

Exploring the Complex Interplay Between Childhood Trauma and Adult Mental Health in Saudi Arabia

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Abstract: - Childhood is often idealized as a period of growth and well-being; however, for many individuals, it is marked by traumatic experiences that may have long-lasting psychological consequences. Despite the growing body of international research, limited studies have examined this issue within the Saudi context. Therefore, the present study aimed to explore the relationship between childhood trauma and depression among a sample of Saudi adults. Using a descriptive correlational research design, data were collected from 186 participants through self-administered validated questionnaires, including the Childhood Trauma Questionnaire—Short Form (CTQ-SF) and the Beck Depression Inventory (BDI). The results revealed significant positive correlations between childhood trauma and depressive symptoms. Furthermore, childhood trauma significantly predicted levels of depression. No significant gender differences were found in overall levels of childhood trauma or depression, except for physical abuse. Gender also did not moderate the relationship between childhood trauma and depression. Regarding age, significant differences were observed in emotional abuse, emotional neglect, total childhood trauma scores, and depression, with higher levels reported among younger adults. The study highlighted the need for future research to examine additional contributing factors, particularly social and environmental influences, within the Saudi population.

Key- Words: - Childhood trauma, Depression, Adults.

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1 Introduction

Childhood is typically considered a period of playfulness, discovery, and growth. However, the ghost of childhood trauma haunts this peaceful picture for a significant number of people. Childhood trauma refers to maltreatment, including abuse and neglect, of children. It involves a wide variety of adverse experiences such as physical, emotional, and sexual abuse—or neglect—as well as household dysfunction.

Childhood trauma can have a deep psychological impact on individuals, determining their psychological well-being all throughout their development. When adult individuals have a history of childhood trauma, they are likely to develop symptoms such as intrusive memories, hypervigilance, and avoidant behaviors that ultimately affect their daily functioning and quality of life (Barawi et al., 2020). Individuals with trauma are more susceptible to chronic stress that can restructure neurobiological pathways, thus fostering the development of hyperactive vulnerability as

mood and anxiety disorders (Downey & Crummy, 2022; Kuzminskaitė et al., 2021).

Moreover, the effects of childhood trauma on emotional outcomes include difficulties in regulating emotions and attachment problems that determine how relationships are conducted, even as an adult. Childhood trauma commonly interferes with the establishment of adequate emotional regulation mechanisms. The difficult times trauma adults have been through in their early years can make them feel strong or overpowering emotions. This also manifests in difficulty with emotional control, making it hard for an individual to establish and maintain one-on-one relationships (Downey & Crummy, 2022). The failure to manage feelings can actually add to rash behavior patterns, state-of-mind swings, and general weakness to stressors, creating obstacles in terms of laying out stable and satisfying associations with others.

The role of childhood trauma in attachment is crucial to understanding adult relationships. The quality of initial bonds, especially those that are developed with primary caregivers, has a significant

impact on the development of relationships in later life. Early childhood trauma interferes with this essential process, leading to the development of insecure attachments. Individuals with past trauma may have attachment problems involving insecurity, fear of abandonment, or trust issues. Such challenges in forming healthy attachments can be reflected in different aspects of adult relationships, such as friendships, romantic relationships, and family relations (Downey & Crumley, 2022). The consequences may include feelings of emotional alienation, problems identifying with vulnerable aspects of oneself, and an increased likelihood of conflict in relationships (Mutum & Bhambri, 2024).

Research indicates that the consequences of childhood trauma can be devastating and long-lasting. People who have suffered in their early years often experience a range of poor outcomes as adults (Mandelli et al., 2015). Childhood trauma is related to high rates of depression, anxiety disorders, post-traumatic stress disorder (PTSD), borderline personality disorder, substance abuse, suicide attempts, and chronic diseases in adulthood (Bozzatello et al., 2021; Copeland et al., 2018; Mandelli et al., 2015; McKay et al., 2021, Negele et al., 2015). To begin with, existing literature has established that childhood trauma is associated with higher rates of depression. In a meta-analysis of 26 studies, children exposed to trauma had approximately 2.4 times higher odds of major depressive disorder, 3.4 times higher odds of anxiety disorders, and 2.7 times higher odds of PTSD. (Copeland et al., 2018). In another meta-analysis of 56 studies, trauma was found to increase the risk of depression among children and adolescents (Vibhakar et al., 2019).

As the consequences of childhood trauma extend across all aspects of mental health, understanding its impact is essential for developing effective and appropriate interventions for individuals who have experienced such trauma. Therefore, this study aims to examine the effects of childhood trauma on adult well-being in Saudi Arabia, providing insights into the complex relationship between early adverse experiences and depression. To the best of the researcher's knowledge, there is a lack of studies investigating this relationship within the Saudi context, highlighting the need for culturally relevant research to create trauma-informed mental health practices.

Given the wide-ranging consequences of childhood trauma, understanding its impact is essential for developing effective evidence-based mental health interventions. In Saudi Arabia, limited research has investigated the relationship between

childhood trauma and adult mental health, particularly depression, highlighting the need for further studies in this context.

Based on the above gap, the aim of this study is to examine the effects of childhood trauma on adult mental health among Saudi adults, with a particular focus on depression. Specifically, the study seeks to:

- Assess the levels of childhood trauma and depression.
- Explore the relationship between childhood trauma and depression.
- Determine whether childhood trauma can predict depression.
- Examine potential differences in trauma and depression according to gender and age.
- Investigate whether gender moderates the relationship between childhood trauma and depression.

