

MODERATING ROLE OF PSYCHOLOGICAL DISTRESS ON THE RELATIONSHIP BETWEEN SUICIDAL IDEATION AND PSYCHOLOGICAL WELLBEING AMONG PEOPLE WITH PHYSICAL DISABILITIES

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ABSTRACT

Objective: To determine the relationship between suicidal ideation and psychological wellbeing and also to investigate the moderating role of psychological distress on the relationship between suicidal ideation and psychological well being.

Study Design: Cross-sectional study.

Place and Duration of Study: Artificial Limbs Centre, Fauji Foundation Hospital Rawalpindi, from Feb 2016 to Nov 2016.

Methodology: The sample comprised of 150 people with physical disabilities. The Modified Scale was used to assess the Suicidal Ideation and The Mental Health Inventory was used to measure psychological wellbeing and psychological distress. Moderation analysis was explored through PROCESS macro.

Result: Results showed that suicidal ideation negatively correlated with psychological well-being ($r=-0.16, p<0.05$) whereas, the psychological distress was positively correlated with suicidal ideation ($r=0.20, p<0.05$) and negatively correlated with psychological-wellbeing ($r=-0.68, p<0.01$). Results also revealed that psychological distress significantly moderated relationship between suicidal ideation and psychological well-being i.e. $\{\beta=0.22, F(2,147) = 65.54, p<0.01\}$. The variance explained by model was 47.9% ($\Delta R^2=0.479$).

Conclusion: The present study is an initiative to contribute in literature regarding physical disability in Pakistan and will also be helpful in developing programs for them at local level to increase the institutional support by involving their families.

Keywords: Adults, Mental health, Psychological distress, Psychological wellbeing, Suicidal ideation, Youth.

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INTRODUCTION

This study examined mental health, psychological stressors and suicidal ideation of individuals who were people with physical disabilities. This is an area that needs substantial research work in Pakistan. As per International Classification of Functional Disability (ICF) physical incapability is a state with striking deformity, constraint or impotence of certain organs or processes of the body, which make obstacle, in carrying out normal physical developments and subsequently influence ordinary working in various everyday matters and physical incapacity either inherent or procured may prompt sentiments of insufficiency¹.

There is a powerful bonding between physi-

cal and mental functioning in humans. Any kind of physical or sensory inadequacy aggravates one's overall psychological functioning by making hurdle in normal flow of such procedures, prompting an ordeal of the world, which is particular in context².

In Pakistan, approximately 32.5 lacs disabled humans were identified in a total population of 13.5 cores via the 1998 census, indicating 2.4% disabled population in Pakistan. This figure was hotly contested by means of civil society and NGOs working for the disabled, who stated the shortcomings of the survey methodology which, among different matters, did not keep in mind the social boundaries and stigma related to the disabled in the country³.

The UN specialists group on incapacity that met in July 2014 to look at various problems in collection and measuring of knowledge on dis-

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ability determined that greater than a thousand million humans or 15% world's population are residing with disabilities. Further, the document acknowledged that "men and women with disabilities are disproportionately represented among the poorest segments of society" and about 80% of persons with disabilities live in establishing international locations³.

Suicidal ideation is annoying symptom and indicator of psychological distress. Suicidal ideation is any self-detailed considerations of taking part in suicide-related thoughts are associated with suicidal plans and attempts⁴. Associations between bodily health problem and death wishes have been in various researches⁵. One of the studies conducted on functionally disabled older Europeans, collected information from 11 European international locations and confirmed the relationship between health issues and suicidal thoughts⁶. Studies conducted in Sweden and Italy asked questions related to suicidal feelings fatigue and dying wishes^{7,8}. Associations between bodily health problems and suicidal ideation didn't persist in Taiwanese and South Korean^{9,6}.

The cure of suicidal trends in psychological distress remains a scientific task. Mental health interventions in the acute distress section are ordinarily no longer opted for due to their risk to increase suicidal ideations. Lithium has been shown to aid within the lowering of suicide threat, however within the acute distress phase it has proven little speedy outcomes¹⁰.

