

Suicidal Ideation and Resilience in Individuals Experiencing Depression With and Without Childhood Adversities

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Abstract

Background: For those diagnosed with depression, adverse childhood experiences (ACEs) are very harmful traumatic events that can affect mental wellness. Psychologists have previously demonstrated a firm relationship between childhood aversions, suicidal ideation, and decreased resilience. The purpose of this study was to determine what relationship there is between children at risk of suicide ideation, ACEs, and resilience while focusing on gender differences and the connection between childhood adversities.

Method: One hundred and fifty participants (75 male, 75 female) were included in the study, diagnosed with depression, 25 to 45 years old ($M = 34.02$, $SD = 5.51$). From Lahore hospitals, staff participated in the study and were assessed for childhood adversities, depression, suicidal ideation, and resilience. The instruments used consisted of a Traumatic Experiences Checklist (TEC), a Patient Health Questionnaire (PHQ-9), a Connor-Davidson Resilience Scale (CD-RISC), and a Suicide Ideation Attributes Scale (SIDAS). Independent sample t-tests were calculated to determine the differences in suicidal ideation and resilience by childhood adversity and by gender.

Results: Analysis of the data revealed that individuals with a history of childhood adversities rated significantly higher on ratings of suicidal ideation ($M = 42.54$, $SD = 2.61$ vs. $M = 41.33$, $SD = 2.87$; $t(148) = 2.39$, $p < .05$). Individuals who had childhood adversities also had significantly lower resilience levels ($M = 21.18$, $SD = 4.14$) than those without ($M = 19.04$, $SD = 2.66$), $t(148) = 3.77$, $p .05$. Similar to other studies, we find that gender differences exist for suicidal ideation but not resilience.

Conclusion: The results demonstrate that exposure to adverse childhood experiences might play a significant role in influencing the risk of suicidal ideation, particularly in people with depression. Importantly, these results suggest that trauma experienced in childhood should be addressed in psychological treatments for depression. Further research is needed to develop a strategy for the prevention of suicidal ideation based on gender differences.

Keywords: Suicidal Ideation, Resilience, Childhood Adversities, Depression, Gender Differences, Mental Health, Trauma.

Introduction

Adverse childhood experiences (ACEs) are a significant factor in the development of many different adverse mental health outcomes, including depression, anxiety, post-traumatic stress disorder (PTSD), and suicidality (Felitti et al., 1998). Emotional, physical, and sexual abuse, neglect, household dysfunction, and all other kinds of childhood adversities disrupt a child's sense of security and development. Individuals who suffer these adversities in early life are twice as likely to develop chronic mental health conditions in later life, most commonly major depressive disorder (MDD) (Anda et al., 2006). Now that nearly one in three American adults report living with childhood adversities, there is a growing interest in which specific pathways lead from childhood adversities to later outcomes such as suicidal behavior and resilience.

Thoughts or considerations of suicide (or suicidal ideation) are a common symptom of depression, especially in individuals with a history of trauma or abuse (Brown et al., 1999). Research indicates that individuals with a history of Adverse Childhood Experiences (ACEs) face a considerably elevated risk of experiencing suicidal thoughts, mainly when dealing with depression (Dube et al., 2001).

Resilience, the adaptation or thriving in response to adversity, is the relevant determinant of how much an individual can manage ACEs (Connor & Davidson, 2003). Resilient people are believed to be able to better cope with the emotional and psychological results of childhood trauma. Subsequently, they have a lower likelihood of developing severe mental health illnesses, for example, depression or suicidal ideas (Mackenzie et al., 2018). Factors involved

in resilience comprise personal characteristics, social support, and environmental conditions; thus, it is a complicated and multi-dimensional concern.

Broad evidence exists for gender differences in depression and suicidal ideation expression. Men and women share a genetic predisposition to develop depression; they may experience and express it differently; men are more likely to manifest their depression through externalizing behaviors, as expressed in aggression or substance abuse; women are more likely to show the symptoms of depression through internalizing behaviors — sadness and anxiety (Nolen-Hoeksema, 2012).

This study aims to extend the current literature by investigating the link between ACEs, depression, and resilience in depressed individuals. This study investigates whether those who have and who have not experienced childhood adversities differ in suicidal ideation and resilience and whether there are gender differences in their effects. Specifically, the study aims to answer the following research questions:

1. Is there a correlation between individuals with a history of childhood adversity and depression and higher levels of suicidal ideation compared to those without childhood adversities?
2. Do individuals who have experienced childhood adversities and struggle with depression exhibit lower levels of resilience compared to those who have not experienced childhood adversities?
3. Is there a significant variance in suicide ideation and resilience between men and women diagnosed with depression?

This study aims to answer these questions to guide the clinical management interventions to minimize suicidal thoughts and positive resilience in patients with depression, including those who had undergone early adversities.

