

Moderating Role of Social Support on the Relationship between Depression and Suicide Intent among Self-harm Inpatients

Naila Yaqoob

PA DTE GHQ

Sadaf Ahsan

Foundation University, Islamabad

Shoaib Kiani

National University of Medical Sciences

Objective: The aim of present research was to investigate moderating role of perceived social support on the relationship between depression and suicide intent as predictor of suicide intent among self-harm inpatients. Study was carried out at Foundation University, Rawalpindi from January 2019 to December 2020 using cross-sectional research design. A sample of 220 self-harm inpatients aged between 18 to 35 years was gathered from mental health departments of Multan, Jhelum and Rawalpindi hospital. To assess depression, social support and suicide intent subscale of depression from Urdu version of Depression Anxiety Stress Scales (DASS-42; Zafar, 2017), Beck Suicide Intention Scale (BSI; Yaqoob et al. 2022) and Multidimensional Scale of Perceived Social Support (Tonsing et al., 2012) were administered. Results of current research revealed that depression had significant positive correlation with suicide intent ($r = .71^{**}$ & $.29^{**}$ respectively). Moreover, Depression significantly positively predicted by suicide intent. Whereas social support as a moderator significantly changed the positive relationship between depression and suicide intent. The study revealed that depression is a significant positive predictor of suicide intent among self-harm inpatients in which social support appears to be a strong protective factor.

Naila Yaqoob, PA DET GHQ, Pakistan.

Sadaf Ahsan, Department of Psychology, Foundation University, Islamabad, Pakistan.

Shoaib Kiani, Department of Psychology, National University of Medical Sciences, Rawalpindi. Pakistan

Correspondence concerning this article should be addressed to Naila Yaqoob, PA DET GHQ, Pakistan. Email: nailaa.ch@gmail.com

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Self-harm is a wide-ranging variety of behaviors that involves directly and intentionally harming one's own body (Griffin et al., 2018). There is dichotomous classification of such self-harming acts as non-suicidal self-injury and attempted suicide based on underlying intent of that behavior as a dimensional phenomenon (DSM-5, 2013). That underlying intent denotes to the purpose, aim or goal behind the act. The challenge with identifying intent is that aim behind act is unknown or hidden intention, uncertain at the time of act or may be ambiguous recollection of the incident (Park et al., 2018). Thus, inquiring intent is the thorough process which requires a combination of thoughtful consideration and exploratory perseverance to predict self-harm or suicidal intents inscribing it as a challenging clinical case to be managed thoughtfully (Knorr et al., 2016; Park et al., 2018).

Depression is defined as feelings of sadness and apprehension, feeling of worthlessness, helplessness and guilt, suicidal ideation, social withdrawal, lack of appetite, sleep and sexual desire, being lethargy and agitated lack of pleasure and interest in daily routine activities (DSM-5, 2013). Depression is found in 45 to 70 percent of suicides cases and high risk for complete suicide at its first episode (Srinivasan et al., 2024). Comorbid depression with personality disorders surge the risk of suicide (Tsegay et al., 2020). Self-harm is constantly related with depressive indicators and the occurrence of mood disorders. Etiology of self-harm has been linked with high self-reported gloominess among those who seek treatment and communal sections of adults (Catledge et al., 2018). Grief and sadness normally occur prior and succeeding self-harm. Depression is more prevailing mental illness and is a serious ailment and if not properly handled, may end up with suicide. Lifetime prevalence for depression is 4% - 5.7% (WHO, 2018).

Perceived social support is known in terms of the value of perceived care from social dealings and was found to be a protective factor for emotional growth (Savitha & Srimathi, 2017). It has been hypothesized as a rescue factor that controls depressive symptoms and suicidal actions but acknowledged to be less investigated compared to other causal features in relative to self-harm. Perceived social support has also been established as an important protective factor against psychiatric illnesses among young adults (Wu et al., 2013; Khalid et al., 2016). Social relations have been recommended as imperative to examine while analyzing the complex phenomenon of self-harm

(Cook et al., 2016). So, it is important to examine social support for young self-harmed people.

