# PSYCHOPATHOLOGICAL DISTRESS AND SUICIDE AMONG ADULTS WITH MAJOR DEPRESSIVE DISORDER: THE MODERATING ROLE OF RESILIENCE AND MEDIATING ROLE OF DELIBERATE SELF-HARM

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#### ABSTRACT

**Background and Purpose:** In the past year, 6.6% of patients with major depressive disorders attempted suicide. Suicidal ideation and behavior may be protected by resilience. Despite decades of research on suicide risk factors in young people, our understanding of the phenomenon has not improved significantly. Therefore, the current study aimed to investigate the relationship between psychopathological distress and suicide in adults with major depressive disorder. The current study also examines the moderating role of resilience and the mediating role of deliberate self-harm among adults with major depressive disorder.

**Methodology:** A correlational research design was used in the present study. Data was taken from (n=300) adults with major depressive disorder through a purposive sampling strategy. Attitude toward deliberate self-harm questionnaire, Columbia suicide screener, brief resilience scale, depression anxiety stress scale and beck depression inventory-II were used as an assessment measure.

**Findings:** The result showed that psychopathological distress (r = .04, p < .005) with suicide, and, resilience significant negative (r = .11, p < .004) relationship with suicide. However, deliberates self-harm (r = .21, p = .001) showed a significant positive relationship with suicide. Regression findings found that all models were significant. In the first step ( $\Delta R^2 = .02$ , F(1, 298) = .51, p = .000) psychopathological distress was a statistically significant predictor ( $\beta = .04$ , p = .000), In the second model ( $\Delta R^2 = .06$ , F(2, 297) = 2.23, p < .004) resilience ( $\beta = -.11$ , p = .004) was significant predictor

of suicide. In the third model ( $\Delta R^2 = -.03$ , *F* (3, 296) = 4.95, *p* < .001) deliberate self-harm ( $\beta = .23$ , *p* = .001) was significant predictor of suicide. In addition, mediation analysis revealed that deliberate self-harm was a significant (*p* = .05) mediator between psychopathological distress and suicide. Moderating findings showed a significant interaction effect of psychopathological distress x resilience (B= -1.42, p= .00), and it revealed that resilience plays a significant (p = .05) moderating role between psychopathological distress and suicide.

**Contributions.** The study concludes that a higher level of psychopathological distress and deliberate self-harm leads to a higher level of suicide, which causes severe levels of major depressive disorder. The present study will help to understand how to enhance resilience, which reduces deliberate self-harm and suicide acts among adults with major depressive disorder.

**Keywords:** Psychopathological distress, resilience, deliberate self-harm, suicide, adults, major depressive disorder.

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#### **1.0 INTRODUCTION**

According to the World Health Organization (2010), mental health is "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity." According to Ghamari et al. (2010), mental health is a persistent adaptation to changing situations, as well as an attempt to manage internal demands and the requirements of the changing environment. Individuals with poor mental health are unable to progress and fulfill their responsibilities. It has a negative impact on the society's health, improvement, and promotion, as well as its consequences (Rashid et al., 2001).

On the other hand, people with mental illnesses present their problem in a variety of ways. They have issues such as a low self-esteem, academic failure, social rejection, an inability to form interpersonal relationships with others, and a lack of knowledge of social rules. All of these psychosocial issues interfere with the student's ability to learn. Furthermore, the unfamiliar environment of the university for new students, separation from family, loss of interest in the field of study, a lack of accommodations and financial facilities can all lead to psychological discomfort and academic failure (Tavakolizadeh & Khodadadi, 2010).

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According to the United Nations International Children's Emergency Fund (2013), Pakistan has a large cohort of young adults (ages 15-29 years), accounting for at least 30% of the total population. In many ways, it is a country in transition, undergoing rapid psychosocial change, and traditional social structures, beliefs, values, and family dynamics are increasingly being impacted. Many people are finding it difficult to cope. In Pakistan, mental health is still a taboo. There is a culture in which mental health issues are not acknowledged or accepted. Several students were concerned that their problems would be brought to the attention of university officials. They were concerned about the potential consequences and the impact such information might have on their academic progress and future success.

