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Experience of Loneliness and Suicidal Ideation among Young Adults: The Moderating Role of Gender

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ABSTRACT

Objective: To assess the experience of loneliness and suicidal ideations among young adults.

Study Design: Descriptive cross-sectional study.

Place and Duration of Study: The study was conducted from March 2015 to February 2016 across the young adults residing in Rawalpindi and Islamabad.

Materials and Methods: Purposive sampling technique was used for data collection from community sample young adults (N=308; aged between 18-25 years). Self-report measures that are, De Jong Gierveld Loneliness scale and Scale for Suicidal Ideation were used for the data collection.[1,2] Participants were categorized as suicide ideators and non-ideators through independent sample t-test. Bivariate Pearson correlation was also calculated. Afterward, the moderating role of gender was assessed in the relationship between suicidal ideation and loneliness.

Results: Loneliness was positively correlated with suicidal ideations. Individuals identified as suicide ideators scored significantly higher on both of social and emotional loneliness as compare to non-ideators. In an alliance, gender significantly moderated the relationship between suicidal ideations and emotional loneliness where females with a higher level of emotional loneliness were more prone to develop the suicidal ideations.

Conclusion: In general young adult population suicidal ideation is significantly associated with loneliness. This point outs the desired significance of efforts to minimize loneliness with regards to diminishing its detrimental effects on well-being as well as general health of young adults.

Key Words: *Loneliness, Suicidal Ideation, Young Adults.*

Introduction

Agreeing to World Health Organization every year around 800000 individuals die because of suicide, constituting one individual in every 40 seconds.[3] Every single case of such death itself establishes a tragedy. Above all, they also intensely affect the mental health of surrounding individuals along with the social order of society, thus such affected individuals often require the desired psychosocial support.[4] Numerous risk dynamics for suicidal behavior was recognized, given as lower class economic status, history of child neglect and abuse, and mental illness.[5-7] Protecting elements as social support, religious associations, and life contentment are interrelated in a way to decline the ratio of suicide.[8,9] One-fourth significant indicator in lieu of attempting or committing suicide is the existence of suicidal ideation.[8–12] Such ideations can transpire all the way through the lifetime and are the second most prominent reason of death amongst 15-29 year olds worldwide.[3]

For the meantime, loneliness is an associative risk factor along with suicidal ideations for morbidity and mortality. Both non-case-control and case-control designs studies where relatives of persons who committed suicide depicted loneliness as often one of the major factor leading to suicidal death.[13,14] Meanwhile, previous studies also revealed the existence of an association among feelings of being alone and involving in suicidal activities. For instance, greater levels of loneliness were assessed, amongst under treatment suicide attempters.[15] Certainly, more or less evidence recommends that loneliness can remain a significant risk element for suicidal behavior throughout the lifespan as research amongst adolescents, middle-aged, and aging adults have altogether interconnected it to be a

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contributing risk for suicidal ideation in addition to suicide attempts.[16-18,33] While evidence on countless features of the relationship between loneliness and suicidal ideations nonetheless leftovers is limited. In specific, most of the empirical studies carried out up till now were accompanied within precise sub-populations like high school students, indoor patients, and the aging individuals, whereas little focus was found to assess this specific association in the general young adult population. Although young adults are more prone to mental illness.[19]

This is an essential research gap as previous research data provide an indication that the frequency of loneliness among adults can be elevating in few countries probably as a consequence of fluctuations in lifestyles resultant of greater divorce rates, inhabitants aging, along with smaller-sized families.[20,21] Therefore research is required to fill this gap as establishing this association between loneliness and suicidal ideations can lay an evidence-based foundation to address preventive measures to minimize the loneliness as well the suicidal ideations. Simultaneously, this research will provide an enhanced understanding of the psychological phenomenon that subsidies to suicidal behavior, and will manage for mental health experts with clear criteria for classifying those at risk, then contribute to the establishment of in effect suicide prevention and intervention approaches.

Taken together, the main aims of the current study was to assess the experience of loneliness and suicidal ideations among young adults. Furthermore, the foremost objectives of study were: (1) to address the association between loneliness and suicidal ideation in general young adult population; (2) to scrutinize the level of loneliness among suicidal ideators and non-ideators; and (3) to examine the moderation role of gender in association of suicidal ideations and loneliness.

Materials and Methods

The present cross sectional study was conducted from March 2015 to February 2016 across the young adults residing in Rawalpindi and Islamabad. The study protocol for current research was being approved from the ethical board of National Institute of Psychology, Quaid-i-Azam University Islamabad. Sample to address study objectives comprising of 308 young adults (126 male & 182 female) within an age range of > 18 and < 25 years was obtained by means of purposive sampling. They were all Pakistani nationals and native Urdu speakers having no problem with Urdu language (talking, reading, understanding, and writing) respectively. Individuals at current or previously diagnosed with any psychiatric ailments were instantly excluded from the study sample. If the inclusion and exclusion criteria were met, then each participant was being tested individually in two steps. During step I, the informed consent was signed from the participant. After rapport building, the researcher filled the demographic sheet while questioning the participant. Next, the participants were requested to fill the set of questionnaires by providing their genuine response. Finally, participants were thanked for their participation.