1.1 Research Questions

This study seeks to address the following research questions:

- What is the level of childhood trauma among a sample of Saudi adults?
- What is the level of depression among a sample of Saudi adults?
- Is there a statistically significant relationship between childhood trauma and depression among a sample of Saudi adults?
- To what extent can depression be predicted by childhood trauma?
- Does childhood trauma differ according to gender and age among a sample of Saudi adults?
- Does depression differ according to gender and age among a sample of Saudi adults?
- Does gender moderate the relationship between childhood trauma and depression among a sample of adults?

2 Methodological Approach

This study used a descriptive-correlational research design to examine the relationships between childhood trauma and depression among Saudi adults. This approach allowed for the identification of levels of trauma and depression, as well as the assessment of potential correlations and predictive relationships between these variables.

2.1 Study Sample

This study employed a non-probabilistic convenience sampling method, whereby the survey was distributed via various social media platforms. The

invitation targeted adult residents of Saudi Arabia. This approach was considered suitable for the purposes of the current research, which aimed to explore a phenomenon in depth across a broad segment of the Saudi population. Although this method may restrict the generalizability of the findings, it facilitated timely and efficient access to a large and diverse participant pool.

Table 1. Sociodemographic characteristics of the sample (n = 186)		
Variables	Frequency	Percent
Gender	Males	79
	Females	107
	Total	100.0 %
Age	20–30	41
	31–40	84
	41–50	47
	51–60	14
	Total	100.0 %

Table 1 shows that the study sample consisted of 186 adults, distributed according to gender (79 males and 107 females) and age. In total, 41 respondents were aged between 20–30 years, 84 were aged 31–40, 47 were aged 41–50, and 14 were aged 51–60.

2.2 Study Tool

This study used self-administered validated questionnaires. The first part included the Arabic version of the Childhood Trauma Questionnaire—Short Form (CTQ-SF), originally developed by Bernstein et al. (2003) and translated into Arabic by Dardoum (2024). The CTQ-SF consists of 28 items assessing five types of childhood maltreatment: emotional neglect, physical neglect, emotional abuse,

physical abuse, and sexual abuse, each measured by five items. Additionally, three validity items were included to detect the possible denial or minimization of traumatic experiences. Responses were recorded on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Subscale scores ranged from 5 to 25, and the total score ranged from 25 to 125, with higher scores indicating greater levels of childhood trauma (Dardoum, 2024).

The second part of the questionnaire was the Arabic version of the Beck Depression Inventory (BDI), developed to assess the severity of depressive symptoms (Beck, Steer, & Brown, 1996). The inventory includes 21 items, with total scores ranging from 0 to 63. According to established scoring criteria, scores of 0–13 indicate no depression, 14–19 mild depression, 20–28 moderate depression, and 29–63 severe depression. The Arabic version of the BDI has demonstrated acceptable internal consistency across various Arabic-speaking populations, including participants from Saudi Arabia, with Cronbach's alpha coefficients ranging from 0.67 to 0.89 (Abdel-Khalek, 1998). These findings support the reliability and validity of the Arabic BDI for use in the present study and within Arabic-speaking contexts more generally.

3 Results

3.1 Question 1: What is the level of childhood trauma among a sample of Saudi adults?

To answer this question, a one-sample Wilcoxon test was used, as shown in Table 2.

Table 2. Level of childhood trauma among a sample of adults (n = 186)

Variables	Median	Standard error	Hypothetical median	Wilcoxon value	Critical ratio	Effect size
Emotional abuse	8	674.38	12	4.01	-5.61***	0.41
Physical abuse	6.50	726.44	12.5	3.57	-7.05***	0.52
Sexual abuse	6	722.29	12.5	3.02	-7.86***	0.58
Emotional neglect	10	658.19	12	5.53	-3.02**	0.22
Physical neglect	8	643.84	9	4.97	-3.70***	0.27
Total score	44	729.18	52	5.76	-3.90***	0.29

Notes: *** significance 0.001 ** significance 0.01 $0.20 \leq 0.49$ small effect $0.50 \leq 0.79$ medium effect.

As shown in Table 2, there was a low level of childhood trauma in all of its dimensions among the sample of adults. The median scores of the sample were 8, 6.50, 6, 10, 8, and 44 for emotional abuse,

physical abuse, sexual abuse, emotional neglect, physical neglect, and total score on the childhood trauma scale, respectively. These values are less than the hypothesized medians of 12, 12.5, 12.5, 12, 9, and

52. The critical ratio values for the sample reached -5.61 , -7.05 , -7.86 , -3.02 , -3.70 , and -3.90 for emotional abuse, physical abuse, sexual abuse, emotional neglect, physical neglect, and total score, respectively. These are statistically significant values with $p < 0.01$ for emotional neglect and $p < 0.001$ for physical abuse, emotional abuse, sexual abuse, physical neglect, and total score. The effect sizes for emotional abuse, emotional neglect, physical neglect, and the total childhood trauma scale score were small

at 0.41 , 0.22 , 0.27 , and 0.29 , respectively. The effect sizes were medium for physical abuse and sexual abuse at 0.52 and 0.58 , respectively.

3.2 Question 2: What is the level of depression among a sample of Saudi adults?

To answer this question, a one-sample Wilcoxon test was used, as shown in Table 3.

Table 3. Depression level among a sample of adults (n = 186)

Variable	Median	Standard error	Hypothetical median	Wilcoxon value	Critical ratio	Effect size
Depression	11	717.30	22	1.90	-9.09***	0.67

Notes: *** significance 0.001

$0.50 \leq 0.79$ medium effect.