Furthermore, psychopathological distress has become a major concern, possibly leading to a variety of health problems, including psychopathology such as depression and anxiety. Stressful experiences involve changes in the environment that require adaptation; stress is typically perceived when the requirements of a situation outweigh one's ability to cope effectively with those requirements (Moore, Zoellner, & Mollenholt, 2008). Experiences involving threat, danger, or potential harm (e.g., risk of serious illness or death from the coronavirus), loss (e.g., of loved ones, income, status, employment), uncertainty and unpredictability (e.g., changing health guidance, insecure access to childcare, introduction of new variants), and lack of control are especially likely to be perceived as stressful and are powerful predictors of the onset of mental health problems (Dickerson & Kemeny, 2004).

Unfortunately, these types of experiences have been remarkably common during the pandemic and have required ongoing adaptation. All intentional behaviors performed with the knowledge that they can or will result in some degree of physical or psychological harm to oneself could be categorized as "self-injury" or "self-harm" (Nock, 2010). Self-harm is now commonly classified into two categories: suicidal behavior and non-suicidal self-injury (NSSI). This classification is based on the intent behind the self-harming act. Over the last few decades, there has been an ongoing debate about the place of self-harm in our diagnostic classifications. For a long time, self-harm was thought to be a symptom of a few specific disorders (e.g., depression or borderline personality disorder). In contrast, researchers attempted to incorporate both types of self-harm into the DSM-5 as distinct diagnostic entities (non-suicidal self-injury disorder and suicidal behavior disorder) (Gillies et al., 2018).

Additionally, suicide is a complex public health issue that is the leading cause of death for young adults aged 18 to 25 worldwide (Gallagher & Miller, 2018). The majority of research in this field has focused on identifying suicide risk factors, with a notable lack of studies on suicide resilience (Shahram et al., 2021). Shifting our focus to suicide resilience and related

behavior may help inform innovative suicide prevention strategies (Ivbijaro et al., 2019). Developing strengths-based approaches can be an important new direction in developing interventions, as focusing on suicide risks has not advanced our understanding of suicide or reduced suicide rates (Kessler et al., 2020).

Moreover, suicide resilience is commonly defined as both the ability and the dynamic process of maintaining psychological and physical health functioning in the face of high suicide risks (Sher, 2020). The concept is largely based on well-documented findings that the majority of high-risk individuals, such as those suffering from depression or suicidal ideation (Collins et al., 2018), do not engage in suicidal behavior. The buffering hypothesis is used in the majority of current studies on suicide resilience to identify the psychological constructs that moderate the relationship between suicide risks and suicidal behavior. However, this approach is frequently limited because it produces relatively small effect sizes (2-5%) of the indicated interaction effects and inconsistent findings across studies, whereas a person-centered approach based on identifying resilient individuals demonstrates the stability of resilience over time (Siegmann et al., 2018).

Importantly, participants with major depressive disorder (MDD) who are at risk for suicidal behavior typically approach suicide by searching the Internet for information and news about self-harm and suicidal behavior, especially when stressed and affected by psychopathological distress. The current study focused on the significance of suicidal thoughts (ST) and non-suicidal self-injury (NSSI), because the link between ST and NSSI leads to major depressive disorder (MDD) and negative clinical outcomes in adults. The current research aimed to examined the moderating role of resilience and mediating role of deliberate self-harm among adults with major depressive disorder in Pakistan. Because resilience is a variable that affects the relationship between psychopathological distress and suicide. However, deliberate self-harm play as a mediating role because it's an intervening variable it links the psychological distress and the suicide act, and its existence explains the relationship between these two variables psychopathological distress and suicide.

### **1.1 Motivation of Study**

Despite increasing awareness for mental health and its care in general, getting professional assistance for mental wellbeing is still not routine in Pakistan. People tend to visit medical facilities for mental health problems only when they recognize severe symptoms. This tendency is also reflected by the mental healthcare infrastructure. In addition to psychiatrists engaged in psychiatric hospitals and other medical facilities, two types of licensed mental health

counsellors exist in the nation at present: clinical psychologists and public psychologists. A clinical psychologist license is certified by a private organization and was the only available license for mental health-related counsellors for decades since its initiation in 1988. In 2018, the government announced the establishment of a national certification of public psychologists. Both clinical psychologists and public psychologists can currently work in the field of medicine, education, industries, social welfare, and jurisdiction. The distinction between the two types of psychologists is, however, not yet clearly specified. It remains to be seen if the recent changes to the infrastructure will convince the general public in Pakistan to make wider use of mental health counselling.