Empirical evidence suggests that there are a number of studies exploring perceived social support and adolescents' mental health and self-harm whereas little is known about its exact underlying role in young adult' clinical population. Probing moderating role of social support elucidates ways in which diverse factors work together to lead to self-harm and suicidal intent. Thus, in the current study, the aim was to investigate the moderating role of social support on the relationship between depression and suicide-intent among self-harm patients.

Method

Participants

An initial, purposive sample of 225 admitted patients with a diagnosis of self-harm was taken from the mental health departments of hospitals in Rawalpindi, Jhelum and Multan. Emerging adults with ages ranging between 18 years to 35 years ($M = 26.44$, $SD = 5.95$), either married or unmarried having minimum qualification of 12th Grade was gathered. Three participants, who met the criteria of drug abuse disorders and two participants who were in psychotic phase of a mood disorder were not included. Consequently, a total of 220 participants with self-harm were recruited for the research.

Formal permission was collected from the authorities of the concerning mental health departments. Moreover, written informed consent was also taken from each inpatient participating in research. Ethical approval was taken from Internal Review Board (IRB) of Foundation University Islamabad Campus (FUI) to conduct research. All ethical considerations and APA guidelines were kept in mind.

Inclusion/Exclusion Criteria

Participants with a minimum one-year period of engagement in self-harming behaviors, depression, and anxiety, bipolar disorder and personality disorders were included. Inpatients having any other disorder than depression, anxiety, bipolar spectrum disorder and personality disorders were excluded. Similarly, inpatients having active psychosis or risk of violence and having any intellectual disability were also excluded. Participants with tattoos and/or culturally sanctioned self-harming behaviors were excluded from the study. Participants with education levels less than matriculation were excluded. In addition, participants under 18 years of age were excluded.

Instruments

Depression Anxiety Stress Scales (DASS-42; Zafar, 2017).

Depression subscale of Depression Anxiety Stress Scales – 42 was used to measure depression. The 14-items of the depression subscale are self-reported measure, using a 4-point Likert-type scoring system; it is used to evaluate psychological, physical and emotional symptoms of depression during the foregoing week; the items correspond with the criteria mentioned in DSM-5 (APA, 2013). Higher score indicated in each scale reflected diagnosis of depression (Lovibond & Lovibond, 1995). Urdu version of DASS-42 (Zafar, 2017) was used in current research. Cronbach alpha reliabilities of Urdu translated version of depression subscale was .84.

Beck Suicide Intention Scale (BSI; Yaqoob et al., 2022).

The Urdu version of the Beck Suicide Intention Scale was used in this study. The scale comprised of 15 items pertaining to the individual's protections and views of that act. Every item is measured from zero to two score range with a likely grand score of 30 indicating the severe intent of suicide or a strong wish to die. Alpha reliability of .81(Yaqoob et al., 2022).

Multidimensional Scale of Perceived Social Support (Tonsing et al., 2012).

The Urdu translated version of Multidimensional Scale of Perceived Social Support was used in current study to assess social support. The scale has 12 items pertaining to level of perception of getting support from friends, family members and significant other using a 7-point Likert-type scale ranging from 'very strongly agree' to 'very strongly disagree'. Higher score on MSPSS reflected high social support and lower score indicated lower social support. The Urdu version of this scale showed overall good internal reliability of .93 (Tonsing et al., 2012).

Results

A purposive sample of 220 patients was selected. The age range was between 18 years to 35 years ($M = 26.44$, $SD = 5.95$), having minimum qualification of matriculation (12^{th} Grade). Data was analyzed through SPSS-23 using correlation, regression and Process Macro.

Table 1. *Multiple Regression Analysis Showing the Main Effect of Depression in Prediction of Suicide Intent Among Self-harm Patients (N = 220)*

Predictors	<i>B</i>	<i>SE</i>	<i>t</i>	β	<i>p</i>	95 % <i>CI</i>	
(Constant)	1.86	.95	1.96		.05	-.01	3.72
Depression	.53	.04	12.77	.75	.00	.44	.61

Note. CI = Confidence Interval.

