

## **LONELINESS AND DEPRESSION OF CHITTAGONG UNIVERSITY STUDENTS**

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### **ABSTRACT**

The present study attempted an empirical investigation to explore the loneliness and depression of Chittagong university students. A total of 100 purposively selected and readily available respondents constituted the sample of the study. An adapted Bengali version of Revised UCLA Loneliness Scale (Parveen 2007) and Depression Scale developed by Rahman and Uddin (2005) were used. Data were analyzed by Pearson Product Moment Correlation and two-way analysis of variance (ANOVA). The findings of the present study showed that there is no significant difference between male and female students; and residential and non-residential students in loneliness. No significant interaction effect was found between gender and residence in loneliness. There is no significant difference between the males and females, however residential students have significantly more depression ( $F = 14.06$ ,  $df = 1$ ,  $p < 0.01$ ) than non residential students. No significant interaction effect was found between gender and residence in depression. Results also showed that loneliness is positively correlated ( $r = 0.29$ ,  $p < 0.01$ ) with the presence of depression among the respondents of this study.

**Key Words:** Loneliness, depression, residential status, gender.

### **INTRODUCTION**

Loneliness is the distress that results from discrepancies between ideal and perceived social relationships. This cognitive discrepancy perspective makes it clear that loneliness is not synonymous with being alone. Loneliness is the distressing feeling that occurs when one's social relationships are perceived as being less satisfying than what is desired. Weiss (1981) suggested that feelings of loneliness are attributable to insufficient amounts of social contact as well as lack of perceived meaningful and intimate relationships with others. Such statements, however, were criticized conceptually by Perlman (1987) suggesting that insufficient social contact may not be the best indicator of the subjective

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experience of loneliness. More descriptive definitions contend that loneliness reflects an individual's subjective deficiencies in maintaining social relationships (Russell *et al.* 1984) or a lack of intimate connections in terms of one's social relationships (Reis 1990).

Rubior (1971) reported that even those individuals who had wonderful relationships, devoted and loving families, excellent and involved careers and hectic social lives, would at one time or another have to battle with loneliness. Individual differences may occur in terms of one's subjective experience of loneliness. An individual may have relatively few close relationships and yet experiences no loneliness. In contrast, one may have a large social network and experience significant loneliness. These differences may be subjective (level of felt intimacy) or objective (number of actual social contacts) in nature depending on the individual.

Loneliness may be caused by a multitude of factors. Some individuals may experience it because they are not accepted by their friends, the community or society at large. Others may experience loneliness because they may be experiencing a crisis or going through a temporary transition. For still others, the cause of loneliness may have an emotional or intellectual origin.

According to Cacioppo *et al.* (2009) loneliness is strongly connected to genetics. The death of someone significant in a person's life can also lead to feelings of loneliness. Loneliness can also be a symptom of a psychological disorder such as depression. Other contributing factors include situational variables, such as physical isolation, moving to a new location and divorce. Loneliness can also be attributed to internal factors such as low self-esteem.

Depression is a common mental disorder, characterized by sadness, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, feelings of tiredness, low energy and poor concentration. These problems can become chronic or recurrent and lead to substantial impairments in an individual's ability to take care of his or her everyday responsibilities. Depression has a significant impact on an individual's ability to perform life activities (Greenberg *et al.* 1990).

Depression is recognized as a common and debilitating problem in the student population. It is a serious mental health concern that affects all areas of functioning involved in a successful experience at university including motivation, concentration, feelings of self-worth, and mood (Andrews and

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Wilding 2004). Depressive symptoms in students can compromise learning and memory processes, adversely affecting academic performance and are associated with problem drinking and suicidal ideation (Hysenbeg *et al.* 2005). Depression has no social or cultural boundaries, as it may impact students of any age, sex, socio-economic status, ethnicity and year level. Being female, for example, is repeatedly found to be more highly associated with depression than being male (Adewuya *et al.* 2006).