Therefore, the main motivational aim of the present study is that how exactly should we respond to mental health issues such as suicide, deliberate self-harm and major depressive disorder? The previous study suggests that a key step is to train and increase the number of socalled 'gatekeepers' those able to spot the signs of mental health problems among others. It's also important to create an environment in which those who feel unwell or anxious are able to speak up, and to establish a range of places and contact points where they can easily seek advice. To this end, social media is one way of delivering this, in addition to traditional telephone consultations.

Overseas developments in mental health measures made available in the workplace are also useful reference. For example, adopting hotdesking instead of fixed office layouts, or changing supervisors for different projects to broaden staff relationships. A wide range of organizations measures can be put in place, from holding regular all-hands sessions on mental health to informing staff of available counselling in the event of a shocking incident such as a shooting, as well as rebalancing negative emotions through activities such as yoga and meditation classes.

Moreover, the support and treatment of citizens with mental health problems in Pakistan are coordinated under the Act on Mental Health and Welfare for the Mentally Disabled enacted in 1950. In October 2020, an estimated number of approximately five million people in the nation were receiving treatments for mental and behavioral disorders such as MDD. But still, there is highly need to develop and implementation of mental health interventions to reduce the high rate of depressive and suicidal problems. Therefore, the aims of present study are to examine the relationship between psychopathological distress and suicide, as well, to study the moderating role of resilience and mediating role of deliberate self-harm with suicide.

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#### 2.0 LITERATURE REVIEW

Suicide attempts, suicide and self-harm are public health predicaments across the world by Naghavi (2019). Deliberate self-harm (DSH) is the act of intentionally causing hurt to oneself, and suicide is the act of deliberately causing one's own fatality by Klonsky et al. (2015). Annually, approximately 800,000 individuals pass away due to suicide globally. The yearly global death rate was roughly 11.2% or 100,000 human beings, with differences across age groups and states Naghavi (2019). Suicide is considered the second-leading cause of death in early adults aged 10-19 years by Bilsen (2018). Several studies demonstrated that self-harm feeling fluctuates during the lifecycle (Muehlenkamp et al., 2012).

In addition, the World Health Organization (WHO) in 2018 showing that suicide attempts rate in youngsters aged 15-29 years were 3.9 in 100,000 in 2016 and 4 in 100,000 in 2003 (Barreto Carvalho et al., 2017). In another study, out of 30,477 youngsters aged 14-17 years in six European states, 2.6% reported DSH incidents, and 3.2% mentioned multiple incidents in the same period (Guerreiro et al., 2017). About 80% adolescents reported that they had not experienced feelings of Deliberate self-harm in the preceding year. Even though unusual, suicide in youngsters is an awful outcome that should be dynamically worked against (Wasserman, Cheng, & Jiang, 2005). Young adulthood and adolescence are a phase at risk for both deliberate self-harm and suicide attempts and, consequently, the capacity to identify self-harming adults at risk of suicide is progressively more overbearing (Brausch, 2009).

Moreover, self-harm behavior and suicide are heterogeneous concepts in cultures or societies with different terminologies all over the world (Meszaros, Horvath, & Balazs, 2017). According to a study, idea of non-suicidal self-injury (NSI) shows a deliberate inclination, but this idea is not casually recognized globally (Rashid et al., 2001). For example, tattoos and piercings is a sign of fashion and are considered taboo in different countries. However, many researchers believe that it leads to injury or destruction of body tissue with no major physical harm (Glenn & Klonsky, 2009).