Table 1 indicating multiple regression analysis showing main effect of depression in prediction of suicide intent among self-harm patients. The R^2 value (.55) of overall model showed predictors accounted for 55% variance in suicide intent with $F(3, 216) = 90.11$, $p < .01$. Results also revealed that depression ($\beta = .75$, $p < .01$) is significant positive predictor of suicide intent among self-harm patients. Depicting that depression increased the suicidal risk among self-harm patients. Moreover, results of collinearity statistics revealed values of Tolerance ($< .10$) and VIF (> 10.00) were in acceptable range (Pallant, 2010).

Table 2: *Moderating Role of Social Support on Relationship Between Depression and Suicide Intent Among Self-harm Patients (N = 220)*

Variables	β	95 % <i>CI</i>		<i>SE</i>	<i>t</i>	<i>p</i>	<i>R</i>	R^2	<i>F</i>
		<i>LL</i>	<i>UL</i>						
Constant	-.47	-5.37	4.42	2.48	-.19	.84	.74	.55	88.78
Dep	.67	.50	.84	.08	7.93	.00			
SS	.06	-.03	.14	.04	1.27	.21			
SS*Dep	-.01	-.01	-.00	.00	-3.18	.00			

Note. Dep = Depression, SS = Social Support.

Table 2 shows moderating role of social support on the relationship between depression and suicide intent. The main effect presented by social support is negatively significant ($p < .05$). It shows that social support negatively predicts suicide intent among self-harm patients. The main effect of depression ($\beta = .67$, $p < .05$) significantly positively predicts suicide intent among self-harm patients depicting depression increases the suicide intent among self-harm patients. Results in addition demonstrate that interaction effect of social support with depression ($\beta = -.01$) is indicating that in the presence of social support direction of relationship between depression and suicide intent has changed significantly in negative direction indicating that social support is weakening the positive relationship between

depression and suicide intent. Thus, social support appears to be a strong protective factor of suicide intent among self-harm patients with depression.

Figure 1. *Moderating Role of Social Support on Relationship between Depression and Suicide Intent.*

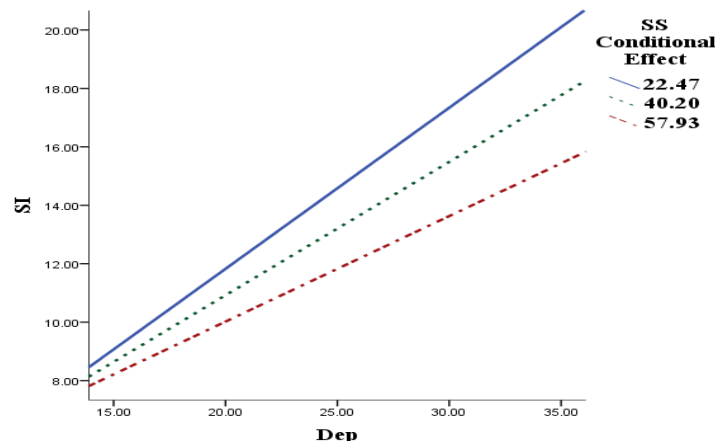


Figure 1 shows moderating role of social support on relationship between depression and suicide intent. Figure further added conditional effects of moderator (social support) revealing that social support is negatively related to suicide intent in the relationship between depression and suicide intent thus weakening the relationship between depression and suicide intent. Conditional effects of moderator (social support) further revealing interaction of social support and depression reduces suicide intent specifically on high social support condition. High social support related to less suicide intent. More social support leads to less suicide intent among self-harm patients with depression. Hence social support moderating as a protective factor among depressed self-harm patients for suicidal tendencies.