There is evidence that students experience some slight variations in symptoms of depression. For example, changes in sleep and appetite may indicate depression in a clinical population but may not be a reliable indicator of depression in a student population as the university lifestyle may influence sleep and eating patterns and may not reflect changes related to depression only (Whisman *et al.* 2000). There is also evidence that students may experience cognitive symptoms, such as concentration difficulties, perfectionism and low self-evaluation, more frequently than clinical populations (Cox *et al.* 1999). Further, students experience motivational problems in the form of loss of interest and initiative and social difficulties related to developing friendships and assertiveness.

Over the past four decades, higher education researchers have frequently examined and compared student characteristics by separating students into two primary groups, residential and non-residential. Residential students are commonly defined as students living in institutionally owned or operated facilities on campus. Non-residential students are conversely defined as students living off-campus in non-institutionally owned or operated housing (Jacoby and Girrell 1981). Student accommodation has become one of the teething problems faced by higher education institutions in developing country context. In many countries, the governments have been the main provider of student accommodation for public higher education institutions. As a result of limited government resources, governments in developing countries like Bangladesh are unable to adequately meet the accommodation demand for all students.

Pike and Kuh (2005) studied engagement and intellectual development of students related to loneliness. They showed that students living on campus tended to be more engaged in the university community as well as more intellectually engaged as compared to non-residential students.

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Academic year found a contributing objective factor of loneliness. Shaver *et al.* (1985) investigated network changes, social skills, and loneliness of students. They found that first-year students, who are transitioning away from previous social support networks (e.g. family, friends) reported significantly more loneliness during their first year.

There are contradictory findings regarding gender and loneliness. Schultz and Moore (1986) studied the loneliness experience of university students and found that male students are usually lonelier than females. Clark (1980) studied Swedish people and found that 12% of the males and 25% of females suffered from loneliness. Khatib (2007) examined the relationship among loneliness, self esteem, self efficacy and gender of 495 college students in United Arab Emirates. He found female students' loneliness level is higher than male students'. But Russell *et al.* (1980) find no gender differences in relation to loneliness.

Vazquez and Blanco (2008) conducted study on major depression among Spanish university students. They found that 8.7% of a sample of 554 university students met criteria for a major depressive episode. Much literature indicates that girls tend to be more vulnerable than boys to internalizing problems such as depression and anxiety, whereas boys are more susceptible to externalizing problems such as aggression, delinquency, and substance use. Wiseman *et al.* (2007) studied gender differences in loneliness and depression of university students and found that females were significantly higher in depression than males.

Ceyhan and Ceyhan (2008) investigated loneliness and depression levels of university students. The participants of the study were 550 university students in Turkey. Findings indicated that 25% of total students had a high level of loneliness. Male students had higher levels of loneliness and depression than female students. Moreover, a moderately significant relationship was found between the loneliness and depression levels of students.

In a study of 110 depressed students, Eisemann (1984) found that depressed students felt lonelier and suffered more from loneliness than controls. He also found that experienced loneliness was negatively correlated with the number of regular contacts with family members for all depressed students. The number of friends of the students was negatively correlated with feelings of loneliness.

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Shelke (2012) studied mental health & adjustment among 200 residential and non- residential students. He found that residential students had more depression than non-residential students. He also found residential male students have poor mental health including depression than residential female students.

University is a transition period from being an adolescent to being an adult. It is a period for them to seek and fulfill their sense of individuality and at the same time, to seek and build close and social relationships with others. For many residential university students, this may be the first time they live away from their parents. They move from the emotional and social support of their families. Lack of adequate social and emotional support for university students, may lead to poor psychological consequences such as, loneliness and depression. Lonely students report poorer self-concepts and lower self-esteem. This lower sense of self includes negative evaluations of their health, appearance, behavior, and functioning. Depressive mood of students hampers their academic performance and responsible for concentration difficulties, low self-evaluation and reduced sense of pleasure in formerly enjoyable activities. Considering these facts, in order to develop interventions for loneliness and depression, it is necessary to determine the variables related to them and then to define those in the high-risk group. Several factors have been to explain the causes of loneliness and depression. Among them place of residential status and gender are employed to give a greater understanding about the explanation of loneliness and depression of university students of Chittagong. Most of the studies in this area have been done in western culture, but in Bangladesh there are very few studies. The present study will increase our theoretical knowledge and may help those persons who are concerned with loneliness and depression to select the appropriate intervention program.