However, these DSM-5 explanations emphasize the intentional nature of the behavior in relation to reducing mental problems and emphasize the intentional and non-suicidal goal based on intentionality. Several studies commonly used terminologies related to intentional self-harm that help explain Brausch's (2009) concept. For example, self-injury is considered NSI, as is distinguishing oneself from brutal circumstances such as drug use and trichotillomania. DSH, on the other hand, includes NSI tendencies as well as intentional drug overdoses. This concept was proposed to denote intentional, non-socially acceptable behaviors and self-directed actions aimed at causing impairment or destruction of the body, whether executed without or with a deliberate suicidal attempt.

Additionally, deliberate self-harm is the term used in Pakistan to prevent suicidal thoughts (Glenn & Klonsky, 2009). On the other hand, studies have disputed that DSH behaviors could be assumed as a protective factor related to suicidal attempt, arguing that DSH behavior was allowing disparaging impulses into a constrained area, and individuals developed a false belief of control over death. In fact, a study found that children reporting DSH is one of the most protective factors in overcoming suicidal ideation (Rehman, Majeed, & Qamar, 2021). DSH, on the other hand, has been linked to an increase in psychological problems such as suicidal behavior or ideation, depression, borderline personality disorder, and mood swings (Hafsa, Aqeel, & Shuja, 2021)

According to Bergen et al. (2012), prevailing insecurity in Pakistan was an important sustaining factor for female depression, as chronic terrorist attacks have a significant impact on mental health, frequently causing anxiety and depression. Women are more concerned about the threat of terrorism than men. According to Chaudhry et al. (2010), in South Asian cultures, somatic symptoms are a common presenting complaint in depressed patients, particularly women, because physical illnesses are more culturally acceptable and often given proper attention than psychiatric illnesses. As a result, patients with depression are frequently misdiagnosed by general practitioners.

In a study, the most common complaints were headaches and body aches. 70% of Pakistan's population lives in rural areas, within a feudal or tribal value system. There is a lack of understanding about mental health. According to Bostwick et al. (2016) psychological disorders are generally stigmatized and are thought to have paranormal causes. As a result, the majority of patients request help from traditional faith healers or religious leaders. According to Khan and Hyder (2006), suicide is a prohibited act in Islam, and under Pakistani law (based on Islamic beliefs), both suicide and deliberate self-harm are punishable by imprisonment and fines.

Nonetheless, the number of suicides has been rising in recent years. The majority of suicides are committed by single men and married women under the age of 30. The most common methods of suicide are hanging, insecticide, and firearm, and the most common reasons for suicide are interpersonal relationship problems and domestic issues. Suicide is strongly linked to depression in Pakistan, which is underdiagnosed and undertreated (Khan et al., 2016).

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In addition, Niaz (1994) discovered that the majority of suicidal patients were married females in a study on suicidal patients. Fights with husband were the most common source of pain (80%), followed by fights with in-laws (43%). Another study of parasuicide in Pakistan conducted by Khan et al. (2016) discovered that the majority of the participants were young adults (mean age 27-29 years). The sample revealed a higher proportion of women (185) than men (129), and the proportion of married females (33%) was higher than that of men (18%). The two major groups of women were housewives (55%) and students (32%). The majority of female participants (80%) reported having problems with their partners. A four-year survey of psychiatric outpatients at a private clinic in Karachi revealed that two-thirds of the patients were women, with 60% of these women suffering from a mood disorder. 70% had been victims of violence (domestic violence, beatings, sexual harassment, and rape) and 80% had marital or family conflicts (Khan et al., 2016).

# 2.1 Hypothesis

- There is likely to be a positive relationship between psychopathological distress, deliberate self-harm and suicide among adults with major depressive disorder.
- There is likely to be a negative relationship between resilience and suicide among adults with major depressive disorder.
- There is likely to be a predicting role of psychopathological distress, deliberate selfharm and resilience with suicide among adults with major depressive disorder.
- There is likely to be a moderating role of resilience between psychopathological distress and suicide among adults with major depressive disorder.
- There is likely to be a mediating role of deliberate self-harm between psychopathological distress and suicide among adults with major depressive disorder.

### **3.0 RESEARCH DESIGN**

### **3.1 Participants**

It is a descriptive correlational study with adults. The correlational research design was used. Purposive sampling was used to recruit (n=300 adults) from various universities in Pakistan. Purposive sampling is used when a researcher establishes a specific criterion for collecting data from a population. G-power analysis was used to determine the sample size.