As shown in Table 3, there was a low level of depression among the sample of adults. The median of the sample was 11 , which is less than the hypothesized median of 22 , and the critical ratio value for the sample reached -9.09 , a statistically significant value ($p < 0.001$). The effect size was medium at 0.67 .

3.3 Question 3: Is there a statistically significant relationship between childhood trauma and depression among a sample of Saudi adults?

To answer this question, Spearman correlation coefficients were used since the variables childhood trauma and depression were right-skewed, as shown in Table 4.

Table 4. Spearman correlation coefficients between childhood trauma and depression among a sample of adults (n = 186)

Variables	Emotional abuse	Physical abuse	Sexual abuse	Emotional neglect	Physical neglect	Total score
Depression	0.37**	0.19*	0.33**	0.33**	0.22**	0.39**

Notes: ** significance 0.01. * significance 0.05

As shown in Table 4, childhood trauma was positively correlated with depression. The correlation coefficients between childhood trauma and depression among the sample of adults were 0.37 , 0.19 , 0.33 , 0.33 , 0.22 , and 0.39 for emotional abuse, physical abuse, sexual abuse, emotional neglect, physical neglect, and total score, respectively. These correlation coefficients were statistically significant at $p < 0.01$ for emotional abuse, sexual abuse,

emotional neglect, physical neglect, and total score, and at $p < 0.05$ for physical abuse.

3.4 Question 4: To what extent can depression be predicted by childhood trauma?

To answer this question, a regression analysis was estimated, as shown in Table 5.

Table 5. Results of a regression analysis of childhood trauma predicting depression among a sample of adults (n = 186)

Independent variable	Dependent variable	R-squared	Adjusted R-squared	F	Unstandardized coefficients	T	(Constant)
Emotional abuse	Depression	0.16	0.16	36.13***	0.87	6.01***	4.32
Physical abuse		0.05	0.04	9.51**	0.41	3.08**	9.13
Sexual abuse		0.14	0.14	30.51***	0.13	5.52***	6.53

Emotional neglect		0.14	0.14	30.63***	0.14	5.54***	4.46
physical neglect		0.05	0.04	9.05**	0.67	3.01**	7.41
The total score		0.19	0.18	42.60***	0.25	6.53***	1.22

Notes: ** significance 0.01 . *** significance 0.001

As shown in Table 5, the results indicated that childhood trauma and its dimensions predicted depression among a sample of adults. The F values were 36.13, 9.51, 30.51, 30.63, 9.05, and 42.60 for emotional abuse, physical abuse, sexual abuse, emotional neglect, physical neglect, and total score, respectively. The T values were 6.01, 3.08, 5.52, 5.54, 3.01, and 6.53 for emotional abuse, physical abuse, sexual abuse, emotional neglect, physical neglect, and total score, respectively. These values were statistically significant at $p < 0.01$ for physical abuse and physical neglect and at $p < 0.001$ for emotional abuse, sexual abuse, emotional neglect, and total score. Further, the contribution rates reached 16%, 4%, 14%, 14%, 4%, and 18% for

emotional abuse, physical abuse, sexual abuse, emotional neglect, physical neglect and total score, respectively. Thus, the predictive equation can be formulated as follows: Degree of depression = 1.22 + 0.25 \times Degree of childhood trauma.

3.5 Question 5: Does childhood trauma differ according to gender and age among a sample of Saudi adults?

To investigate the gender differences in childhood trauma, a Mann–Whitney test was performed since depression was right-skewed. The results are summarized in Table 6.

Table (6) Differences between males and females in childhood trauma among a sample of adults (n = 186)

Variables		N	Mean rank	Sum of ranks	Z value	Effect size
Emotional abuse	Male	79	91.20	7,204.50	0.51 NS	0.00
	Female	107	95.20	10,186.50		
Physical abuse	Male	79	103.91	8,209.00	2.36 *	0.21
	Female	107	85.81	9,182.00		
Sexual abuse	Male	79	93.43	7,381.00	0.02 NS	0.00
	Female	107	93.55	10,010.00		
Emotional neglect	Male	79	86.39	6,824.50	1.55 NS	0.00
	Female	107	98.75	10,566.50		
Physical neglect	Male	79	95.91	7,577.00	0.53 NS	0.00
	Female	107	91.72	9,814.00		
Total score	Male	79	93.68	7,400.50	0.04 NS	0.00
	Female	107	93.37	9,990.50		

Notes: NS not statistically significant. * significance 0.05 0.20 \leq 0.49 effect small.

As shown in Table 6, there were no differences between males and females in childhood trauma and its dimensions among this sample of adults except for in physical abuse. Here, the Mann–Whitney value was 2.36 and statistically significant ($p < 0.05$). This

difference was in the direction of males. The effect size for physical abuse was small at 0.21.

To investigate the differences in the childhood trauma according to age, the Kruskal–Wallis test was used since childhood trauma was right-skewed. The results are displayed in Table 7.