Because these fields have not yet been studied, loneliness and depression level of Chittagong University students are unclear and need to be explored. To address this gap of knowledge, the objectives of this research were- (a) to find out loneliness and depression levels of the students of Chittagong University; (b) to investigate whether loneliness of students varies as a function of residence and gender; (c) to see whether depression of students varies as a function of residence and gender and (d) to observe whether there is any relation between loneliness and depression.

## MATERIALS AND METHODS

### *Sample*

100 respondents were purposively selected from readily available students residing in different halls of Chittagong University and some residential areas of Chittagong. Among them 50 (50%) were residential students and remaining 50 (50%) were non-residential students. Each group again consisted of 25 males and 25 females. The samples were taken from different academic sessions and different departments of Chittagong University.

### *Measuring Instruments*

The following instruments were used in the present study:

1. Loneliness Scale
2. Depression scale

### *Loneliness Scale*

Loneliness Scale was originally developed by Russell, Peplau and Ferguson (1978). It was revised by Russell, Peplau and Cutrona (1980). An adapted Bengali version of Revised UCLA Loneliness Scale (Parveen 2007) was used for measuring loneliness. It is a 20 items Likert type scale. 10 questions are positive and 10 are negative. There are four alternatives for each question. The scoring of positive items are 1 for Never, 2 for Rarely, 3 for Sometimes and 4 for Often and the scoring system for negative items is just opposite of the scoring system of positive items. The scale scores range from 20 to 80. Higher score means high level of loneliness and lower score means low feeling of loneliness. The measure was found highly reliable, both in terms of internal consistency (coefficient  $\alpha$  ranging from 0.89 to 0.94) and test-retest reliability over a 1-year period ( $r = 0.73$ ). Convergent validity for the scale was indicated by significant correlations with other measures of loneliness. Construct validity was supported by significant relations with measures of the adequacy of the individual's interpersonal relationships, and by correlations between loneliness and measures of health and well-being. Significant correlation ( $r = 0.88$ ) between scores of English and Bengali version indicated translation reliability of the scale that measured the same personality traits by the two versions.

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### *Depression scale*

The scale was developed by Rahman and Uddin (2005). The DS scale is a 30 items Likert type scale. Each item has 5 response alternatives. The response options are 'not at all applicable' (1), 'not applicable' (2), 'moderately applicable' (3), 'somewhat applicable' (4) and 'fully applicable' (5). All items were scored in positive direction. Higher scores indicate higher level of depression. Highest score in this scale is 150 and lowest is 30. It has four levels of severity norm. These are minimal (30-100 score), mild (101-114 score), moderate (115-123 score) and severe (123-150 score). The cut-off point of screening norm is 93.5, means individuals obtaining the score of 93.5 (or 94) or above are designated as depressed. The split-half reliability (Guttman split-half  $r = 0.76$ ) and test-retest reliability ( $r = 0.59$ ) found of the depression scale. Concurrent validity ranged from 0.37 to 0.55 and construct validity was found as 0.71.

### *Design*

Cross-sectional survey research design was followed for conducting the present study.

### *Procedure*

Standard data collection procedure was followed to collect data from the participants. The loneliness and depression scales were administered to the sample of residential and non-residential students studying in Chittagong University. The scales were administered to them individually. A demographic and personal information questionnaire was also used to collect data about participant's age, gender and residential status. Respondents were told that the sole purpose of the investigation was academic and their response would be kept confidential. Before administration of the questionnaires, necessary rapport was established with the respondents. All possible clarifications were provided to the respondents. There was no time limit for the respondents to answer all the items of the scales. After completion of their tasks the answered questionnaires were collected from them and they were given thanks for their sincere co-operation.

## **RESULTS AND DISCUSSION**

The data were analyzed by using mean, standard deviation, Pearson Product Moment Correlation and two-way analysis of variance (ANOVA). All statistical analyses were carried out using the statistical program SPSS version 16.0 for windows.