Adults with major depressive disorder aged 18-40 years and living in Pakistan met the inclusion criteria. The current study included male and female participants from Pakistan. There were both educated and uneducated clients. Three members were excluded because they

did not meet the inclusion criteria. The total sample size was 300 adults. Participants with any other psychiatric illness, regardless of MDD, or with a physical disability or drug abuse were excluded from the current study.

For the diagnosis of major depression disorder, psychiatric interviews were conducted (MDD). The DSM-5 MDD checklist was used to diagnose patients with major depressive disorder. The majority of adults (61.7%) attended private universities. The majority of participants (56.3%) were female students. The majority of participants (36%) have a conflicted family environment.

### **3.2 Measures**

# 3.2.1 Demographic Questionnaires

A set of queries was developed in order to obtain appropriate demographic information about adults. Age, academic level, socioeconomic status, family background, and gender were all details for adults.

# 3.2.2 Attitude toward Deliberate Self-Harm Questionnaire (ADSHQ; McAllister et al., 2002)

The Attitude toward Deliberate Self-Harm Questionnaire was developed by McAllister et al. (2002). His questionnaire is an acceptable tool for assessing healthcare providers' attitudes toward patients who self-harm. This scale has 33 items. It is a 4-point Likert scale with 1 being "strongly disagree" and 5 being "strongly agree." The Cronbach's alpha coefficient for the overall scale was ( $\alpha$ =.89) in the current study.

# 3.2.3 Columbia Suicide Screen (CSS; NREPP, 2015)

Columbia Suicide Screen tool was originally developed by NREPP (2015). It is a 6-question tool approved by the National Institute of Mental Health that is used to assess mood, drug abuse, suicidal thoughts, and commitments. In comparison to other screening tools, this instrument reportedly has lower rates of false positives (consequences that inappropriately recommend suicide risk) (NREPP, 2015). This tool's Cronbach alpha reliability is ( $\alpha$ =.56).

# 3.2.4 Brief Resilience Scale (BRS; Smith et al. 2008)

Brief resilience scale was formerly developed by Smith et al. (2008). The Brief Resilience Scale was developed to assess the perceived ability to recover from stress. The scale was designed to assess a unitary construct of resilience by including both positively and negatively worded items. The BRS has a score range of 1 (low resilience) to 5 (high resilience) (high resilience). This scale has 6 questions and uses a 5-point Likert scale (1=Strongly Disagree to 5=Strongly Agree). In the current study, the Cronbach's alpha coefficient for the total scale was ( $\alpha$ =.77).

## 3.2.5 Depression, Stress and Anxiety Scale (Lovibond & Lovibond, 1995)

Lovibond and Lovibond (1995) developed the Depression, Stress, and Anxiety Scale (DASS-21). The Depression, Anxiety, and Stress Scale - 21 Items (DASS-21) is a collection of three self-report scales designed to assess the emotional states of depression, anxiety, and stress. Each of the three DASS-21 scales has seven items, which are divided into subscales with similar content. This scale has 21 items. This tool *utilized* a four-point Likert scale. This scale has a Cronbach alpha reliability of ( $\alpha$ =.79).

# 3.2.6 Beck Depression Inventory (BDI-II; Beck et al., 1961)

The Beck Depression Inventory-II (BDI-II) is a widely used 21-item self-report inventory used to assess the severity of depression in adolescents and adults. The BDI-II was revised in 1996 to be more consistent with DSM-IV criteria for depression. The Beck Depression Inventory (BDI) is a self-report assessment checklist of 21 questions that measures typical depression attitudes and symptoms. This scale has a Cronbach alpha reliability of ( $\alpha$ =.80).

### **3.3 Procedure**

Before data collection could begin, permission was obtained from the heads of departments at different universities, and once permission was obtained, university students were approached. Adults were systematically informed about the purpose of the study, and those who agreed were given a form to secretly complete. Meanwhile, this study collected data through paper-and-pencil surveys. Those who agreed to participate in the study were given a set of forms to fill out. Adults received no compensation for their contributions, which were entirely voluntary. The reviews that were completed were ready for data analysis at the same time.

