criteria, only 870 respondents fulfilled the criteria. Out of 870 respondents, 100 respondents were selected using simple random sampling technique by selecting every alternative roll number from the students' attendance register. In the present study, both male and female postgraduate students, having access to internet in computer and smartphones, able to understand English, and who were willing to participate were taken into consideration. Respondents studying in Ranchi University were included in the study. Permission was taken from the university to conduct the study. Study was undertaken with the permission of scientific and ethics committee of the Central Institute of Psychiatry, Ranchi.

Description of the tools

Sociodemographic and family sheet

It was developed to obtain information about gender, education, perceived economic status, habitat, religion, parent's occupation, family type, parenting practices, age of parents, personal and family history of substance use, duration of use, and average time spent on internet.

The Internet Addiction Test[8]

It comprises of 20-item questionnaire in which responses are measured in five-point Likert scale. The scale has four categories; none (zero to 30) indicates no presence of internet addiction, mild (31-49) which indicates an average online user, moderate (50-79) which indicates an increase of internet addiction from occasionally to frequent use, severe (80-100) which indicates a high level of internet usage. Internal consistency (α=0.88), test-retest reliability (r=0.82) and bisection (r=0.72) of the scale are satisfactory.

The revised UCLA (University of California, Los Angeles) Loneliness Scale[9]

It is a scale consisting of 20 items to measure loneliness. It comprises of two categories; if the total score of an individual is 40 or below, it qualifies for rarely lonely and if it is above 40, it comprises of being lonely. It is a four-point Likert scale, with items 1, 5, 6, 9, 10, 15, 16, 19, 20 of reverse scoring. Internal consistency ranges from 0.89 to 0.94 and test-retest reliability is r=0.73.

The Social Interaction Anxiety Scale (SIAS)[10]

It is a 20-item scale to measure social anxiety and social phobia. It is a five-point Likert scale. Total score of the scale is 60. If an individual scores 34 and more out of 60, it qualifies for social phobia and if an individual scores 43 and more out of 60, it qualifies for social anxiety. Items like 5, 9, and 11 have reverse score.

The Multidimensional Scale of Perceived Social Support (MSPSS)[11]

It is a 12-item scale to measure social support. It is a four-point Likert scale. There are 12 items, with four items for each subscale. The scale attributes good internal and test-retest reliability. The scoring of the scale comprises of low support (1-2.9), moderate support (3-5), and high support (5.1-7).

Statistical analysis

Statistical Package for the Social Sciences (SPSS) version 23.0 was used for analysis and interpretation of data. For the analysis, frequency, cross table, correlation (Pearson), and regression analysis were done.

Procedure for data collection

Step 1

Written consent and permission from the university higher authorities was taken through consent form.

Step 2

Permission was taken from the Head of the Department, and with his/her approval a particular day and time was finalised to conduct the study. Attempt was made to administer the tools at a pre-scheduled time that was after the end of a particular lecture. At the onset, nine departments, selected using convenience sampling technique, were approached. From which, four departments finally allowed to conduct the study on their students. The four departments were History, English, Hindi, and Philosophy. Initially 960 students were approached out of which 100 students were selected on the basis of random sampling in accordance with the inclusion and exclusion criteria. The selected students were informed about the purpose of the study and questionnaire was distributed. The datasheet was distributed and collected on the same day, in order to avoid any kind of manipulation from the respondent side and for accuracy of the study.

RESULTS

The sociodemographic summary (Table 1) reflects that majority of respondents (71%) were in the age group of 20-25 years, female (66), single (87), Hindu (63), general category (43), hailing from middle socioeconomic condition (93) of urban sector (70) with nuclear family type (53). Talking of substance intake in respondents, it was found that majority of respondents were not having a history of substance intake (71). Moreover, the table also shows that majority of respondents parents were also not having a history of substance intake (64). Majority of respondent were having 2 and more siblings (36).

As shown in prevalence summary (Table 2), it was seen that 92% of the respondents were being lonely, 22% were having social phobia, 21% were having social anxiety, and 38% were found to have high level of perceived social support. In internet addiction 15% respondents were at significantly above average use.

As shown in correlation summary (Table 3), loneliness has a significant positive correlation with social anxiety (r=0.285, p=<0.01).

As shown in Table no. 4, social anxiety, perceived social support, and internet addiction contribute significantly to the prediction of loneliness among college student [F(3,96)=4.492, p=0.005] accounting for 1.23% variance. Remaining 98.7% was attributed to variable not included in the study. Social anxiety strongly contributes to the variance on the loneliness (Beta=0.358, t=3.389, p=0.001).