This set of questionnaires consisted of self-report measures. In order to measure the level of loneliness the De Jong Gierveld Loneliness scale was utilized whereas, the Suicidal Ideation Scale was used to examine the suicidal ideations.[1,2] The Loneliness Scale is grounded on a cognitive theoretical characterization of loneliness, which highlights the incongruity among what person desires in positions of interpersonal liking and intimacy, and what person actually has; the more the difference, the more the loneliness. Thus, loneliness is understood as an individual experience which is not openly linked to situational aspects.[1] It is a 06-item instrument to be scored on a 4-point scale ranging from “no” to “yes”. It has two subfactors, the emotional loneliness scale, and the social loneliness scale, and the sum of their scores provides the total loneliness score. Instrument reliability ranges from .70 to .74 (Cronbach's α).[1] The Suicidal Ideation Scale was designed to screen individuals in the community for presence of suicidal thoughts and assess the severity of these thoughts. It targets an attribute of suicidal thoughts: frequency, controllability, closeness to attempt, level of distress associated with the thoughts and impact on daily functioning. The instrument had high internal consistency (Cronbach's $\alpha = 0.91$).[2]

The parametric data was analyzed with the help of SPSS 24.[22] At first, we calculated descriptive statistics Cronbach's alpha reliability's followed by inferential statistical analysis i.e., pearson bivariate correlation

(p < .01; p < .05), independendent sample "t" test (*p* < .001; p < .01; p < .05) and moderation analysis (p < .01) . Moreover, Pearson Bivariate correlation coefficients were calculated to address the relationship between suicidal ideation and loneliness. At the same time, individuals were categorized into two groups that are, suicide ideator and non-ideators, based on their score on the The Suicidal Ideation Scale. Furthermore, differences were explored on emotional and social loneliness across two groups of suicide ideators and non-ideators via computation of independent sample *t*-test, and Cohen's *d* were calculated to examine the strength of the group differences.[23] Finally, the moderating part of gender was measured by using process macro version 2.16 for the effect of suicidal ideations on emotional loneliness.[24] Given that majority of participants are middle born, and belonging to middle socioeconomic status (SES) in our sample, so birth order and SES was used as a control in the moderation analysis to counterweight the gender groups through birth order and socioeconomic status.

Results

Taken together, first of all, Cronbach's reliabilities, mean values, standard deviation, and Pearson bivariate correlation amongst study variables are grouped together in table I. Afterward, in table II differences of social and emotional loneliness among suicide ideators and non-ideators are presented. Finally, table III and figure 1. explain the moderating role of gender across the relationship between emotional loneliness and suicidal ideations.

At first, results from the table I depicted that there is a significant positive correlation between emotional loneliness and social loneliness (r = .67, p < .01) as well as the emotional loneliness and that of suicidal ideations (r = .49, p < .05). Meanwhile, in alliance with our predictions, social loneliness is also positively associated with the suicidal ideations (r = .38, p < .01). As expected, results from an independent samples *t*-test showed that participants clustered as suicide ideators (M = 7.62, SD = 2.29, N = 86) scored significantly higher on the emotional loneliness as compared to that of non-ideators (M = 6.71, SD = 1.99, N = 222), t (306) = 3.43, p < .001, two-tailed. The change of .91 scale points was large (d = .43), and the 95% confidence interval around difference between the group means was relatively precise (.39 to 1.43). Similarly, on loneliness suicide ideators (M = 8.73, SD = 2.21, N = 86) had elevated scored than that of non-ideators (M = 8.14, SD = 2.06, N = 222), t (306) = 2.15, p < .05, two-tailed.

Finally, the results of the moderation analyses showed that after controlling the effect of birth order and socioeconomic status, gender moderated the effect of emotional loneliness on suicidal ideations. The results presented in Table III show a significant interaction effect (B interaction = 1.23, p < .01) explaining 12% additional and 57% total variance in emotional loneliness. The moderating effect of gender is additionally explained in Figure 1. The figure demonstrates that emotional loneliness increases suicidal ideations amongst both men and women young adults, yet the slope for the females is much steeper than for males, suggesting that females are more prone to develop suicidal ideations as a consequence of emotional loneliness. Additionally, a fan effect appearing approximately in the center of the figure suggests a reversal role of low versus high suicidal ideations. The fan effect suggests that while facing low levels of emotional loneliness, male become more suicidal. Contrary to that while facing high levels of emotional loneliness, females are more prone to develop suicidal ideations.