### **3.4 Analysis**

Statistical analyses were performed using IBM SPSS Statistics: version 23, with significance set at p 0.05. The demographic variables were defined using mean, standard deviation, frequencies, and percentages. Means, standard deviations, and reliability values (i.e., Cronbach alphas) were calculated for the major study variables. It can be seen that all of the variables

were within normally acceptable ranges of 2. Pearson product moment correlation analysis, hierarchical regression analysis, mediation analysis, and moderation analysis were used to confirm and clarify the simplicity of analysis and clarification.

### 4.0 ANALYSIS AND DISCUSSION

#### 4.1 Pearson Product Moment Correlation Analysis

The results of the correlation analyses are reported in Table 1. A significant positive relationship was observed between total score of psychopathological distress (r = 0.04, p < .005) with suicide, and, resilience (r = .11, p < .004) has significant negative relationship (r = .21, p = .001) with suicide. However, deliberates self-harm showed significant positive relationship with suicide. See Table 1 for summary.

#### 4.2 Hierarchal Regression Analysis

A hierarchical regression was conducted with psychopathological distress entered at the first step, resilience entered at the second step and deliberate self-harm entered at the third step. The findings for the regression analysis are in table 2. We found that all models were significant. In the first step ( $\Delta R^2 = .02$ , F(1, 298) = .51, p = .000) psychopathological distress was a statistically significant predictor ( $\beta = .04$ , p = .000), of suicide. In the second model ( $\Delta R^2 = .06$ , F(2, 297) = 2.23, p < .004) resilience ( $\beta = -.11$ , p = .004) was significant predictor of suicide. In the third model ( $\Delta R^2 = -.03$ , F(3, 296) = 4.95, p < .001) deliberate self-harm ( $\beta = .23$ , p = .001) was significant predictor of suicide. See Table 2 for summary

### 4.3 Mediation Analysis

Results of direct effect revealed that psychopathological distress and deliberate self-harm were significant positive (P = .05) predictors of suicide. The result of an indirect effect of deliberate self-harm revealed that deliberate self-harm was a significant (P = .05) mediator between psychopathological distress and suicide. See Table 3 and Table 4 for summary

#### **4.4 Moderation Analysis**

Outcomes showed that significant interaction effect of psychopathological distress x resilience (B=-1.42, p=.00). The Value of  $R^2(.20)$  explained .20% variance in the suicide accounted for by psychopathological distress. See Table 5 for summary.

	1	2	3	4
1. Psychopathological Distress	-	0.10*	$0.05^{*}$	$0.04^{*}$
2. Resilience	-	-	.62**	.11**
3. Deliberate Self-Harm	-	-	-	.21**
4. Suicide	-	-	-	-

Table 1: Correlational ana	lysis between s	study variables (n=300)
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\*\*. Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

	Sui	cide
	Adul	ts
Predictors	$\overline{\Delta \mathbf{R}^2}$	β
Step 1	.02**	
Psychopathological Distress		$.04^{**}$
Step 2	06*	
Resilience		11*
Step 3	.03**	
Deliberate Self-Harm		.23**
Total R <sup>2</sup>	.17%	

#### Table 2: Hierarchal regression analysis predicting suicide (n=300)

Note: \*p < .05. \*\*p < .01. \*\*\*p < .001.

a. Dependent Variable: Suicide

b. Predictors in the Models: Psychopathological Distress, Resilience, Deliberate Self-Harm.

