PSYCHOLOGICAL CORRELATES OF LONELINESS AMONG ADOLESCENTS

*Mukta Singhvi *Suman Kumari **Rajiv Sehgal ***Neelam Kumari

ABSTRACT

The current study expands on the existing literature by incorporating stress, depression, locus of control and anger in the purview of a single study to explain the construct of loneliness. The 300 adolescents comprising of 150 males and 150 females in the age range of 15 to 17 years comprise the sample. Russell's Revised UCLA Loneliness Scale, Zung Self-Rating Depression Scale, Rotter's Internal-External Locus of Control, Cohen's Perceived Stress Scale and Spielberger's State-Trait Anger Scale were administered. For females depression was found to be the most salient predictor of loneliness. For males, depression, locus of control and perceived stress contributed to loneliness.

INTRODUCTION

Psychologists have long been interested in the topic of loneliness (Fromm-Reichmann, 1959; Sullivan, 1953). The lack of adequate measures and the considerable gap between theoretical conceptions of loneliness and its operational definitions have seriously hampered research in this area. Only recently, however, loneliness has become the subject of substantial research. The flurry of research on loneliness in the last few years has been impressive. One impetus for the new interest is the realization that loneliness is a serious and widespread problem and the study of loneliness has much potential for helping to understand traditional topics such as need for affiliation and interpersonal attraction. Another reason is that only recently efforts have been made to develop objective scales for rating loneliness. One reason for the neglect of loneliness has been the lack of adequate measures. Recent work on scale development has produced several measures of loneliness that are reliable, valid and avoid social desirability problem (Loucks, 1980; Rubenstein & Shaver, 1980; Russell, Peplau, & Cutrona, 1980; Russell, Peplau, & Ferguson, 1978). Peplau & Perlman (1982) suggest that loneliness is a meaningful psychological construct. Researches conducted in the recent past reveals that unidimensional as well as multidimensional explanations of loneliness has been advanced, though sufficient evidence is available in favor of unidimensional aspect of loneliness.

Most researches of response patterns to loneliness have focused primarily on adults. Relatively fewer researchers have examined how younger subjects, especially adolescents, respond to loneliness, although it is important to study this group for several reasons. Moreover, the researches in the context of adolescent loneliness suffer from various methodological flaws. One of the most significant flaws is that variables have been treated or examined in isolation to ascertain their relevance.

The researchers in the area of loneliness have failed to take cognizance of perceived stress, depression and anger as correlates of loneliness. Moreover, past research with adolescents, despite its merit has resulted with conflicting findings concerning the role of locus of control. The current study expands on the existing literature by incorporating stress, depression, locus of control and anger in the purview of a single study to explain the construct of loneliness.

SAMPLE

The subjects were drawn from Senior Secondary Government and Public Schools located in Chandigarh. Participants were 300 adolescents comprising of 150 males and 150 females. The age of participants ranged from 15 to 17 years.

Measures

A.   Revised UCLA Loneliness Scale (Russell, Peplau, & Cutrona, 1980)

The UCLA Loneliness Scale is the most widely used measure of loneliness. Investigations using the instrument in theory testing and research have assumed unidimensionality. It comprises of 20 items, the total score ranges from 20 to 80. The psychometric characteristics are well established.

B.   Zung Self-Rating Depression Scale (1965)

Zung Self-Rating Depression Scale was selected because it intended to quantify depressive symptoms. It is appropriate for use in studies of depressive symptomatology. For each item, respondent indicate the frequency with which they have experienced a specific feature during the preceding month by selecting one of the four alternatives (i.e. a little, some, good part, or most of the time), with numerical value ranging from 1 to 4 for positive statements. The maximum possible ZSRS score is 80, while a score of 20 indicates the complete absence of depressive symptoms. Higher the score the greater is the symptomatology. The scale seems to be well balanced with equal numbers of positive and negative statements as out of the 20 items used ten are worded symptomatologically positive and other ten are worded symptomatologically negative. The psychometric characteristics of the scale are well established.

C.   Internal-External Locus of Control Scale (Rotter, 1966)
The Rotter's internality-externally scale is a two-option forced-choice scale. Rotter's Scale consists of 23 items and 6 additional buffer items format covering a broad variety of situations. A low score implies an internal locus of control and a high score, an external locus of control. The scale has even intensively used by researchers interested in measuring the IE construct.