Possibilities of suicidal thoughts are the highest among teenagers encountering family issues, relationship issues with guardians, antagonistic associates, challenges with the dialect obstruction, and in turn enhance psychological distress, like anxiety and depression⁸.

Interventions that are psychologically supportive may reduce the intrusiveness of illness by using an emotion-focused/avoidant coping style and it can also be a powerful approach for picking and treating suicidal older individuals with physical stipulations¹¹. Poorer psychological well-being has been observed reliably to be linked

with suicide risk. For example, greater suicide (regardless of whether characterized as endeavors or ideation) has been found within the sight of enthusiastic strain¹².

Psychological distress has been observed as a key risk factor to determine suicide in foreigner pre-adults^{13,14}. Another Research has also provided support for a link between psychological distress and suicidal behavior¹⁵. An additional research on people with Autistic Spectrum Disorders (ASDs) also provided substantial support for association between psychological distress and psychological wellbeing¹⁶.

Emerging empirical evidence suggest that psychological distress may act as moderator on the relationship between different psychological variables. Studies^{17,18}, have found that protective behavioral strategies (PBS) reduce alcohol-related

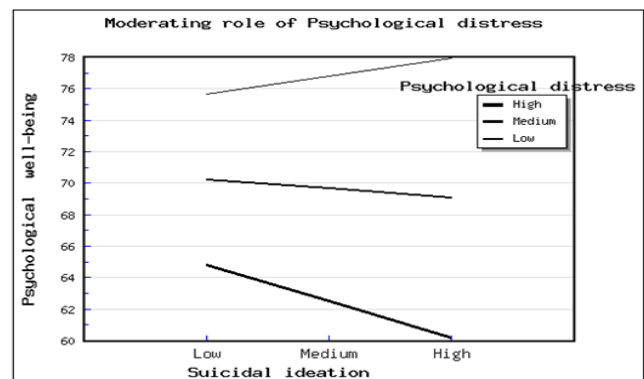


Figure-1: Moderating role of psychological distress between suicidal ideation and psychological well-being in people with physical disabilities.

negative consequences. However, this relationship is weakened when psychological distress acts as a moderator on the relationship between protective behavioral strategies and alcohol-related negative consequences. Similarly, other studies^{19,20}, have also found that psychological distress plays as a moderator on the relationship between hardiness and social support.

Based on previous researches, it is notified that people with physical disabilities may have high suicidal ideation labeled by symptoms of psychological distress. However, less work has been done on the link between mental health and

suicidal ideation among people with physical disabilities persons in Pakistan. So, the current study aimed to investigate the previously established literature on psychological issues in people with physical disabilities and to find out the relationship between suicidal ideation, psychological wellbeing and psychological distress among people with physical disabilities and also to see the moderating role of psychological distress between suicidal ideation and psychological well-being among people with physical disabilities.

METHODOLOGY

A cross-sectional study was conducted at Artificial Limbs Centre, Fauji Foundation Hospital Rawalpindi, from February, 2016 to November, 2016. The sample consisted of 150 people with physical disabilities and the sample size was estimated according to analyzing multivariate data²¹. The age range of sample was 15-35 years ($M=28.03$, $SD=5.21$). The age range was further divided into two groups, youth (15 -24 years) and young adults (24–35 years). Educational level of the respondents was at least intermediate²².

The Modified Scale of Suicidal Ideation²³, (MSSI) is an 18 items scale that is an adjusted variant of Beck scale for Suicidal Ideation. The MSSI contains 13 items from the previous scale in addition to 5 new items. The MSSI evaluates suicidal symptoms over the back year. The initial 4 items have been assigned as screening items to recognize those whose suicidal ideation is sufficiently serious to warrant organization of whole scale. Each MSSI item is appraised on a scale going from 0 to 3; general scale scores therefore may range from 0 to 54. All items are keyed such that higher scores represent more suicidal ideation²³. MSSI has reported reliability coefficient as $\alpha=0.94$.