The literature review found meta-analyses of child sexual, physical, and emotional abuse and neglect in 244 publications and 551 prevalence rates. However, child maltreatment research is mainly limited to sexual abuse, studies of developed world populations, and self-report methods. In self-report studies, prevalence rates were 127/1000 for sexual abuse, 226/1000 for physical abuse, 363/1000 for emotional abuse, 163/1000 for physical neglect, and 184/1000 for emotional neglect (Stoltenborgh et al., 2015). Recent research affirms that adverse childhood experiences (ACEs) are significant predictors of suicide ideation in adulthood. Adults who have

experienced childhood adversities, like abuse, neglect, and dysfunction in the family unit, develop lasting and long-lasting emotional and psychological effects that put them at a higher risk for depressive illness and suicidal thoughts. According to a comprehensive meta-analysis made by Angelakis, Gillespie, and Panagioti (2019), those with a history of childhood maltreatment were abundantly more prone to suicidal ideation than those who did not have that experience. These results highlighted the importance of early intervention as childhood trauma raises the risk of suicidal behavior across the lifespan.

Gong et al. (2020) aimed to determine the relationship between child abuse and suicide attempts among high school students in Guangdong Province, China. The multivariate analysis indicated that physical, emotional, and sexual abuse and emotional abuse were related to suicidal ideation and suicide attempts. Depressive symptoms acted as a moderator between childhood maltreatment and suicidal behaviors, and, therefore, these factors could explain the high levels of suicidal ideation among Chinese adolescents.

A third study tried to quantify the direct effect of child abuse, with mental disorders stripped out, on suicidal behaviors through the analysis of marginal structural models. The data was collected in Tokyo and the neighboring prefectures of Japan and was a cross-sectional study. Results indicated that childhood abuse significantly influenced suicidal behaviors and physical abuse related to having suicidal ideation, plan, and attempt. According to the study (Obikane, 2018), mental disorders do not mediate the link between childhood abuse and adult suicidal behaviors. In addition, a study involving 3,146 Chinese adolescents pointed out that childhood maltreatment raises the odds of SI. The Childhood Trauma Questionnaire, the Resilience Scale for Chinese Adolescents, and the Beck Scale for Suicide Ideation assessed the variables of resilience. Findings revealed that adolescents who had a history of child abuse and neglect had 1.74 odds of having SI. Emotional abuse was the single most significant factor, and thus, it was the focus of the analysis. The resilience factor explained the total association in 39.8% of the total association. Preventive measures, which can be referred to as resilience, could be suggested for suicidal risk management.

In addition, the association between childhood maltreatment and suicidality in adolescents and young adults with their first depressive episodes was examined. The prevalence of suicide was 31.5% (95% CI, 26.0% to 37.7%). Bipolar disorder, anxiety (and anxiety disorder), smoking, and childhood maltreatment were found as potential associated factors of suicide. Symptoms of anxiety also mediated the association between childhood maltreatment

and suicide attempts. According to the study, adolescents and young adults with first depressive episodes and childhood maltreatment are at high risk of suicide (Chen et al., 2021).

Furthermore, Choi et al. (2017) investigated whether ACEs were associated with lifetime suicidal ideation among older adults. Older adults who had experienced childhood adversities were more likely to have had both lifetime and past year suicidal ideation, their findings showed. Looking at this information can show how childhood trauma can seriously affect life as a whole later on in life and how ACE education could lessen suicidal ideation.

Liu et al. (2019) meta-analysis showed that, while women are more likely to report suicidal ideation, men are more likely to complete lethal attempts, the latter associated with sociocultural norms of masculinity and help-seeking behavior.

Although the relationship between ACEs, depression, and suicidal ideation has been established, essential knowledge gaps persist in the literature, and the exact mechanisms by which childhood adversities lead to resilience and suicidal ideation in individuals diagnosed with depression remain unaddressed. In addition, while prior studies have examined gender differences in depression and suicidal ideation, little has been done to evaluate how gender differences occur within those who have experienced childhood trauma. Furthermore, there is a dearth of studies that have focused on the convergence of resilience, childhood adversities, and suicidal ideation in a non-Western context, particularly in Pakistan, in which cultural concepts shape the occurrence of mental health symptomatology and help-seeking behaviors (Poole, 2016).

To address these gaps, this study investigated how childhood adversities relate to suicidal ideation and resilience in people who are depressed and explored gender differences in these variables. This research builds on that literature by providing insights into the effects of childhood trauma on mental health in a non-Western context through a focus on a sample of individuals from Pakistan. It also guides targeted intervention development to address the unique needs of depressed individuals with childhood adversities, including gender-sensitive ways of decreasing suicidal ideation and increasing resilience.