Table 7. Differences according to age in childhood trauma and its dimensions among a sample of adults (n = 186)

Variables		N	Mean rank	Kruskal–Wallis values
Emotional abuse	20–30	41	107.40	11.55 **
	31–40	84	100.23	

	41–50	47	74.18	
	51–60	14	77.29	
Physical abuse	20–30	41	96.65	3.77 NS
	31–40	84	99.37	
	41–50	47	81.81	
	51–60	14	88.32	
Sexual abuse	20–30	41	94.17	0.47 NS
	31–40	84	94.60	
	41–50	47	89.51	
	51–60	14	98.32	
Emotional neglect	20–30	41	115.23	11.85 **
	31–40	84	93.82	
	41–50	47	76.36	
	51–60	14	85.46	
Physical neglect	20–30	41	86.01	4.67 NS
	31–40	84	101.11	
	41–50	47	83.50	
	51–60	14	103.36	
Total score	20–30	41	105.43	7.86 *
	31–40	84	98.40	
	41–50	47	75.93	
	51–60	14	88.18	

Notes: NS not statistically significant. * significance 0.05 ** significance 0.01

As shown in Table 7, there were no significant differences according to age in childhood trauma and its dimensions among a sample of adults except for in emotional abuse, emotional neglect, and total score, where the Kruskal–Wallis test values were

11.55, 11.85, and 7.86, respectively. These values were statistically significant at $p < 0.05$ and $p < 0.01$.

To determine the direction of the differences according to age in the dimensions of emotional abuse, emotional neglect, and total score, a Mann–Whitney test was used. Table 8 shows the results.

Table 8. Differences according to age in dimension emotional abuse, emotional neglect and total score for childhood trauma scale among a sample of adults (n = 186)

Variables	N	Mean Rank	Sum of Ranks	Z value	Effect size	
Emotional abuse	20–30	41	66.89	2,742.50	0.84 NS	0.00
	31–40	84	61.10	5,132.50		
	20–30	41	52.29	2,144.00	2.72**	0.20
	41–50	47	37.70	1,772.00		
	20–30	41	30.22	1,239.00	1.77NS	0.00
	51–60	14	21.50	301.00		
	31–40	84	72.77	6,112.50	2.75**	0.21
	41–50	47	53.90	2,533.50		
	31–40	84	51.36	4,314.00	1.59 NS	0.00
	51–60	13	38.36	537.00		
Emotional neglect	41–50	47	30.57	1,437.00	0.35 NS	0.00
	51–60	14	32.43	454.00		
	20–30	41	72.65	2,978.50	2.08 *	0.20
	31–40	84	58.29	4,896.50		
	20–30	41	54.28	2,225.50	3.37***	0.25
	41–50	47	35.97	1,690.50		
	20–30	41	30.30	1,242.50	1.83 NS	0.00
	51–60	14	21.25	297.50		

	31–40	84	70.38	5,912.00	1.77 NS	0.00	
	41–50	47	58.17	2,734.00			
	31–40	84	50.15	4,212.50			
	51–60	14	45.61	638.50	0.56 NS	0.00	
	41–50	47	30.22	1,420.50	0.63 NS	0.00	
	51–60	14	33.61	470.50			
Total score for childhood trauma scale	20–30	41	66.28	2,717.50	0.71 NS	0.00	
	31–40	84	61.40	5,157.50			
	20–30	41	52.10	2,136.00	2.61 **	0.20	
	41–50	47	37.87	1,780.00			
	20–30	41	29.05	1,191.00	0.83 NS	0.00	
	51–60	14	24.93	349.00			
	31–40	84	71.70	6,023.00		2.30 *	0.20
	41–50	47	55.81	2,623.00			
	31–40	84	50.30	4,225.00	0.68 NS	0.00	
	51–60	14	44.71	626.00			
	41–50	47	30.24	1,421.50		0.61 NS	0.00
	51–60	14	33.54	469.50			

Notes: * significance 0.05
NS not statistically significant

** significance 0.01
0.20 \leq 0.49 effects small.

As shown in Table 8, there were no differences between the 20–30 and 31–40; 20–30 and 51–60; 31–40 and 51–60; or 41–50 and 51–60 age groups in emotional abuse among the sample of adult. Here, the Mann–Whitney values were 0.84, 1.77, 1.59, 0.81, and 0.35, respectively. These were not statistically significant values. At the same time, there were differences between the 20–30 and 41–50, and 31–40 and 41–50 age groups in emotional abuse. Here, the Mann–Whitney values were 2.72 and 2.75, respectively, and these values were statistically significant at $p < 0.01$. The differences were in the direction of the 20–30 year olds, with the average score for 20–30 being higher than that for 41–50. Likewise, the differences were in the direction of 31–40 year olds, where the average score for 31–40 was higher than that for 41–50. The effect size for emotional abuse was small.

As shown in Table 8, there were no differences between the 20–30 and 51–60; 31–40 and 41–50; 31–40 and 51–60; or 41–50 and 51–60 age groups in emotional neglect. Here, the Mann–Whitney values were 1.83, 1.77, 0.56, and 0.63, respectively. These were not statistically significant values. There were differences between the 20–30 and 31–40, and 20–30 and 41–50 age groups in emotional neglect. Here, the Mann–Whitney values were 2.08 and 3.37, respectively. These values were statistically

significant at $p < 0.05$ and $p < 0.01$, respectively, and the differences were in the direction of the 20–30 year olds. The effect sizes were small for emotional abuse, with values of 0.20 and 0.25, respectively.

As shown in Table 8, there were no differences between the 20–30 and 31–40, 20–30 and 51–60, 31–40 and 51–60, 41–50 and 51–60 age groups in the total score for childhood trauma scale. Here, the Mann–Whitney values were 0.71, 0.83, 0.68, and 0.61 respectively, and these were not statistically significant. However, there were differences between the 20–30 and 41–50, and the 31–40 and 41–50 age groups in the total score for childhood trauma scale. Here, the Mann–Whitney values were 2.61 and 2.30, respectively. These values were statistically significant at $p < 0.01$ and $p < 0.05$, respectively. The differences were in the direction of 20–30 and 31–40 year olds. The effect size was small for total score for childhood trauma scale, with a value of 0.20.