D.   Perceived Stress Scale (Cohen and Williamson, 1988)
The perceived stress scale is a measure of the degree to which situation is a measure of the degree to which situation in one's life is appraised as stressful (Cohen et al., 1983). Items were designed to tap how unpredictable, uncontrollable and overloaded respondent find their lives. The questions in the perceived stress scale ask about feelings and thoughts during the last month. In each case, respondents are asked how often they felt a certain way. Perceived stress scale scores are obtained by reversing responses (eg. 0=4, 1=3, 2=2) to the seven 4, 5, 6, 7, 9, 10, and 13) and then summing across all scale items.

PROCEDURE

The following tests were administered in random order, requiring four different sessions. The tests were administered in small groups of 10 to 15 participants. The doubts of the participants were removed before permitting them to fill out different questionnaires. The instructions for different tests were read aloud to the groups and the instructions in typed form were also provided to the subjects.

The general testing conditions were satisfactory. Efforts were made to establish rapport with the participants in order to elicit reliable and authentic information. Participants were told that the information was being collected purely for research purpose. They were also told that the information would remain confidential and presented only in a form in which no person could be identified. The promise of privacy appears to have gone a long way in establishing psychological rapport because a large number of participants contacted the investigator later and enquired about their performance on different measures. Despite the task being tedious, participants showed keen interest in filling out different questionnaires.   After the collection of data scores on different questionnaires were calculated and analyzed accordingly.

RESULTS

A. BIVARIATE CORRELATIONS
Bivariate correlations between tested variables were computed by making use of Pearson's product-moment method. This was done after ascertaining that the data fulfilled the main requirements underlying the use of Pearson's product-moment

method. Bivariate correlations between different variables included in the current study were obtained separately for males and females (Table 4.8 and 4.9).

Given the number of correlations being evaluated and large sample size, a significant level of 0.01 was used for the interpretation of correlation. When relationship between different indices of psychopathology and loneliness were examined separately for men and women, results indicated that the pattern of significant correlations was different for male and female adolescents. The correlation between loneliness and depression, however, was identical for males and females. Self-reported loneliness was strongly associated with depressive symptoms for both males and females when zero order correlation was evaluated. The indices of correlation between loneliness and depression were found to be 0.683 (p<0.001) and 0.461 (p<0.001) for female and male adolescents, respectively. Thus overall higher level of depression were associated with greater loneliness for both males and females, and the magnitude of the correlation found with these high school adolescents were similar to many researches, including (Young, 1982; Russell, Peplau and Cutrona, 1980; Weeks, Michela, Peplau, & Bragg, 1980; Russell, Peplau, & Feuguson, 1978), and those studies using high school students (eg., r=0.60 between the Zung Depression Scale and the Revised UCLA Loneliness Scale; Moore & Schultz, 1983).

Results of the study also revealed that loneliness correlated negatively with social support: quantitative (r = -0.262; p<0.01) and social support: qualitative (r = -0.237, p<0.01) only for females. These significant correlations have turned out to be negligible for male adolescents. Further, it can be noted that the correlations of loneliness with perceived stress, locus of control and anger turned out to be non-significant. Thus male and female adolescents appear to evidence different pattern of relationships between psychiatric distress and loneliness.

Table 1
Intercorrelation Matrix (Females N=150)

S.No	Variable	1	2	3	4	5	6	7	8
1	Loneliness	1.00	-.263	-0.237	0.683	0.151	0.135	0.152	0.216
2	Social Support (Quantitative)		1.00	0.125	-0.077	0.108	-0.053	-0.101	0.120
3	Social Support (Qualitative)			1.00	0.234	-0.051	-0.085	-0.085	-0.104
4	Depression				1.00	0.203	0.212	0.323	0.389
5	Perceived Stress					1.00	0.006	0.207	0.162
6	Locus of Control						1.00	0.137	0.149
7	Anger (State)							1.00	0.289
8	Anger (Trait)								1.00
Value of r significant at 0.05 level = 0.159									
Value of r significant at 0.01 level = 0.208									

Table 2
Intercorrelation Matrix (Males: N=150)

S.No	Variable	1	2	3	4	5	6	7	8
1	Loneliness	1.00	-.041	-0.104	0.461	-0.074	0.177	0.175	0.132
2	Social Support (Quantitative)		1.00	0.042	0.069	0.195	0.038	-010	-0.08
3	Social Support (Qualitative)			1.00	-0.126	0.131	-0.069	-0.114	-0.018
4	Depression				1.00	0.070	0.134	0.196	0.161
5	Perceived Stress					1.00	0.024	0.114	0.099
6	Locus of Control						1.00	-0.036	-0.010
7	Anger (State)							1.00	0.492
8	Anger (Trait)								1.00
Value of r significant at 0.05 level = 0.159									
Value of r significant at 0.01 level = 0.208									

Step Wise Regression Among Tested Variables

Bivariate correlation suffers from some limitations in the sense that the role of overlapping variables is not taken into account. As such it is difficult to ascertain the true nature of the relationship between two variables. In order to explain a construct like loneliness, it is imperative to go beyond simple bivariate correlation (S) existing between variables.