Method

This research was conducted using a cross-sectional design to investigate the relationship between adverse childhood experiences (ACEs), suicidal ideation, and resilience factors in persons with a diagnosis of depression. The main objective was to find out that people with a history of ACEs present with higher levels of suicidal ideation and lower resilience than those with no ACEs. Gender differences in suicidal ideation and resilience to depression were also examined. The design met the relatively brief data collection period and the types of research questions because it efficiently enabled data collection with minimum participant burden. Participants included 150 (75 males, 75 females) individuals diagnosed with major depressive disorder. Various hospitals and clinics in Lahore, Pakistan, were the source of participants recruited for the study. The inclusion criteria were as follows:

- Only those aged between 25 and 45 years participants.
- This must be a formal diagnosis of depression (one that has been made by a mental health professional using the DSM-5 criteria).
- No comorbid psychiatric disorders (e.g., schizophrenia, bipolar disorder) were diagnosed. It was also necessary that the subjects read and understand the Urdu language since all instruments were administered in this language DSM-5 criteria) made by a qualified mental health professional.
- No diagnosis of comorbid psychiatric disorders (e.g., bipolar disorder, schizophrenia).
- Ability to read and understand Urdu, as all instruments were administered in this language.

Gender was evened out in the sample to permit a meaningful comparison of males versus females on the propensity for suicidal ideation and resilience. Participants had a mean age of 34.02 (SD=5.51). Before participating, participants were recruited to the study, informed of its purpose, and provided informed consent. The procedures in this study followed ethical principles, including approval by the institutional review board (IRB) and guidelines set by the American Psychological Association (APA).

Data collection took place from January to March 2023. Participants were approached and invited to participate in the study at outpatient psychiatric clinics and hospitals. In voluntary research, the objectives and information sheet were mentioned for those who agreed. After obtaining informed consent, participants were administered a battery of

psychological assessments to measure the key variables of interest: adolescent depression, suicide ideation, childhood adversities, and resilience.

The following standardized instruments were used for data collection:

1. The Traumatic Experiences Checklist (TEC) is a self-report measure (Nijenhuis, Van der Hart, et al., 2002) that assesses for childhood adversities, including emotional, physical, and sexual abuse and neglect. Different cultural contexts have shown strong evidence of the TEC's reliability and validity. We asked participants to respond to items that reflected whether they had experienced these adversities before 18.
2. The Patient Health Questionnaire-9 (PHQ-9), developed by Kroenke, Spitzer, and Williams (2001), is one of the most common means to evaluate patient depressive symptom severity. The PHQ-9 has nine items scored on a scale from 0 (not at all) to 3 (nearly every day). The total score is between 0 and 27; a higher score means more severe depression. The PHQ-9 has been validated for use in both clinical and nonclinical populations and is commonly used in studies of depression.
3. Connor and Davidson (2003) developed the Connor-Davidson Resilience Scale (CD-RISC). The CD-RISC is a 25-item self-report scale that measures one's ability to cope with adversity. The 40 items are ranked on a 5-point Likert scale, with higher numbers indicating a higher level of resilience. In this study, the Urdu version of the CD-RISC was used, and it was validated earlier in studies conducted in Pakistan (Ahmad & Tariq, 2018).
4. Suicidal Ideation Attributes Scale (SIS): The SIS, developed by Spijker et al. (2014), is a five-5-item scale measuring the severity of suicidal thoughts during the past month. Items are rated from 0 to 10, with higher ratings indicating higher levels of suicidal ideation. The SIDAS has proven to have excellent psychometric properties and is validated for depressive populations.

IBM SPSS Statistics, version 26, was used to analyze the data. First, descriptive statistics were used to summarize the sample's demographic characteristics, age, gender, and scores on the PHQ-9, CD-RISC, and SIDAS.

To test the study hypotheses, independent samples T-tests were used to compare differences in levels of suicidal ideation and resilience between individuals with and without childhood adversities. Consequently, this test was

appropriate because the independent variable was categorical (presence or absence of childhood adversities), and the dependent variables were continuous (suicidal ideation and resilience).

Furthermore, independent samples T-tests were also conducted to compare gender differences in terms of suicidal ideation and resilience of people with depression. Effect sizes (Cohen's d) were calculated in cases with significant differences to establish the magnitude of any such differences.

Assumptions and Robustness Checks

Before applying the t-tests, the variables for normality tests, tests of homogeneity of variance, and outliers must be analyzed. The choice of tests was informed by the assumption of normality being tested using the Shapiro-Wilk test, while equality of variance was tested using Levene's test. The T-test assumption for the current data was tested, and it met the requirements. Further, to check the validity of results, non-parametric tests (Mann-Whitney U) were run on the data, assuming that the distribution of some of the psychological measures may not necessarily be expected.

Ethical Considerations

The Institutional Review Board (IRB) at the University of Lahore permitted this study, and all participants signed informed consent. We explained to participants that they could withdraw from the study at any time without giving any reason. Participant data was kept confidential throughout the study, and identifiers were removed from the dataset.

The questions regarding suicidal ideation were sensitive; we gave resources for mental health support, and if participants reported severe suicidal thoughts, we referred them to counseling services. Researchers were also instructed on how to deal with emotional distress, and there was a good backup for participants during the entire data collection process.

Results

The following chapter includes demographics, scale statistics, and results of the study.