3.6 Question 6: Does depression differ according to gender and age among a sample of Saudi adults?

To investigate the gender differences in the level of depression, a Mann–Whitney test was performed since depression was right-skewed. The results are summarized in Table 9.

Table 9. Differences between male and female in depression among a sample of adults (n = 186)

Variables		N	Mean Rank	Sum of Ranks	Value Z
depression	Male	79	84.55	6,679.50	1.95 NS
	Female	107	100.11	10,711.50	

Notes: NS not statistically significant.

As shown in Table 9, there was no difference between males and females in depression among the sample of adults. The Mann–Whitney value was 1.95 and not statistically significant.

To investigate the differences in the level of depression according to age, the Kruskal–Wallis test

was used since depression was right-skewed. The results are summarized in Table 10.

Table 10. Differences according to age in depression among a sample of adults (n = 186)

Variables	N	Mean rank	Kruskal–Wallis value
Depression	20–30	41	9.35 *
	31–40	84	
	41–50	47	
	51–60	14	

Notes: NS not statistically significant. * significance 0.05

As shown in Table 10, there was significant difference according to age in depression among a sample of adults. Here, the Kruskal–Wallis test value was 9.35 and was statistically significant at $p < 0.05$.

To determine the direction of the differences according to age in depression among a sample of adults, the Mann–Whitney test was used. Table 11 shows the results.

Table 11. Differences according to age in depression among a sample of adults (n = 186)

Variables	N	Mean rank	Sum of ranks	Z	Effect size	
depression	20–30	41	75.22	3,084.00	2.64 **	0.20
	31–40	84	57.04	4,791.00		
	20–30	41	52.55	2,154.50	2.76**	0.21
	41–50	47	37.48	1,761.50		
	20–30	41	30.20	1,238.00	1.74 NS	0.00
	51–60	14	21.57	302.00		
	31–40	84	67.01	5,629.00	0.41 NS	0.00
	41–50	47	64.19	3,017.00		
	31–40	84	49.42	4,151.00	0.07 NS	0.00
	51–60	13	50.00	700.00		
	41–50	47	30.73	1,444.50	0.21 NS	0.00
	51–60	14	31.89	446.50		

Notes: ** significance .01 NS not statistically significant. 0.20 ≤ 0.49 small effect.

As shown in Table 11, there were no differences between the 20–30 and 51–60; 31–40 and 41–50; 31–40 and 51–60; or 41–50 and 51–60 age groups in depression. Here, the Mann–Whitney values were 1.74, 0.41, 0.07, and 0.21, respectively, and these values were not statistically significant. However, there were differences between the 20–30 and 31–40, and 20–30 and 41–50 age groups in depression among a sample of adults. Here, the Mann–Whitney values were 2.64 and 2.76, respectively, with the values being statistically significant at $p < 0.05$. The differences were in the direction of the 20–30 year olds. The effect size was small.

3.7 Question 7: Does gender moderate the relationship between childhood trauma and depression among a sample of adults?

To answer this question, a regression analysis was estimated including gender as an interaction variable. The results are summarized in Table 12 and Figures 1–6. As indicated in Table 12 and Figure 1, gender did not moderate the relationship between childhood trauma and depression ($\beta = -0.001$, $SE = 0.15$, $p = 0.991$). This was also true for all the childhood trauma dimensions. The relationship between physical abuse and depression was not moderated by

gender ($\beta = 0.09$, SE = 0.30, $p = 0.752$; Figure 2). Gender did not moderate the relationship between emotional abuse and depression ($\beta = 0.19$, SE = 0.37, $p = 0.606$; Figure 3). Similarly, there was no significant moderation by gender between sexual abuse and depression ($\beta = -0.14$, SE = 0.40, $p = 0.72$; Figure 4). Further, the relationship between physical neglect and depression was not moderated by gender

($\beta = 0.63$, SE = 0.47, $p = 0.187$; Figure 5). Finally, gender did not moderate the relationship between emotional neglect and depression ($\beta = 0.35$, SE = 0.49, $p = 0.471$; Figure 6). Overall, the relationship between childhood trauma, through all its dimensions, with depression was not moderated by gender. These relationships were similar across females and males.

Table 12. Moderation of gender in the relationship between childhood trauma and depression

Variable	β	SE	F	t	p	Adj. R^2
Intercept	9.87	4.72		2.09	< 0.05	
Physical abuse \times gender	0.09	0.30	13.54	0.31	0.752	0.16
Emotional abuse \times gender	0.19	0.37	12.51	0.51	0.606	0.15
Sexual abuse \times gender	-0.14	0.40	9.83	-0.35	0.72	0.12
Physical neglect \times gender	0.63	0.47	0.07	1.32	0.187	0.11
Emotional neglect \times gender	0.35	0.49	12.66	0.72	0.471	0.15
Childhood trauma total \times gender	-0.001	0.15	12.77	-0.010	0.991	0.17