Table 1: Sociodemographic profile of respondents (N=100)

Variables	Frequency (N)
Age (in years)	
20-25	71
25-30	29
Sex	
Male	34
Female	66
Marital status	
Single	87
Married	13
Religion	
Hindu	63
Muslim	12
Christian	17
Other	8
Category	
General	43
OBC	27
ST	5
SC	25
Socioeconomic status	
Lower	7
Middle	93
Domicile	
Rural	30
Urban	70
Family type	
Nuclear	53
Joint/extended	47
Substance use	
No	71
Yes	29
Substance use by parents	
No	64
Yes	36
Total number of siblings	
0	34
1	30
2 and above	36

OBC=Other Backward Classes, ST=Scheduled Tribe, SC=Scheduled Caste

DISCUSSION

The present study showed that the prevalence rate of loneliness among college adults was high (92%). Similar findings were found in the studies where it was concluded that level loneliness was high among college adults.[12,13] Likewise, in this study, social anxiety was found in 21%. There are studies which show that prevalence rate of social anxiety among college going students was falling in the

Table 2: Prevalence of loneliness, social anxiety, social support, and internet addiction among college students

Variables	Frequency (N)
Loneliness	
Rarely lonely (≤40)	8
Being lonely (>40)	92
Social anxiety	
Normal	57
Social phobia	22
Social anxiety	21
Perceived social support	
Low	4
Moderate	58
High	38
Internet addiction	
Average	33
Above average	52
Significantly above	15

Table 3: Relationship between loneliness, social anxiety, social support, and internet addiction

Variables	Social anxiety	Perceived social support	Internet addiction
Loneliness	0.285*	0.044	-0.127

*$p<0.01$

range of 3.5 to 64.2%.[14,15] In this study, it was found that half of the population were having moderate level of social support (58%) and 38% of population was having a high level of social support. Inversely, studies show that social support was minimal among college adults due to factors like low income and increased stressful life.[16,17] The present study showed that 15% fulfilled the criteria of severe level of internet addiction. Other studies also showed that prevalence rate of internet addiction among college adults was in a range of three to 18%.[18,19] In the present study, it was found that loneliness has a significant positive correlation with social anxiety. Similar finding was found in other studies where it was concluded that relationship between loneliness and social anxiety was found to be spurious, and that social anxiety was the confounding variable.[6,20] The present study also found that loneliness is negatively correlated with internet addiction. Inverse result was found in other studies which concluded that loneliness was a predictor of internet addiction. Internet addicted people were more socially anxious and emotionally lonely.[19] In this study, it was found that social anxiety was a significant predictor for loneliness. Similar finding was found in other studies where social anxiety was found to be an important predictor for loneliness.[6,10]

Limitations and future directions

No research is free from limitations. This investigation is not an exemption. Small sample size was one of the major limitations of the study, sample size was not determined by using any scientific method. With larger samples, more

Table 4: Regression analysis of social anxiety, perceived socials support, and internet addiction on loneliness (N=100)

Multiple R	R²	Adjusted	Standard		
0.351	0.123	0.096	7.10273		
ANOVA Table					
	df	Sum of square	Mean of square	F	Significant
Regression	3	679.905	226.635	4.492	0.005
Residual	96	4843.085	50.449	-	-
Variables in the equation					
Variables	B	SE	Beta	t	Significant
IAT	-0.038	0.037	-0.098	-1.023	0.309
SIAS	0.209	0.062	0.358	3.389	0.001
MSPSS	1.132	0.615	0.194	1.840	0.069
Constant	38.402	4.900	-	7.837	0.000

IAT: Internet Addiction Test, SIAS: Social Interaction Anxiety Scale, MSPSS: Multi-dimensional Scale for Perceived Social Support, SE: Standard Error

robust findings would have been found. Few Tools like UCLA, SIAS, which were administered, were not found to be used in Indian studies. More scales could have been used to get a comprehensive picture of the study. A large sample should be taken in future. More diverse groups should be involved and comparison between them should be assessed.

Implication of the study

The current study has shown the prevalence of internet addiction among postgraduate college students and its association with various psychosocial determinants including sociodemographic variables, loneliness, social anxiety, and perceived social support. This can be of great help for mental health professionals to appropriate for the same.

Conclusion

A great deal of recent research in social sciences has focused on the role of close personal relationships in behaviour and experience. But, variables like loneliness, social anxiety, social support, and internet addiction must be further explored; because, the present study has showed that these variables play a vital role in modulation of behaviour in college aduls. Further research in this domain will definitely give a better picture of issues in college adults and their mental health.

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