The Mental Health Inventory 24 is a38-items instrument. Each item asks respondents to rate on a six point frequency or intensity scale about how they had been feeling amid the previous month. Possible answers included 1 = all of the time, 2 = most of the time, 3 = a good bit of the time, 4 = some of the time, 5 = a little of the time and 6 =

none of the time. There are two subscales in Mental Health Inventory i.e. the Psychological Distress and Psychological Wellbeing. Psychological distress indicates inverse states of mental health and is comprised of 24 items where as psychological well-being indicating the positive states of mind and is comprised of 14 items. Psychological distress consist of Items 2, 3, 8, 9, 11, 13, 14, 15, 16, 18, 19, 20, 21, 24, 25, 27, 28, 29, 30, 32, 33, 35, 36 and 38. The score range is 24-142 with higher scores reflecting greater psychological distress. The reverse scoring items are 2, 3, 11, 13, 15, 16, 19, 20, 21, 24, 25, 27, 29, 30, 32, 33, 35, 36, and 38. Psychological well being consist of items 1, 4, 5, 6, 7, 10, 12, 17, 22, 23, 26, 31, 34 and 37. The score range is 14-84 with higher score reflecting greater psychological well-being. And the Mental Health Inventory has reported reliability coefficient $\alpha = 0.82$.

Physically disabled individuals who fulfilled the inclusion criteria were selected as sample and consent was taken from the participants. Purpose of the study was described to each respondent. The respondents were told that there were no right or wrong answers and those they had to respond with whatever option first comes to their mind to finish the questionnaires as genuinely as could be allowed and try to give reaction on each item of each questionnaire. It was guaranteed to

Table-I: Alpha coefficient of suicidal ideation and mental health (psychological distress and psychological well-being) among people with physical disabilities (n=150).

Scales/Subscales	No. of Items	Alpha Coefficient α
Suicidal ideation	18	0.78
Psychological distress	24	0.86
Psychological well-being	14	0.82

them that all the given information would stay private and would be utilized just for the examination and academic purposes. There was no time limit for the completion of questionnaires. After the completion of item booklet, it was investigated for missing information. With a specific end goal to accomplish the destinations of the

present investigation mean, standard deviations, and the alpha reliability coefficients of the instruments were acquired as a preparatory step.

RESULTS

Out of the total of 150 people with physical disabilities 87 (58.0%) were males while 63 (42%) were females with mean ± SD age of 28.03 ± 5.21 years. The minimum education matriculation was

ress ($r=0.20, p<0.05$) and significant negative relationship with psychological well-being ($r=-0.16, p<0.05$). Psychological distress has significant negative relationship with psychological well-being ($r =-0.68, p<0 .01$).

Table-III shows linear regression analysis for suicidal ideation and psychological distress. Results showed that suicidal ideation was a posi-

Table-II: Correlation matrix between suicidal ideation and mental health (psychological distress & psychological wellbeing) among people with physical disabilities (n=150).

Variables	N	Mean ± SD	1	2	3
Suicidal ideation	150	13.44 ± 8.08	-	0.20*	-0.16*
Psychological distress	150	77.47 ± 17.63	-	-	-0.68**
Psychological wellbeing	150	69.78 ± 10.16		-	

reported by 63 (42%), 17 (11%) were intermediate, 31 (20.7%) were graduate, 27 (18%) were masters and highest education level were reported from 12 (8%) participants. Table-I showed that suicidal ideation, psychological distress, and psychological well-being have good reliabilities (i.e., $\alpha>0.70$).

Table II presents the correlation matrix between suicidal ideation and mental health (psy-

itive predictor of psychological distress $F(1,148) = 12.31, p<0.05$ and 23% variance ($R^2=0.23$) was explained by the model. Result also showed linear regression analysis for suicidal ideation and psychological wellbeing. Results showed that suicidal ideation was a negative predictor of psychological wellbeing $F(1,148) = 8.67, p<0.05$ and 21% variance ($R^2=0.21$) was explained by the model.