Table I: Cronbach's Reliabilities, Mean, Standard Deviation, and Pearson Bivariate Correlation Among Study Variables (N=308).

		Items	A	1	2	3	4
1	Age	-	-	-	-.24	-.07	-.09
2	Emotional Loneliness	3			-	.67**	.49*
3	Social Loneliness	3				-	.38**
4	Suicidal Ideations	19					-
	Mean	-	-	19.57	6.96	8.81	13.45
	SD	-	-	1.87	2.12	2.21	10.15

*p < .05, **p < .01.

Table II: Differences in Social and Emotional Loneliness Among Suicide Ideators and Non-Ideators (N=308).

	Ideators (n = 86)		Non-Ideators (n = 222)					
Variables	M	SD	M	SD	T	LL	UL	Cohen's d
Emotional Loneliness	7.62	2.29	6.71	1.99	3.43**	.39	1.43	.43
Social Loneliness	8.73	2.21	8.14	2.06	2.15*	-1.14	-0.50	.28

*p < .05, **p < .001.

Table III: Moderating Effect of Gender for the Relationship between Emotional Loneliness and Suicidal Ideations (N=308).

	Suicidal Ideation				
Predictors		B	*SE* β	T	95% CI
(Constant)		12.56**	8.45	1.49	[4.04, 29.18]
BO		.82*	.81	.32	[-.79, 2.43]
SES		4.67	4.21	.05	[-.07, 9.41]
EL		-1.04*	.95	-1.11	[-2.91, .82]
Gender		-10.33***	4.18	- 2.47	[-18.56, -2.11]
EL x Gender		1.23**	.57	2.17	[.12, 2.35]
R^2	.08***				
F	4.72**				
ΔR^2	.02**				

Note: EL= Emotional Loneliness
*p < .05, **p < .01, ***p < .001.

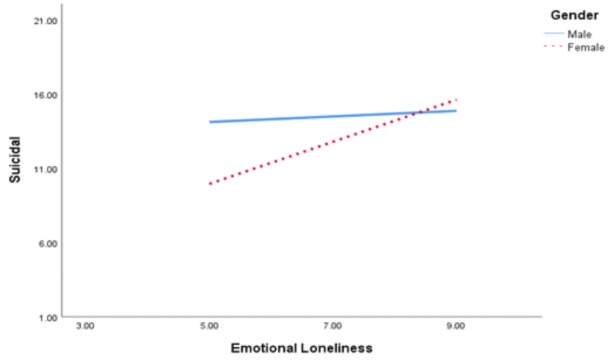

Fig 1: Graph Demonstrating The Moderating Role of Gender for the Relationship between Emotional Loneliness and Suicidal Ideations

Discussion

Regardless of the emergent body of research on suicidal ideations and loneliness, as such, slight far-scale research is present in the general young sample that focused on this relationship. The current study has addressed this research gap after considering the emerging young adult population.

At first, our results depicts a relationship between suicidal ideations and loneliness. In an alliance, both forms of the loneliness that is., social and emotional loneliness significantly positively correlates with suicidal ideations. This association laids the foundation that more the person feels lonely more s/he is susceptible to develop the suicidal ideations. In the same way, as predicted suicide ideators are high on social and emotional loneliness as compare to that of non-ideators. This is in alliance with previous research findings that loneliness predicts suicide ideations.[14,17,19,25-29] Finally, after controlling a few probable confounders that are, birth order, and socio-economic status it is establised that the gender is moderating the relationship between the suicidal ideations and emotional loneliness. This association is suggestive of the fact emotionally lonely girls are more susceptible to develop suicidal ideation.[30,31] Thus based on these findings it is necessary to discuss that the prevention and intervention techniques are need to be designed to restrict the suicidal behavior. Meanwhile, establishment of the crises management cells, and personal skills grooming units are desired in a way to accomplish a mandate in healthcare-associated with suicidal ideation, along with other mental health concerns.

Despite many efforts, this study has few limitations. All the participants were non-clinical young adults, so in the future patient population can also be tested. Meanwhile, sample from different span of life, other than young adulthood that is., adolescents, older adults, and elderly aged people can also be assessed to explore the association of loneliness and suicidal ideations. Finally, as this was a cross-sectional study causality cannot be inferred for the associations that were observed. Thus, the longitudinal pattern needs to be explored in future studies.

Conclusion

The current study indicated that young adults with loneliness manifested suicidal ideations more intensely. This occurred for the whole sample, in which both dimensions (that is., emotional and social loneliness) are equally evaluated. Explicitly, females with emotional loneliness are more prone to develop suicidal ideations.

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