Notes: SE = standard error, Adj. R^2 = adjusted R-squared

Figure 1. Moderation of gender

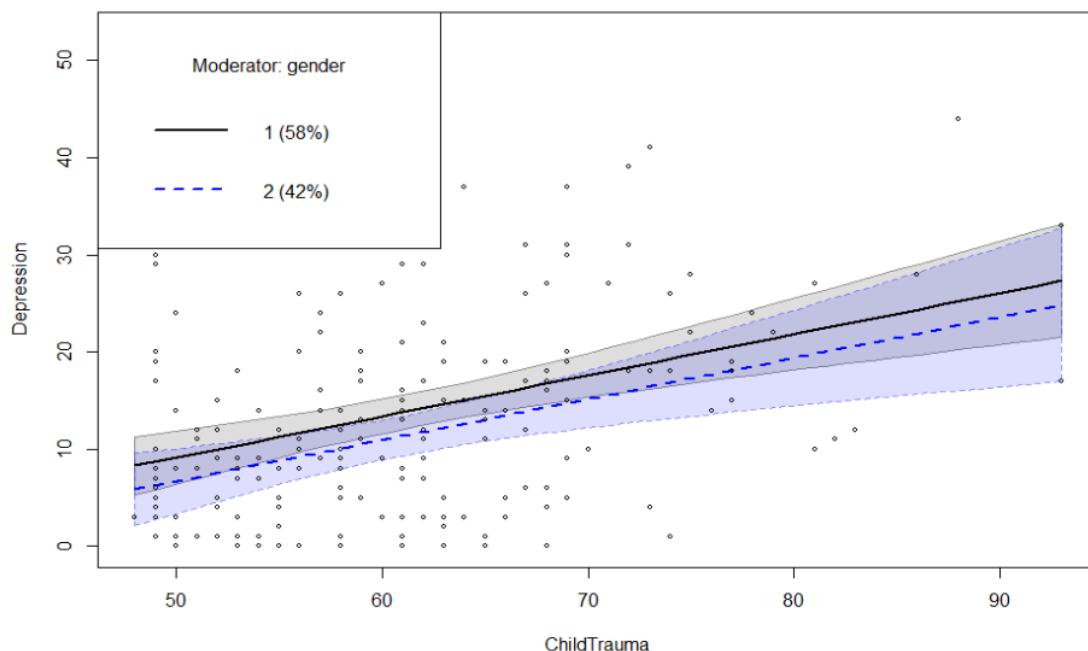


Figure 1. Moderation of gender in the relationship between childhood trauma (total score) and depression.

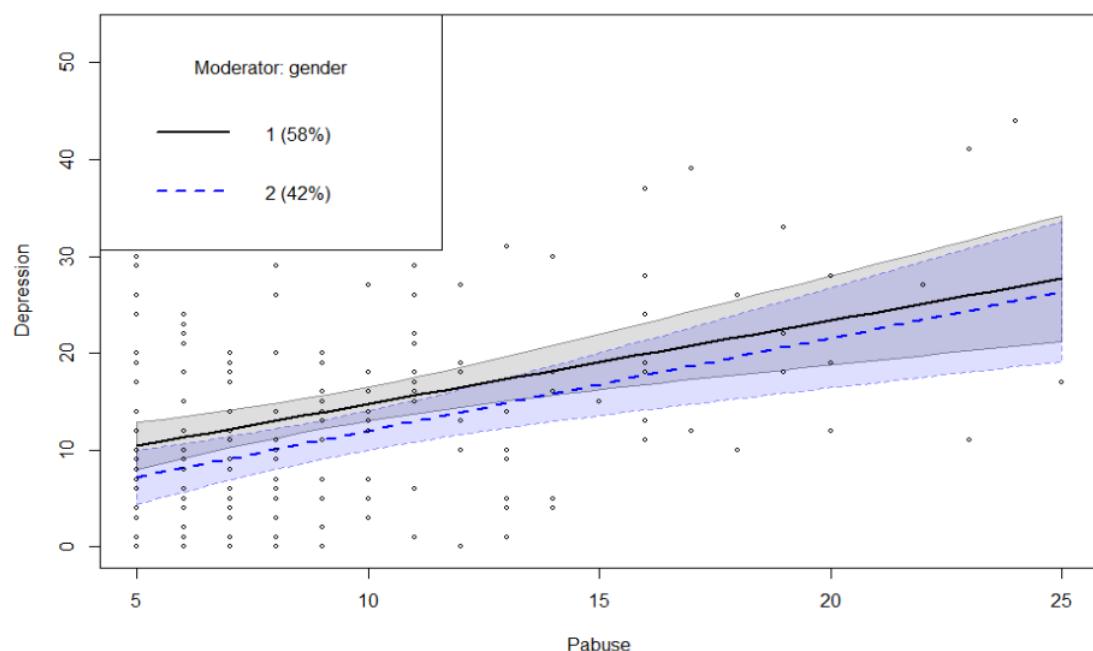
Figure 2. Moderation of gender

Figure 2. Moderation of gender in the relationship between physical abuse and depression.