Discussion

Results of current research revealed that depression had significant positive correlation with suicide intent. Moreover, depression significantly positively predicted by suicide intent. Whereas social support as a moderator significantly changed the positive relationship between depression and suicide intent and serves as a protective factor among depressed self-harm patients for suicidal tendencies. Likewise, a longitudinal study of 2.5 years found that lack

of social support strongly predicted self-harm among adolescents (Abdelraheem et al., 2019). Moreover, cross-sectional studies have found that less social support has been related with self-harm and make its severity high over time (Arafat et al., 2021; Chan et al., 2018; Shekhani et al., 2018). Similarly, high social support was found as an important factor for terminating self-harm behaviors (Savitha & Srimathi, 2017). In many cultures parents and peers are primary sources of social support (James et al., 2017). A longitudinal study found that high or less social support was the strongest predictor of cessation or onset of self-harming behaviors. Furthermore, self-injurers are more expected to be identified with mood disorder, like major depressive disorder, than people with no account of self-harm (Hetrick et al., 2018). Among known predictors mood disorders are well-known and established for suicides (Fox et al., 2018). Turner (2002) records that mood disorders such as major depressive disorders and bipolar disorders may go unobserved in people who self-harm for prolonged period. In Pakistan it is reported as 17.2% for depression (Khalid et al., 2016) that manifest in form of self-harming behaviors (Ramsey et al., 2022; Eddleston et al., 2019). Research suggested that in Pakistan high incidence and predictive role of depression in manifesting risk of self-harm makes it significant to establish the relationship among depression and self-harm (Cook et al., 2016). While experiencing lack of social support people who do self-harm feel the need to engage in self-harm activity to give an added histrionic message by means of self-harm (Savitha & Srimathi, 2017). Consequently, family influences play a role in increasing the risk of suicidal ideation and attempts. Young people are influenced by peers and seek support from friends as there is high prevalence of self-harm between these ages of 15 to 24 (Husnain et al., 2019). Hence, the findings of current research are consistent with existing empirical body as in present research depression comorbidity found to be a significant factor of suicidal intent among self-harm patients and social support significantly moderates the relationship between depression and suicide intent.

Limitation and Suggestions

This study had some limitations that deserve a mention. Firstly, this study relied on results of a cross-section research design. Current study can be more useful using longitudinal research design among clinical samples of patients with self-harm to understand complex phenomenon of self-harm. Self-harm needs to be further explored in patients with complex mental health needs (for instance psychosis or having comorbid issues such as drug addicts).

Conclusion

The study revealed that depression is a significant positive predictor of suicide intent among self-harm inpatients in which social support appears to be a strong protective factor.

References

- Abdelraheem, M., McAloon, J., & Shand, F. (2019). Mediating and moderating variables in the prediction of self-harm in young people: A systematic review of prospective longitudinal studies. *Journal of Affective Disorders*, 246, 14-28.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). American Psychiatric Publishing.
- Arafat, S. Y., Khan, M. M., Menon, V., Ali, S. A. E. Z., Rezaeian, M., & Shoib, S. (2021). Psychological autopsy study and risk factors for suicide in Muslim countries. *Health science reports*, 4(4), e414.
- Beck, A. T. (1991). *Beck scale for suicidal ideation (BSIS)*. USA: The Psychological Corporation.
- Catledge, C. B., Scharer, K., & Fuller, S. (2018). Assessment and identification of deliberate self-harm in adolescents and young adults. *The Journal for Nurse Practitioners*, 8(4), 299-305.
- Chan, S., Denny, S., Fleming, T., Fortune, S., Peiris-John, R., & Dyson, B. (2018). Exposure to suicide behavior and individual risk of self-harm: Findings from a nationally representative New Zealand high school survey. *Journal of Psychiatry*, 52(4), 349- 356.
- Cook, S. H., Heinze, J. E., Miller, A. L., & Zimmerman, M. A. (2016). Transitions in friendship attachment during adolescence are associated with developmental trajectories of depression through adulthood. *Journal of Adolescent Health*, 58.
- Eddleston, M., Sheriff, M. R., & Hawton, K. (2019). Deliberate self-harm in Sri Lanka: An overlooked tragedy in the developing world. *Bio Medical Journal*, 317(7151), 133-135.
- Fox, K. R., Franklin, J. C., Ribeiro, J. D., Kleiman, E. M., Bentley, K. H., & Nock, M. K. (2018). Meta-analysis of risk factors for nonsuicidal self-injury. *Clinical psychology review*, 42, 156-167.
- Griffin, E., McMahon, E., McNicholas, F., Corcoran, P., Perry, I., Arensman, E. (2018). Increasing rates of self-harm among children, adolescents and young adults: A 10-year national study 2007-2016. *Social Psychiatry and Psychiatric Epidemiology*, 53(7), 663-671.
- Hetrick, S. E., Robinson, J., Burge, E., Blandon, R., Mobilio, B., Rice, S. M., ... & Davey, C. G. (2018). Youth codesign of a mobile phone app to facilitate self-monitoring and management of mood symptoms in young