Table 1*Summary of Demographic Variables of Sample (N=150)*

Variable	F	%
Gender		
Male	75	50
Female	75	50
Education		
Matric	50	32.9
B.A	40	28.9
MA	56	36.8
Monthly income		
No income	42	28.0
10000-30000	41	27.3
31000-40000	36	24.0
4100-onward	31	20.7
SES		
Lower class	39	26.0
Lower middle	57	38.0

Upper middle	54		36.0
Marital status			
Single	51		34.0
Married		59	39.3
Divorce	40	26.7	
Family structure			
Nuclear	86		57.3
Joint	64		42.7
Duration of illness			
3M-12M	10		6.6
1Y-5Y	54		35.5
6Y-10Y	52		34.2
11Y-15Y	34		22.4
Previous treatment			
Yes	51		34.0
No	99		66.0
Duration of treatment			
Never	99		65.1
Months	41		27.0
Years	10		6.6
Childhood adversities			
With	78		51.3

Physical	20	25.6
Sexual	22	28.2
Emotional	17	21.7
Neglect	19	24.3
Without	72	47.4

Note. *f* = Frequency, % = Percentage, M = Mean, SD = Standard Deviation

Age = 25-45; Mean = 34.02; SD = 5.51

This table shows the Frequencies and percentages of demographic variables.

Table 2

Reliability of Scales

<i>Scale</i>	<i>No. of Items</i>	<i>α</i>
PHQ-9	9	.636
SIDAS	5	.747
BRC	6	.122
TEC	29	.885

α = alpha Cronbach's

Psychometric properties of all the scales or variables used in this research.

Hypothesis Testing

Hypothesis I

Table 3

*Difference in the level of Suicidal Ideation in Depressed Patients with and without Childhood Adversities.
(N=150)*

Variable	With Childhood (N=78)		Without Childhood (N=72)		95% adversities	Adversities	CL	LL	UL	Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>						
SIDAS	42.54	2.61	41.33	2.87	2.39	0.01	148	0.21	2.19	0.44

M= mean, SD= standard deviation, t= t-test, p= sigma, df= degree of freedom and CL= confidence interval, LL= lower limit, UL= upper limit.

Independent-sample t-test was computed to see the difference in the level of suicidal ideation in depressed patients with and without childhood adversities. It was found that there was a significant difference in suicidal ideation ($t(148) = 2.39, p < .05, 95\% \text{ CI } [0.21, 2.19]$) between depressed patients with childhood adversities ($M = 42.54, SD = 2.61$) and those without childhood adversities ($M = 41.33, SD = 2.87$). These findings support the hypothesis.

Hypothesis II

Table 4

The difference in the Level of Resilience in Depressed Patients with and without Childhood Adversities. (N=150)

Variable	With Childhood (N=78)		Without Childhood (N=72)		95% adversities	Adversities	CL	LL	UL	Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>						
BRC	21.18	4.14	19.04	2.66	3.77	.00	148	1.02	3.26	0.61

M= mean, SD= standard deviation, t= t-test, p= sigma, df= degree of freedom and CL= confidence interval, LL=lower limit, UL= upper limit

Independent-sample t-test was computed to see the difference in the level of resilience in depressed patients with and without childhood adversities. It was found that there was a significant difference in the level of resilience ($t(148) = 3.77, p < .05, 95\% \text{ CI } [1.02, 3.26]$) between depressed patients with childhood adversities ($M = 21.18, SD = 4.14$) and those without childhood adversities ($M = 19.04, SD = 2.66$). These findings support the hypothesis.

Hypothesis III

Table 5

Gender Differences in the Level of Suicidal Ideation in Depressed Patients. (N=150)

	Male		Female		95%					
	(N=75)		(N=75)		CL					
Variable	M	SD	M	SD	t	P	Df	LL	UL	Cohen's
	d									
SIDAS	42.25	2.79	41.13	2.80	-2.24	0.01	148	-2.03	-0.21	0.40

M= mean, SD= standard deviation, t= t-test, p= sigma, df= degree of freedom and CL= confidence interval, LL= lower limit, UL= upper limit.

Independent-sample t-test was computed to see the gender difference in the level of suicidal ideation in depressed patients. It was found that there was a significant difference in suicidal ideation ($t(148) = -2.24, p < .05, 95\% \text{ CI } [-2.03, -0.21]$) between males ($M = 42.25, SD = 2.79$) and females ($M = 41.13, SD = 2.80$). These findings support the hypothesis.

Hypothesis IV

Table 6

Gender Difference in the Level of Resilience in Depressed Patients. (N=150)

	Male		Female		95%					
	(N=75)		(N=75)		CL					

Variable	M	SD	M	SD	T	p	Df	LL	UL	Cohen's d
BRC	19.75	3.60	19.59	2.99	-0.29	0.76	148	-1.23	0.91	0.04

M= mean, SD= standard deviation, t= t-test, p= sigma, df= degree of freedom and CL= confidence interval, LL= lower limit, UL= upper limit.