Table 3: Standardized estimates of direct effects of th	ne pathway analysis (n=300)
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Predictors	Psychopatholo	Psychopathological Distress Suicide		icide
	В	SE	β	SE
Psychopathological Distress	$.06^{*}$	.08	$.10^{*}$	.11
Deliberate Self-Harm	$.04^{*}$	.08	$.17^{*}$	.08
$R^2$	.04			

\*p < .05, \*\*p < .01, \*\*\*p < .001 Note:  $\beta$  = Standardized coefficient, SE = Standardized error

Table 4: Standardized	estimates of indirect	effect through	deliberate self-harm	(n=300)
	commando or munico	. encet unough	uchocrate sen-narm	(n - 300)

Predictors	Suicide	
	β	SE
Psychopathological Distress	.04*	.10

\*p < .05, \*\* p < .01, \*\*\* p < .001 Note:  $\beta$  = Standardized coefficient, SE = Standardized error

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Predictor		SE	В	t
Psychopathological	Distress	.53	-1.42	-2.69
Suicide		.29	55	-1.90
Interaction		.00	.01	2.90
R <sup>2</sup> .20				
F 16.	76			

Table 5: Moderating role of resilience (n=300)

*Note:* \*p < .05. \*\*p < .01. \*\*\*p < .001.

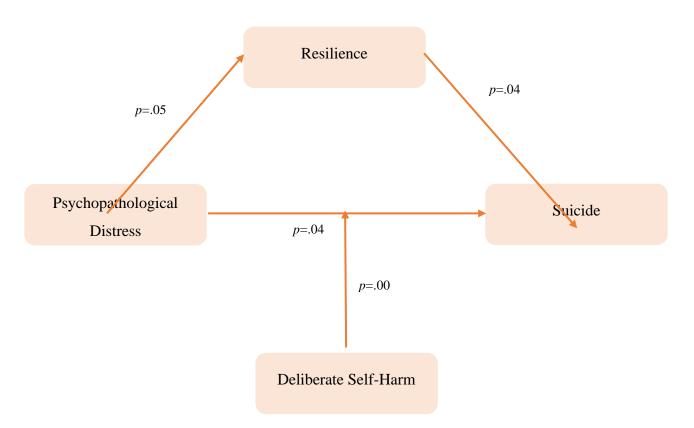


Figure 1: Show mediating role of deliberate self-harm and moderating role of resilience between psychopathological distress and suicide

#### 4.5 Discussion

The findings revealed that psychopathological distress and deliberate self-harm have a significant positive relationship with suicide, whereas resilience has a significant negative relationship with suicide in adults. Suicide was significantly predicted by psychopathological distress, resilience, and deliberate self-harm. Findings also revealed that resilience plays a significant moderating role between psychopathological distress and suicide, and that deliberate self-harm plays a significant mediating role between psychopathological distress and suicide. Prior research supported the current study's findings.

The researchers believe that depression, by interfering with a person's daily routine and social relationships, contributes to these thoughts and even suicide attempts by Levine (2008). Furthermore, the study's other findings suggest that anxiety, everyday stress, and psychological health have a positive and significant relationship with suicidal ideation, which is consistent with the findings of previous studies by Levine (2008). According to Philips et al. (2002) the presence of stressor factors can affect a person's psychological health and worry, and their effects on suicidal ideation and suicidal attempts. Another study's finding revealed a negative relationship between resiliency and suicidal thoughts, which is consistent with the findings of other studies. It means that an individual's resilience reduces suicidal ideation (Lee & Cranford, 2008).

In addition, resilience is an important factor in preventing general mental illnesses, and it appears that it has an impact on enhancing suicidal thoughts by reducing the risk of the appearance of other psychological illnesses, which may lead to suicidal ideation. On the other hand, authors declared that those with a high level of resiliency do not experience psychological diseases despite facing risks and severe issues by Pinquart (2009). They explained that people who attempt suicide have a lower level of resiliency (Rutter, 1985).

Moreover, the impact of a confounding factor cannot be understood and considered entirely through a mediational model. A moderation outline has also been provided for resilience. While moderation and mediation methods differ, both emphasize the role of a "third intervening variable" in defining the variance of an outcome (i.e., dependent) variable by MacKinnon, Krull, and Lockwood (2000). Min, Lee, and Chae (2015) for example, found that resilience had a moderating effect on suicidal thoughts in patients with depression and/or anxiety disorders. In addition, resilience reduces the spread of depression during stressful life events, acting as a moderator (Hjemdal et al., 2006).