- people with major depression, suicidal ideation, and self-harm. *Journal of Medical Internet Research Mental Health*, 5(1), e9.
- Husain, M. O., Umer, M., Taylor, P., Chaudhry, N., Kiran, T., Ansari & Husain, N. (2019). Demographic and psychosocial characteristics of self-harm: The Pakistan perspective. *Psychiatry research*, 279, 201-206.
- James, K., Samuels, I., Moran, P., & Stewart, D. (2017). Harm reduction as a strategy for supporting people who self-harm on mental health wards: The views and experiences of practitioners. *Journal of Affective Disorders*, 214, 67-73.
- Khalid, A. (2016). *Correlates of Mental Health among Pakistani Adolescents: An exploration of the interrelationship between attachment, parental bonding, social support, emotion regulation and cultural orientation using Structural Equation Modelling* (Unpublished Ph. D. thesis). University of Edinburgh. Edinburgh.
- Knorr, A. C., Tull, M. T., Anestis, M. D., Dixon-Gordon, K. L., Bennett, M. F., & Gratz, K. L. (2016). The interactive effect of major depression and nonsuicidal self-injury on current suicide risk and lifetime suicide attempts. *Archives of Suicide Research*, 20(4), 539-552.
- Park, S., Lee, Y., Youn, T., Kim, B. S., Park, J. I., Kim, H. & Hong, J. P. (2018). Association between level of suicide risk, characteristics of suicide attempts, and mental disorders among suicide attempters. *Bio Medical Central Public Health*, 18(1), 477.
- Ramsey, C., Galway, K., & Davidson, G. (2022). Implementing changes after patient suicides in mental health services: A systematic review. *Health & Social Care in the Community*, 30(2), 415-431.
- Savitha, S. I., & Srimathi, N. L. (2017). Social Support among Adolescents with Suicidal Tendency. *The International Journal of Indian Psychology*, 4(88), 2349-3429.
- Shekhani, S. S., Perveen, S., Akbar, K., Bachani, S., & Khan, M. M. (2018). Suicide and deliberate self-harm in Pakistan: A scoping review. *Bio Medical Central Psychiatry*, 18(1), 44.
- Srinivasan, R., Flouri, E., Lewis, G., Solmi, F., Stringaris, A., & Lewis, G. (2024). Changes in early childhood irritability and its association with depressive symptoms and self-harm during adolescence in a nationally representative United Kingdom birth cohort. *Journal of the American Academy of Child & Adolescent Psychiatry*, 63(1), 39-51.
- The World Health Organization (2018). *Preventing suicide: A global imperative*. WHO Library Cataloguing-in-Publication Data
- Tsegay, A., Damte, A., & Kiros, A. (2020). Determinants of suicidal ideation among patients with mental disorders visiting psychiatry outpatient unit in Mekelle town, psychiatric clinics, Tigray, Northern Ethiopia: A case-control study. *Annals of General Psychiatry*, 19(1), 1-12.

- Tonsing, K., Zimet, G. D., & Tse, S. (2012). Assessing social support among South Asians: The multidimensional scale of perceived social support. *Asian Journal of Psychiatry*, 5(2), 164-168
- Wu, C. Y., Chang, C. K., Huang, H. C., Liu, S. I., & Stewart, R. (2013). The association between social relationships and self-harm: A case-control study in Taiwan. *Bio Medical Central Psychiatry*, 13(1), 101.
- Yaqoob, N., Ahsan, S., & Hanif, R. (2022). Urdu Translation and Validation of Beck Suicide Intent Scale Among Patients with Self-Harming Behavior. *Pakistan Journal of Psychological Research*, 37(4), 505-514.

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