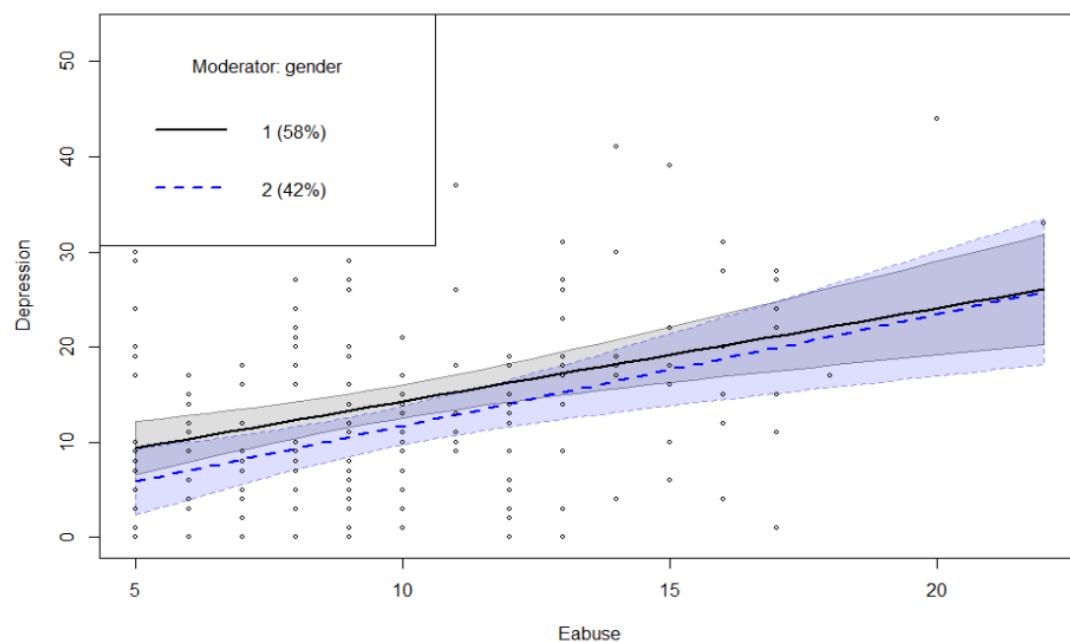
Figure 3. Moderation of gender

Figure 3. Moderation of gender in the relationship between emotional abuse and depression.

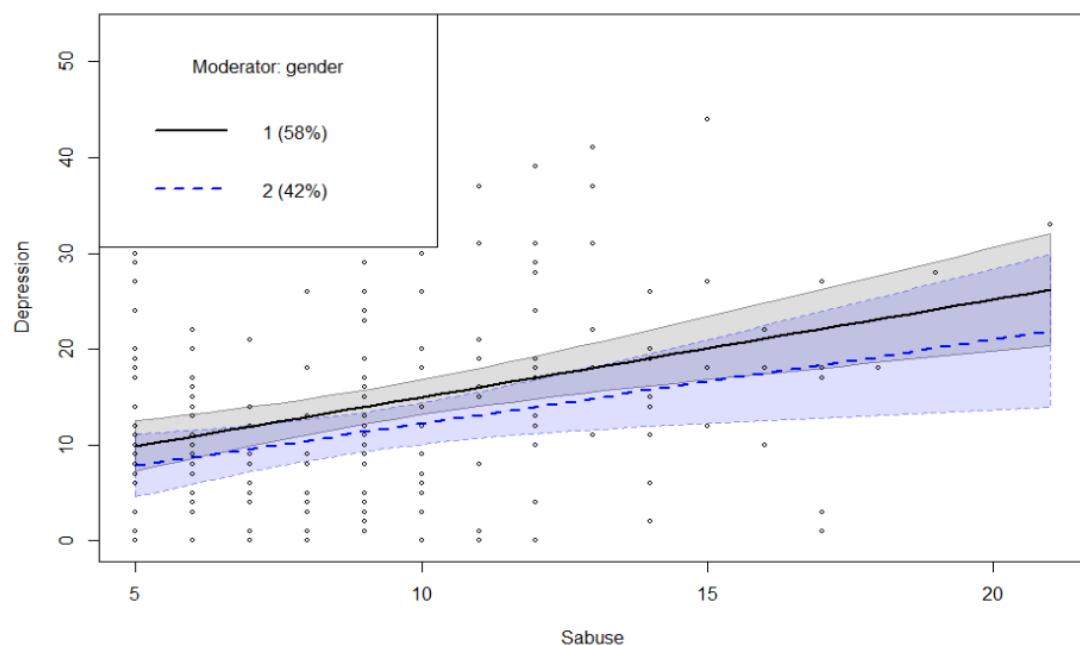
Figure 4. Moderation of gender

Figure 4. Moderation of gender in the relationship between sexual abuse and depression.