Independent-sample t-test was computed to see the gender difference in the level of resilience in depressed patients. It was found that there was a significant difference in the level of resilience ($t(148) = -0.29, p < 0.76$, 95% CI [-1.23, 0.91]) between male (M= 19.75, SD= 3.60) and female patients (M=19.59, SD=2.99). These findings do not support the hypothesis.

Additional findings

Table # 7

Analysis of variance to determine the difference in the three groups of socioeconomic status

(lower class, upper middle, and lower middle) on the variables of Suicide and Resilience in Depressed Patients.

(N=150)

		The sum of Squares	DF	Mean Square	F	Sig.
SIDAS	between Groups	29.02	2	14.511	1.809	0.167*
	Within Groups	1178.871	147	8.02		
	Total	1207.893	149			
BRC	between Groups	13.50	2	6.75	0.615	0.542*
	Within Groups	1613.83	147	10.978		
	Total	1627.33	149			

Note. Dependent variable: suicide and resilience showed no significant difference between the three groups N=150 depressed Patients (* $P > 0.5$) level.

SIDAS= suicidal ideation attributes scale

BRC= brief resilience scale

One-way ANOVA was conducted to see the difference between suicide and resilience in depressed patients. All these groups of depressed Patients showed no significant difference between the three groups of patients. Suicide showed no significant difference, $F(1.809)$, $P=0.167$, resilience showed no significant difference (0.615), $P=0.542$.

Table # 8

Tukey Multiple Comparisons Table for Suicide and Resilience with three groups of Socio-economic Status.

Dependent Variable	(I) Groups	(J) Groups	Mean difference (I-J)	Std.Error	Sig	95% Confidence Interval	
						LB	UB
SIDAS	lower class	Upper middle	1.115	.59	0.15	-.29	2.52
		Lower middle	0.493	.58	0.68	-.90	1.89
	Upper middle-lower class		-1.115	.59	0.15	-2.52	0.29
	Lower middle-lower class		-0.493	.58	0.68	-1.89	0.90
	Upper middle-lower middle		-0.623	.53	0.48	-1.90	0.65
	Lower middle-upper middle		0.623	.53	0.48	-.65	1.90
BRC	lower class	upper middle	0.561	.69	0.70	-1.09	2.21
		Lower middle	0.750	.68	0.52	-0.88	2.38
	Upper middle-lower class		-0.561	.69	0.70	-2.21	1.09
	Lower middle-upper middle		0.189	.62	0.95	-1.30	1.68
	Lower middle-lower class		-0.75	.68	0.52	-2.38	0.88

Upper middle -0.189 .62 0.95 -1.68 1.30

Table # 8 shows there is no significant difference in suicide and resilience, $*, =P > .05$ level.

Table # 9

Analysis of variance to determine the difference in the three groups of marital status (single, married, and divorced) on the variables of Suicide and Resilience in Depressed Patients. (N=150)

		The sum of Squares	DF	Mean Square	F	Sig.
SIDAS	between Groups	106.624	2	53.312	7.116	0.001*
	Within Groups	1101.270	147	7.492		
	Total	1207.89	149			
BRC	between Groups	95.86	2	47.932	4.601	0.012*
	Within Groups	1531.470	147	10.418		
	Total	1627.33	149			

Note. Dependent variable: suicide and resilience showed significant differences between the three groups N=150 depressed Patients ($*, P < 0.5$) level.

SIDAS= suicidal ideation attributes scale

BRC= brief resilience scale

One-way ANOVA was conducted to see the difference between suicide and resilience in marital status. All these groups of marital status showed significant differences between the three groups of patients. Suicide showed a significant difference, $F (7.116)$, $P=0.001$, and resilience showed a significant difference $F (4.601)$, $P=0.01$.

Table # 10

Tukey Multiple Comparisons Table for Suicide and Resilience with three groups of marital status.

Dependent Variable	(I) Groups	(J) Groups	Mean difference (I-J)	Std.Error	Sig	95% Confidence Interval	
						LB	UB
SIDAS	divorce	single	1.722	.57	0.009	0.35	3.09
		Married	2.024	.56	0.001	0.70	3.35
	Single	divorced	-1.722	.57	0.009	-3.09	-0.35
		Married	0.302	.52	0.832	-0.94	1.54
	Married	divorce	-2.024	.56	0.001	-3.35	-0.70
		Single	-0.302	.52	0.832	-1.54	0.94
BRC	divorce	single	1.622	.68	0.04	0.01	3.24
		Married	1.924	.66	0.01	0.36	3.49
	Single	divorced	-1.622	.68	0.04	-3.24	-0.01
		Married	0.302	.61	0.87	-1.16	1.76
	Married	divorce	-1.924	.66	0.01	-3.49	-0.36
		Single	-0.302	.61	0.87	-1.76	1.16

Table 10 shows there is a mean significant difference in suicide and resilience, *. =P<.05 level.