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Table 1 shows that the maximum and minimum loneliness score of students of Chittagong University were 70 and 32. The mean loneliness score was 49.41 and standard deviation was 7.39. When the range of the scores to be obtained from the loneliness scale (between 20-80) is taken into consideration, it shows that students of Chittagong University had an average level of loneliness. In case of depression the maximum and minimum score were 106 and 39. The mean depression score of students was 73.82 and standard deviation was 14.07. It indicates the minimal level of depression considering the levels of severity norm of the depression scale.

TABLE 1: DESCRIPTIVE STATISTICS OF LONELINESS AND DEPRESSION SCORE.

	N	Maximum	Minimum	Mean	Std. Deviation
Loneliness	100	70	32	49.41	7.39
Depression	100	106	39	73.82	14.07

Table 2 indicates that mean loneliness score of male was 48.45 (SD=7.15) and female was 50.28 (SD=7.59). The mean loneliness score of residential students was 50.70 (SD=7.56) and non-residential students was 48.12 (SD=7.06).

TABLE 2: DESCRIPTIVE STATISTICS OF LONELINESS SCORE ACCORDING TO GENDER AND RESIDENTIAL STATUS.

Gender	Residential status		
	Residential	Non-residential	Total
Male	$M = 46.84$ $SD = 6.13$	$M = 50.24$ $SD = 7.80$	$M = 48.54$ $SD = 7.15$
Female	$M = 54.56$ $SD = 6.92$	$M = 46$ $SD = 5.62$	$M = 50.28$ $SD = 7.59$
Total	$M = 50.70$ $SD = 7.56$	$M = 48.12$ $SD = 7.06$	

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To determine whether the differences observed between the means in Table 2 were statistically significant, two-way analysis of variance (ANOVA) was computed.

Table 3 shows that gender and residential status have no significant effect on students' loneliness. The result also shows no significant interaction effect between gender and residence.

TABLE 3: SUMMARY OF THE ANALYSIS OF VARIANCE OF LONELINESS SCORE ACCORDING TO RESIDENTIAL STATUS AND GENDER.

Source of variance	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	Sig.(p-value)
Gender	1	75.690	75.690	1.699	.196
Residential status	1	166.410	166.410	3.736	.065
Gender * Residential status	1	894.010	894.010	3.938	.380
Error	96	4276.08	44.542		
Corrected total	99	5412.190			

Table 4 shows that mean depression score of male was 74.48 (SD=14.39) and female was 73.16 (SD=13.85) and mean depression score of residential students was 78.64 (SD=12.73) and non-residential students was 69.00 (SD=13.79).

TABLE 4: DESCRIPTIVE STATISTICS OF DEPRESSION SCORE ACCORDING TO GENDER AND RESIDENTIAL STATUS.

	Residential status		
	Residential	Non-residential	Total
Gender			
Male	<i>M</i> = 75.60 <i>SD</i> = 14.07	<i>M</i> = 73.36 <i>SD</i> = 14.91	<i>M</i> = 74.48 <i>SD</i> = 14.39
Female	<i>M</i> = 81.68 <i>SD</i> = 10.67	<i>M</i> = 64.64 <i>SD</i> = 11.25	<i>M</i> = 73.16 <i>SD</i> = 13.85
Total	<i>M</i> = 78.64 <i>SD</i> = 12.73	<i>M</i> = 69.00 <i>SD</i> = 13.79	

To investigate whether the differences observed between the means in Table 4 were statistically significant, two-way analysis of variance (ANOVA) was computed.

Table 5 shows that gender has no significant effect on students' depression but residential status has significant effect on depression ( $F = 14.06$ ,  $df = 1$ ,  $p < .01$ ). Residential students have more depression than non residential students. The result also shows no significant interaction effect between gender and residence.

TABLE 5: SUMMARY OF THE ANALYSIS OF VARIANCE OF DEPRESSION SCORE ACCORDING TO RESIDENTIAL STATUS AND GENDER.

Source of variance	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	Sig.(p-value)
Gender	1	43.560	43.560	.264	.609
Residential status	1	2323.24	2323.24	14.06	.00
Gender * Residential status	1	1369.00	1369.00	8.28	.346
Error	96	15862.960	165.239		
Corrected total	99	19598.760			

Finally, to find out whether there is any relation between loneliness and depression Pearson Product Moment Correlation was conducted. Positive correlation ( $r = 0.29$ ) was found between loneliness and depression in students with an alpha level of  $p < .01$ .