According to a review of research, the majority of people who engage in suicidal behavior are under the age of 30, highlighting the need to educate adults in Pakistan about psychological health and other problems they face. Suicide and DSH were also uncommon among the elderly, a finding that stands in contrast with findings from Western studies. Part of the explanation could be found in the fact that some older people in Pakistan are socially isolated or live on their own, where they must provide for themselves (Raja et al., 2008). Another study found that adults with high levels of resilience during pandemics had higher levels of psychological well-being. It is critical to understand how adults adapt to various changes in their lives, as well as how environmental, physiological, and psychological factors may influence adult intolerance, uncertainty, and psychological health (Rehman et al., 2021).

#### **5.0 CONCLUSION**

Suicidal behavior is common in adults with major depressive disorder. Suicide is strongly associated with higher levels of psychopathological distress and deliberate self-harm. According to the findings of our study, there is a high need to assess psychopathological symptoms in adults, as well as to increase resilience among adults in the initial assessment, in order to prevent deliberate self-harm and serious suicidal behavior.

#### 5.1 Limitations and Recommendations

The current study considered a number of limitations and recommendations. The first limitation of the current study is that it only collected data from 300 university students. As a result, the current study's sample size was restricted in order to improve comprehension. A larger sample size from more universities would provide researchers with more data to analyze, allowing them to gain a better understanding of the topic. It will also improve the validity and reliability of research. The data was also limited to one city, Lahore, Pakistan. Future research could collect data from various cities to improve generalization in society.

#### **5.2 Strengths and Implications**

This study found a significant positive relationship between psychopathological distress and deliberate self-harm, proving the hypothesis of the current study. Because statistics show a positive relationship between variables when psychopathological distress and deliberate self-harm are high. However, resilience has a significant negative relationship among adults with major depressive disorder, which supports the current study's hypothesis. According to statistics, a negative relationship exists when the level of one variable rises while the level of the other variable falls. As a result, as resilience increases, the rate of suicide decreases, indicating a negative relationship between resilience and suicide. Previous literature, as mentioned in the discussion chapter, supported the current study's findings.

Also, this study was conducted with university students because students in Pakistan generally start university in late adolescence or early adulthood. The rapid biological and psychological changes and development that occur at this time can make it difficult to pinpoint the emergence of mental health problems, resulting in an increase of negative consequences before issues are identified. To fully comprehend the mental health issues that Pakistani university students face, it is critical to first comprehend their living environment, which includes their cultural and social background, family dynamics, demographic background, and social status.

To begin, mental health is an important but frequently overlooked field of medical health science in Pakistan. It is not regarded as exciting, nor does it enjoy the respect it deserves in comparison to other medical disciplines such as neurology and cardiology. Acknowledging and seeking help for mental health problems is primarily avoided, and discussion of such issues is largely taboo. Traditional beliefs, societal pressure, misconceptions, and negative images of mental hospitals, patients, and related professionals such as psychologists and psychiatrists all contribute to this.

Therefore, university students in their early twenties are at a stage in their lives when mental health promotion and effective care can have a positive impact. A positive sense of well-being is required for an individual's development in terms of communication, thinking skills and learning, emotional development, and self-esteem. Despite the importance of research aimed at understanding how psychological distress and deliberate self-harm cause suicide and depression among university students and affect their motivation and future prospects, this has been a largely neglected area in Pakistan.

Moreover, the main implications of this study were as follows: this study was specifically designed to raise awareness among adults who require assistance or assistance from their family and society. The current study was designed to educate and inform adults of Pakistani ethnic backgrounds about the benefits of resilience. This research could help administrators, policymakers, and social workers educate families and society about the various levels, styles, and types of psychopathological distress and deliberate self-harm that leads to suicide. According to this study, it is important not only for professionals and students to be aware of suicide and depression in Pakistani society, but also to be educated about culture itself in both social and clinical fields. Because data was collected from various public and private universities in Pakistan, the current study's findings are generalizable.

Furthermore, the current study suggests that additional research should be conducted to gain a better understanding of the phenomenon and to shed light on the grieving process as well as how suicide affects and is emotionally dealt with by survivors and informed people. Additional research could also assist in the development of effective prevention strategies, such as counselling communities, which could not only allow for early intervention and identification of suicidal individuals, but also provide a supportive environment for both suicidal individuals and survivors seeking help.

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