Table # 11

Analysis of variance to determine the difference in the three groups of Education (Matric, F.A, and B.A) on the variables of Suicide and Resilience in Depressed Patients. (N=150)

		Sum of Squares	DF	Mean Square	F	Sig.
SIDAS	between Groups	0.404	2	0.202	0.025	0.97*
	Within Groups	1207.489	147	8.214		
	Total	1207.893	149			
BRC	between Groups	66.410	2	33.205	3.127	0.04*
	Within Groups	1560.924	147	10.619		
	Total	1627.33	149			

Note. Dependent variable: resilience showed a significant difference between the three groups N=150 depressed Patients (*. $P < 0.5$) level. Suicide showed no significant difference.

SIDAS= suicidal ideation attributes scale

BRC= brief resilience scale

One-way ANOVA was conducted to see the difference between suicide and resilience in education. All these groups of education showed significant differences between three groups of patients. Suicide showed a no-significant difference, $F(0.025)$, $P=0.97$, resilience showed a significant difference $F(3.127)$, $P=0.04$.

Table # 12

Tukey Multiple Comparisons Table for Suicide and Resilience with three groups of Education.

Dependent Variable	(I) Groups	(J) Groups	Mean difference (I-J)	Std.Error	Sig	95% Confidence Interval	
						LB	UB
SIDAS	matric	F.A	-0.107	.59	0.98	-1.51	1.30

		B.A	-0.112	.55	0.98	-1.43	1.21
	F.A	matric	0.107	.59	0.98	-1.30	1.51
		B.A	-0.005	.57	1.00	-1.37	1.36
	B.A	matric	0.112	.55	0.97	-1.21	1.43
		F.A	0.005	.57	1.00	-1.36	1.37
BRC	matric	F.A	0.579	.67	0.66	-1.02	2.17
		B.A	1.563	.63	0.03	0.06	3.06
	F.A	matric	-0.579	.67	0.66	-2.17	1.02
		B.A	0.984	.65	0.29	-0.57	2.54
	B.A	matric	-1.563	.63	0.03	-3.06	-0.06
		F.A	-0.984	.65	0.29	-2.54	0.57

Table 12 shows a significant difference in resilience, *. $P < .05$ level. Suicide showed no significant difference.

Table # 13

Difference in Family Structure in the level of Resilience in Depressed Patients (N=150)

Variable	Nuclear (N=86)		Joint (N=64)		T	p	Df	95% CL		Cohen's d
	M	SD	M	SD				LL	UL	
BRC	19.15	3.08	20.36	3.48	-2.24	0.02	148	-2.27	-0.14	0.36

M= mean, SD= standard deviation, t= t-test, p= sigma, df= degree of freedom and CL= confidence interval,

LL= lower limit, UL= upper limit

An Independent sample t-test was computed to see the family structure in the level of resilience in depressed patients. It was found that there was a significant difference in the level of resilience ($t(148) = -2.24, p < 0.05, 95\% \text{ CI} [-2.27, -0.14]$) between nuclear ($M = 19.15, SD = 3.08$) and joint system ($M = 20.36, SD = 3.48$). These findings support the hypothesis.

Table # 14

Difference in Family Structure in the level of suicide in Depressed Patients. (N=150)

Variable	Nuclear (N=86)		Joint (N=64)		T	p	Df	95% CL		Cohen's d
	M	SD	M	SD				LL	UL	
SIDS	41.38	2.95	42.11	2.66	-1.55	0.12	148	-1.65	0.199	0.25

M= mean, SD= standard deviation, t= t-test, p= sigma, df= degree of freedom and CL= confidence interval, LL= lower limit, UL= upper limit

An Independent sample t-test was computed to see the family structure in the level of suicide in depressed patients. It was found that there was a significant difference in the level of suicide ($t(148) = -1.551, p > 0.12, 95\% \text{ CL} [-1.65, 0.199]$) between the nuclear system ($M = 41.38, SD = 2.95$) and joint system ($M = 42.11, SD = 2.66$). These findings don't support the hypothesis.

Discussion

Traumatic and stressful events in childhood, so-called adverse childhood experiences (ACEs), can lead to disturbance of the infants and child's psychological development and, later in adult life, to disturbance of the personality, psychological development, health, and relationships. However, there are few studies analyzing the prevalence of various psychological problems in Pakistan precisely due to the effect of childhood experiences on depression. The current study examined 150 adult primary care patients (Male/female) with depression utilizing Adverse Childhood Experiences (i.e., physical, sexual, emotional abuse, neglect) to determine the long-term association of childhood experiences with suicidal ideation and resilience.

Demographic analysis was done on 150 depressed patients, equally divided between males (50%) and females (50%). The sample was literate, and 28.9 and 36.8% were graduate and post-graduate, respectively. The majority of the respondents were of the lower and upper middle class ($n=71.9\%$), while 99 were never treated for depression ($n=66\%$), and illness duration was >1 year to five years (35.5% , $n=54$). Most of the sample was married (39.3%), and 78 of the 152 respondents (51.3%) said they had experienced childhood adversities (more than half of the whole sample).