The first objective of the present study was to find out loneliness and depression levels of the students of Chittagong University. Result shows students of Chittagong University had an average level of loneliness ( $M = 49.41$ ,  $SD = 7.39$ ). Besides the average loneliness level of the students, when the range of the distribution, the percentages and the range of the scores obtained from the scale (between 20-80) are taken into consideration, a group of about 25% (who received a score between 55-70) had a high level of loneliness. The findings are consisted with a study of Ceyhan and Ceyhan (2008). Maybe this group of students have difficulties in establishing close relationships with others which is can be claimed as one of their basic developmental tasks. In case of depression,

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the mean score of students was 73.82 and standard deviation was 14.07, which indicate minimal level of depression. Considering the screening norm of the scale 9% (who received a score between 94-106) of the students designated as depressed. Among them 8 were minimal and 1 was mildly depressed. The finding is supported by a study of Rimmer *et al.* (1982). They investigated prevalence and incidence of psychiatric illness in undergraduate students and estimated at 10% samples as depressed.

The second objective of the present study was to investigate whether loneliness of students varies as a function of residence and gender. Result shows that gender and residential status have no significant effect on students' loneliness. The result also shows no significant interaction effect between gender and residence. So the present study found that there is no significant difference between males and females and between residential and non-residential students in loneliness. These findings are supported by a study of Russell *et al.* (1980). The causes of the findings can be explained by self-esteem, gender roles, interpersonal relationships, multidimensional phenomenon of perception of loneliness. Traditional gender role and social expectation are changing in Bangladesh. Both male and female; residential and non-residential students are participating various social, cultural, recreational and intellectual activities. These factors have minimized the gap of perceived loneliness between male and female; and residential and non-residential university students.

The third objective of the present study was to see whether depression of students varies as a function of residence and gender. The present study found that there exists no significant difference in depression of males and females. The result is contradicted with previous researches (Wiseman *et al.* 2007, Ceyhan and Ceyhan 2008, Shelke 2012). The result also indicates that depression score of residential students is higher than non-residential students. The finding is supported by a study of Shelke (2012). In past, female students were confined in a limited circle and considered having introvert personality. But traditional gender stereotypes are changing. At present, female students share their problems and opinions with others. As a result, they come out from their internalizing psychological problems. So, the present study showed no significant gender difference in depression. One important finding of the present study is the significant difference between residential and non-residential students in case of depression. Residential students have more depression than that of non-residential students. Residential students experience important changes in their lives when

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they start their university education. In line with these changes, they face adjustment difficulties and stressful situations that they are to cope with which the close companionship of residential halls may not totally prevent. Still accommodation has been a constant problem in the university. Absence of balanced diet is a crying need to keep fit health, which is not available in the university halls. Political instability is one of the major drawbacks for the residential students. Such problems cause them to become more vulnerable to various mental health problems like depression. But non-residential students are better socialized in admitting and expressing their emotions than residential students.

The final objective of the study was to observe whether there is any relation between loneliness and depression. Positive correlation ( $r = 0.29$ ) was found between loneliness and depression in students with an alpha level of  $p < 0.01$ . It reveals moderately significant relationship between the loneliness and depression levels of the students. It indicates that students might have the symptoms of both loneliness and depression together if the situations are not changed.

The results of the present study may be used to identify groups of students those are most vulnerable and in need of assistance in relation to loneliness and depression. The research findings reveal the necessity to provide proper counseling and guidance service in order to make effective interventions against the loneliness and depression problems of students. Students should be helped to identify their interests, strengths, weaknesses and personal circumstances so that they can have good mental health. University authority can introduce counseling services for students. This study had some limitations too. The sample size was relatively small and participants were not drawn randomly which is not sufficient to make valid generalization. The study was administered in some specific halls and areas of Chittagong city only. Future research can be carried out on a large scale sample covering all the halls of university and different socioeconomic areas of Chittagong district.

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