To further investigate the relationship of loneliness to depression, social support, perceived stress, locus of control, state anger and trait anger regression analysis was run for males and females separately. More precisely speaking, step wise multiple regression analysis was performed with loneliness as the criterion and the following variables as predictors: depression, social support (qualitative), social support (quantitative), perceived stress, locus of control, state and trait anger. Each variable was added subsequently into the regression equation and the regression analysis shows the change in R^2 at the entry for each variable.

For males, with loneliness as the criterion measures, the significant predictors were depression [t=6.32, p<0.005, β=.461], locus of control [t=1.59, p<.01, β=.117] and perceived stress [t=1.50, p<.01, β=-.108]. For females the picture was somewhat different: loneliness was predicted by depression [t=11.38, p<.005, β=.683] and social support (quantitative) [t=3.64, p<.005, β= -.210].

Table 3

Multiple R, R^2 – Change and F-values (Males)

Independent Variables	R	R2 –Change	F-value
Depression	.461	-	-
Locus of control	.475	.014	21.46*
Perceived Stress	.487	.011	15.18*
Anger (State)	.499	.012	12.02*
Social Support (Quantitative)	.501	.002	9.89
Anger (Trait)	.502	.001	8.04

*Significant at .001 level

Table 3

Multiple R, R^2 – Change and F-values (Males)

Independent Variables	R	R2 –Change	F-value
Depression	.683	-	-
Social Support (Quantitative)	.714	.044	36.78*
Social Support (Qualitative)	.716	.004	51.48*

*significant at 0.01 level
**significant at 0.05 level

DISCUSSION

The present findings emphasize different interrelationships for male and female adolescents between various predictors, on the one hand, and loneliness, on the other hand. Confirming earlier studies, the data are consistent with the prediction in showing a positive relationship between depression and loneliness with beta weights being 0.68 and 0.46 (p<0.05) for both females and males respectively. The overall pattern of results reveal that depression is the most salient predictor of loneliness for both male and female adolescents. The presence of depressive tendencies force a person to withdraw from interpersonal reality, leading to the perception of relational deficit.

Depression appears to be a more potent predictor of loneliness for females than males (68% variance in loneliness for females and 46% variance in loneliness for males).

Another finding of interest relates to quantitative social support seems to be negatively related to loneliness for female adolescents with a β weight of -0.210, p<0.05, but for male adolescents, quantitative social support had no relationship with loneliness. This finding was confirmed by earlier studies of Cooper and Grotevant (1987) who found that female adolescents are more likely to rely on social relationships and experience better social support than male adolescents. The contribution of quantitative social support to loneliness partly supports the hypothesis which states that the loneliness would be negatively related to different indices of social support. As far as qualitative social support is concerned, the findings are contrary to the above mentioned hypothesis as no significant contribution of qualitative social support to loneliness was found in case of both male and female adolescents. The relation between quantitative social support and loneliness is in the expected direction in the context of the nature of constructs involved.

For female adolescents no other predictor except depression and quantitative social support contributed to loneliness. But, in case of male adolescents the findings were somewhat different. Other than depression, locus of control (+) and perceived stress (-) also contributed to loneliness. Several factors may attenuate the difference in these findings of males and females. In case of males locus of control does contribute to loneliness. The results showed a β weight of 0.117, p<0.01 in case of locus of control as a predictor of loneliness for male adolescents. The results point out that male adolescents, with external orientation tend to be more lonely than males with internal orientation.

Perceived stress showed a negatively relationship to loneliness with a β weight of -0.108, p<0.01. This negative connotation simply rejects the hypothesis that perceived stress is positively related to loneliness. It confirmed that higher the perceived stress in case of male adolescents, the lower the chance of feeling lonely for them. In case of females, the results were somewhat different, whereas perceived stress showed no relationship with loneliness.

From the above research findings it is confirmed that in case of male adolescents with loneliness as dependent measure only depression (+), locus of control (+), and perceived stress (-) contributed to loneliness as significant predictors. And, for female adolescents only depression (+) and quantitative social support (+) contributed as significant predictors of loneliness.

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Department of Psychology, University of Rajasthan, Jaipur.
**Department of Psychology, Panjab University, Chandigarh.*
*** Head, Department of Psychology, G.C.W. Ludhiana, Punjab.*
**** G.U.M., College of Education, Sonipat, Haryana*