The first hypothesis was that the level of suicidal ideation was different for individuals who reported depression with and without childhood adversities. The adult depressed patients who had experienced childhood adversities were different from the adult depressed patients who had no childhood adversities ($t(148) = 2.39$, $p < .05$). Individuals experiencing depression with childhood adversities had higher suicidal ideation. The finding in this study is congruent with what previously has been established in the literature that childhood adversities and trauma contribute to depressive symptoms that contribute to adult suicidal ideation and behavior.

The second hypothesis was to establish the difference in the level of resilience in depressed patients with varying contributing childhood adversities. The results demonstrated that there was a significant difference in the level of resilience between depressed patients who have experienced childhood adversities and those who do not have a history of childhood adversities by way of substantial association. Even so, participants with childhood adversities scored higher on resilience, as earlier research suggested that traumatized individuals have more resilient attributes in them.

The third hypothesis was to look for differences in the level of suicidal ideation between genders in depressed patients. The results were found to be significant: male adult depressed patients were found to have higher suicidal ideation than females. To get rid of things that are not under control, these things lead to higher levels of stress that give rise to various mental health problems, namely suicidal ideation. Murad A. Khan also reported that in Pakistan, the ratio of suicide is two times higher in men as compared to women (2:1).

The fourth hypothesis sought to study the overall level of resilience in depressed patients and the association of demographic variables like socioeconomic status, marital status, education, and family unit with resilience. No significant difference was shown in resilience levels between male and female patients, and gender is not

a determinant of resilience. The ability to withstand stress and resilience is equal between males and females in the literature.

In addition, the relationship between socioeconomic status, educational level, family structure, and marital status with suicide and the resilience variables were studied. A one-way ANOVA Analysis was carried out to determine if there is a difference between symptoms of suicidal ideation and resilience among depressed patients, and it was concluded that socioeconomic status does not specify the two variables.

The suicide and resilience levels were examined in three groups of marital status and found significant differences among all groups. Divorced participants scored higher in suicide and resilience than married and single participants; divorce is a painful, stressful, and adverse experience in which some people recover quickly, whereas others struggle. Over time, post-divorced couples often learn how to fine-tune their adjustment and develop optimism, self-compassion, and resilience.

To observe the difference in nuclear or joint family structure in the level of suicide and resilience in depressed patients, a simple T-test was conducted. Results demonstrated no significant difference in the suicide parameters between the nuclear and joint systems, but a considerable difference in the resilience of the nuclear and joint systems was observed. The above finding shows that resilience is more prevalent in subjects living in a joint family system where they remain connected with family members and beloved throughout adversity.

Sahar and Muzaffar (2017) conducted research that generally found that most joint family system participants scored higher on resilience and positive adjustment than the nuclear family system participants. Therefore, these findings show a significant association of resilience with the role of family systems in Pakistan, which play as a support system in the form of peer interaction and cooperation, enhancing communication and social coordination.

The study concluded that the level of adversities an individual faces, but not the gender, measures resilience. The results indicate that family systems contribute to an individual's resiliency and positive adjustment in adversities.

Conclusion

This research study has led us to an important conclusion that ACEs have long-term implications on adult mental health on the variables of suicidal ideation and resilience. It has strong associations with child development and family dynamics. This complex study reveals that suicidal ideation is higher in adults diagnosed with depression, where men are at greater risk as compared to women. Regarding the variable of resilience, respondents with a history of adverse childhood experiences had more resilience because they had adapted to extreme, unavoidable circumstances faced in early life and developed coping mechanisms. The study shows that resilience holds immense potential to combat adversities in an individual's life. It does not depend on gender, class, or education. However, marital status and joint family systems are strong predictors of resilience and suicidal ideation in our population.

REFERENCES

- 1) Anda, R. F., Felitti, V. J., Bremner, J. D., Walker, J. D., Whitfield, C., Perry, B. D., Dube, S. R., & Giles, W. H. (2006). The enduring effects of abuse and related adverse experiences in childhood: A convergence of evidence from neurobiology and epidemiology. *European archives of psychiatry and clinical neuroscience*, 256, 174-186.
- 2) Angelakis, I., Gillespie, E. L., & Panagioti, M. (2019). Childhood maltreatment and adult suicidality: a comprehensive systematic review with meta-analysis. *Psychological medicine*, 49(7), 1057-1078.
- 3) Brown, J., Cohen, P., Johnson, J. G., & Smailes, E. M. (1999). Childhood abuse and neglect: Specificity of effects on adolescent and young adult depression and suicidality. *Journal of the American Academy of Child & Adolescent Psychiatry*, 38(12), 1490-1496. .
- 4) Chen, H., Li, W., Cao, X., Liu, P., Liu, J., Chen, X., Luo, C., Liang, X., Guo, H., & Zhong, S. (2021). The association between suicide attempts, anxiety, and childhood maltreatment among adolescents and young adults with first depressive episodes. *Frontiers in psychiatry*, 12, 745470.
- 5) Chen, X., Jiang, L., Liu, Y., Ran, H., Yang, R., Xu, X., Lu, J., & Xiao, Y. (2021). Childhood maltreatment and suicidal ideation in Chinese children and adolescents: the mediation of resilience. *PeerJ*, 9, e11758.
- 6) Choi, N. G., DiNitto, D. M., Marti, C. N., & Choi, B. Y. (2017). Association of adverse childhood experiences with lifetime mental and substance use disorders among men and women aged 50+ years. *International psychogeriatrics*, 29(3), 359-372.