Table-IV indicates moderating role of psy-

Table-III: Linear regression analysis showing the effect of Suicidal ideation as a predictor on Psychological distress and Psychological distress among people with physical disabilities (n=150)

		Psychological distress		
		95% CI		
Variables	B	SE B	LL	UL
Suicidal ideation	0.20*	0.37	0.24	0.68
R2	0.23			
F	12.31**			
		Psychological Wellbeing		
		95% CI		
Variables	B	SE B	LL	UL
Suicidal ideation	-0.32*	0.062	-0.31	-0.34
R2	0.21			
F	8.67**			

chological distress and psychological well-being) among people with physical disabilities. Results suggested that Suicidal ideation has significant positively relationship with psychological dist-

Table-IV: Moderating role of psychological distress between suicidal ideation and psychological well-being among people with physical disabilities (n=150).

		Psychological Well-being		
		95% CI		
Model	β	SE	LL	UL
(Constant)	53.99**	0.94	53.13	55.85
Suicidal ideation	-0.06	0.96	-0.255	0.124
Psychological distress	-0.07	0.75	-0.224	0.075
Suicidal ideation × Psychological distress	0.22**	0.07	0.009	0.033
R2	0.489			
F	65.54**			
ΔR^2	0.479			
ΔF	46.64**			

chological distress between suicidal ideation and psychological well-being among people with physical disabilities. Results showed that psychological distress significantly moderated relationship between suicidal ideation and psychological wellbeing i.e. $\{\beta = 0.22, F(2,147) = 65.54, p<0.01\}$.

The variance explained by model was 47.9% ($\Delta R^2=0.479$).

DISCUSSION

The main point of the study was to determine the relationship between suicidal ideation and psychological wellbeing and to evaluate the role of psychological wellbeing as moderator between Suicidal ideation and Psychological distress variables among people with physical disabilities. Result of the study showed that Suicidal ideation had significant negative relationship with psychological wellbeing and also positively related to psychological distress. According to the previous studies, mental health consideration could assume a vital role in diminishing suicide risk by recognizing suicidal adults and reducing the stigma associated with mental health treatment seeking²⁵. In another study, acculturative psychological distress stress has been identified as a main factor to predict suicide in immigrant adolescent groups^{13,14}.

Results of present study had also stamped out that psychological distress significantly moderates the relationship of suicidal ideation and psychological distress. Another study has also given evidenced for linkage between psychological distresses and both PTSD symptoms and suicidal behavior¹⁵. In additional research on parents of children with autistic spectrum disorders (ASDs) also provided support for association between psychological distress and psychological wellbeing¹⁶.

This study will be helpful in raising the awareness about problems faced by disabled persons in our society. Seminars could be conducted on physical disability and their problems. It could have significance for non-government organization (NGOs) that are dealing with people with physical disabilities persons. This knowledge would be helpful for NGOs before planning any kind of intervention. For example work on unemployment, education, or types of physical disability.

Present study will provide elementary information to those researcher who are interested in

studying the on suicidal, anger and mental health problems in people with physical disabilities. It will grant them base line information to develop further hypotheses in this regard. On the basis of findings of this research, a need is being felt to have counselors in educational institutions as well as in organizations for counseling the challenging people to reduce suicidal ideation anger and work on mental health.

CONCLUSION

Overall, the present study is an initiative to contribute in literature regarding physical disability in Pakistan and will also be helpful in developing programs for them at local level to increase the institutional support by involving their families. The findings of the current study pointed out that suicidal ideation played an important role in determining the psychological wellbeing of people with physical disabilities. This research also established psychological distress as a significant moderator among suicidal ideation and psychological wellbeing among people with physical disability.

CONFLICT OF INTEREST

This study has no conflict of interest to declare by author.

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