- 7) Connor, K. M., & Davidson, J. R. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD RISC). *Depression and anxiety*, 18(2), 76-82.
- 8) Dube, S. R., Anda, R. F., Felitti, V. J., Chapman, D. P., Williamson, D. F., & Giles, W. H. (2001). Childhood abuse, household dysfunction, and the risk of attempted suicide throughout the life span: findings from the Adverse Childhood Experiences Study. *Jama*, 286(24), 3089-3096.
- 9) Easton, S. D., Kong, J., Gregas, M. C., Shen, C., & Shafer, K. (2017). Child sexual abuse and depression in late life for men: A population-based, longitudinal analysis. *The Journals of Gerontology: Series B*.
- 10) Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., . . . Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. *American journal of preventive medicine*, 14(4), 245-258.
- 11) Gong, M., Zhang, S., Li, W., Wang, W., Wu, R., Guo, L., & Lu, C. (2020). Association between childhood maltreatment and suicidal ideation and suicide attempts among Chinese adolescents: the moderating role of depressive symptoms. *International journal of environmental research and public health*, 17(17), 6025.
- 12) Infurna, M. R., Reichl, C., Parzer, P., Schimmenti, A., Bifulco, A., & Kaess, M. (2016). Associations between depression and specific childhood experiences of abuse and neglect: a meta-analysis. *Journal of affective disorders*, 190, 47-55.
- 13) Jenkins, P. E., Meyer, C., & Blissett, J. M. (2013). Childhood abuse and eating psychopathology: The mediating role of core beliefs. *Journal of Aggression, Maltreatment & Trauma*, 22(3), 248-261.
- 14) John, S. G., Cisler, J. M., & Sigel, B. A. (2017). Emotion regulation mediates the relationship between a history of child abuse and current PTSD/depression severity in adolescent females. *Journal of family violence*, 32(6), 565-575.
- 15) Kelly, L. E. (2013). *The Relationship Between Emotional Eating, Depression, and Body Mass a. Index*. Vanderbilt University.
- 16) Lind, M. J., Brown, R. C., Sheerin, C. M., York, T. P., Myers, J. M., Kendler, K. S., & Amstadter, A. B. (2018). Does parenting influence the enduring impact of severe childhood sexual abuse on psychiatric resilience in adulthood? *Child Psychiatry & Human Development*, 49(1), 33-41.

- 17) Murphy, A., Steele, H., Steele, M., Allman, B., Kastner, T., & Dube, S. R. (2016). The clinical Adverse Childhood Experiences (ACEs) questionnaire: Implications for trauma-informed behavioral healthcare *Integrated early childhood behavioral health in primary care* (pp. 716): Springer.
- 18) Obikane, E., Shinozaki, T., Takagi, D., & Kawakami, N. (2018). Impact of childhood abuse on suicide-related behavior: analysis using marginal structural models. *Journal of Affective Disorders, 234*, 224-230.
- 19) Otte, C., Gold, S. M., Penninx, B. W., Pariante, C. M., Etkin, A., Fava, M., . . . Schatzberg, A. F. (2016). Major depressive disorder. *Nature Reviews Disease Primers, 2*, 16065.
- 20) Piaget, J. (1970). Piaget's theory.
- 21) Poole, J. (2016). *Adverse Childhood Experiences and Adult Depression: Resilience as a Moderator*. University of Calgary.
- 22) Stoltenborgh, M., Bakermans-Kranenburg, M. J., Alink, L. R., & van IJzendoorn, M. H. (2015). The prevalence of child maltreatment across the globe: Review of a series of meta-analyses. *Child Abuse Review, 24*(1), 37-50.
- 23) Traub, F., & Boynton-Jarrett, R. (2017). Modifiable resilience factors to childhood adversity for clinical pediatric practice. *Pediatrics*, e20162569.
- 24) Ulukol, B., Kahiloğulları, A. K., & Sethi, D. (2014). Adverse childhood experiences survey among university students in Turkey.
- 25) Von Cheong, E., Sinnott, C., Dahly, D., & Kearney, P. M. (2017). Adverse childhood experiences (ACEs) and later-life depression: perceived social support as a potential protective factor. *BMJ open, 7*(9), e013228.
- 26) Yousafzai, A. W. (2018). CHILD ABUSE: ARE WE DOING ENOUGH TO PREVENT IT? *Khyber Medical University Journal, 10*(1), 1-2.