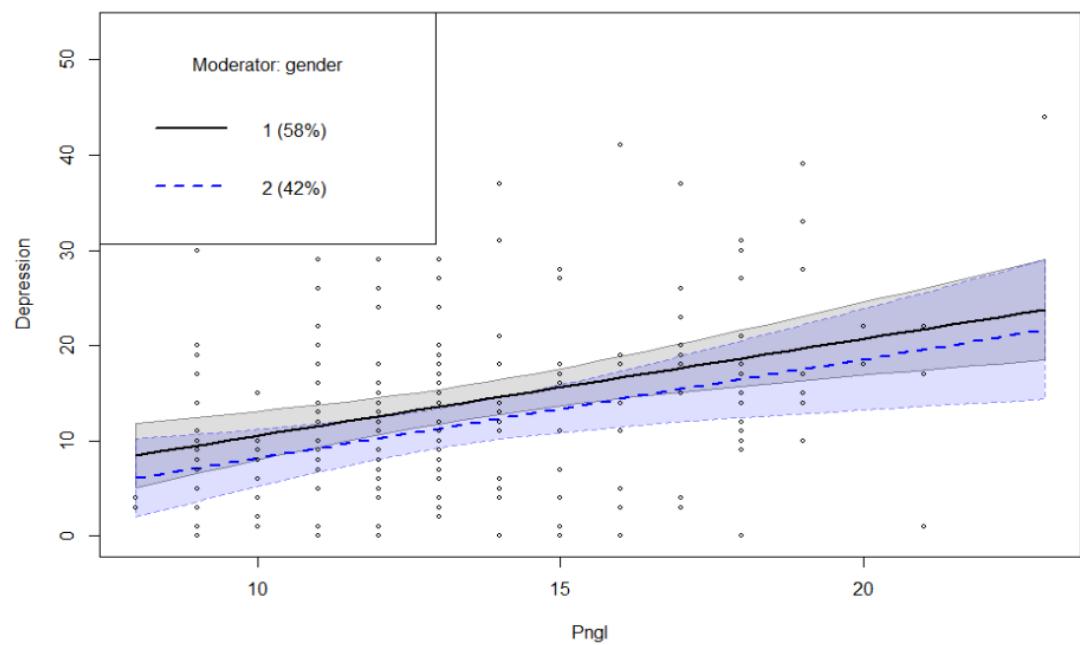
Figure 5. Moderation of gender

Figure 5. Moderation of gender in the relationship between physical neglect and depression.

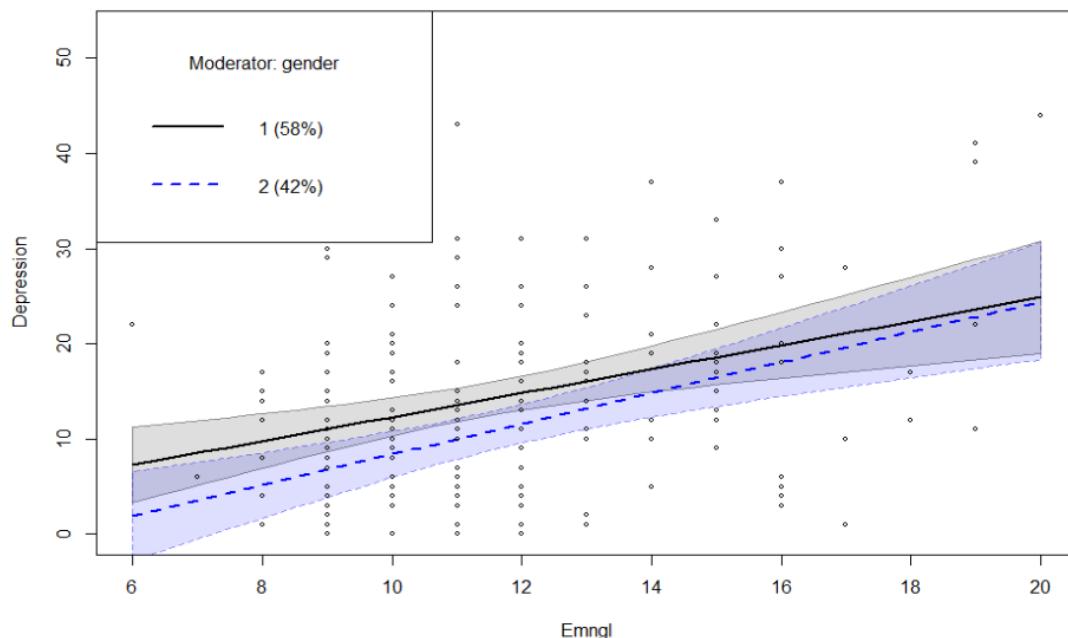
Figure 6. Moderation of gender

Figure 6. Moderation of gender in the relationship between emotional neglect and depression.

4 Conclusion

The results of this study indicate that the sample of Saudi adults had low levels of childhood trauma and depression, suggesting that, overall, this population experienced relatively fewer adverse childhood experiences and lower depressive symptoms compared to hypothesized norms.

A positive correlation was found between childhood trauma and depression across all dimensions, indicating that individuals with higher exposure to adverse childhood experiences would be more likely to report elevated depressive symptoms. This finding is consistent with previous research demonstrating strong links between childhood trauma and adult mental health problems, including depression, anxiety, and PTSD (Bozzatello et al., 2021; Copeland et al., 2018; Mandelli et al., 2015, McKayetal., 2021). Regression analyses further confirmed that childhood trauma significantly predicted depression, highlighting the lasting psychological impact of early adverse experiences.

Regarding gender differences, no significant variations were observed in the dimensions of childhood trauma or depression except for physical abuse, which was higher among males. This aligns with previous studies suggesting that males are more frequently exposed to physical forms of maltreatment, whereas females may experience

higher rates of emotional or sexual abuse (Stoltenborgh et al., 2015).

In addition, the results showed that most dimensions of childhood trauma and depression did not significantly differ across age categories. However, younger adults (20–30 and 31–40) reported higher levels of emotional abuse, neglect, and depressive symptoms compared to older adults. This pattern may reflect generational differences in reporting, awareness of childhood adversity, or shifts in parenting practices over time (Thompson et al., 2015; Twenge et al., 2019).

Furthermore, gender did not moderate the relationship between childhood trauma and depression, indicating that the impact of childhood trauma on depressive symptoms was consistent across both males and females. These results support prior research showing that the trauma–depression relationship remains similar across sexes (Heim et al., 2009; Kessler et al., 2010).

Overall, these findings highlight the profound relationship between childhood trauma and mental health. In the Saudi context, although levels of childhood trauma and depressive symptoms were relatively low in this sample, the results underscore the importance of implementing trauma-informed assessments and interventions, as well as further investigating this issue.

Despite higher prevalence reported in previous studies, the current study found a relatively low

number of cases. This discrepancy may suggest the influence of social and cultural factors that possibly contribute to limited disclosure or underreporting of the phenomenon. Childhood trauma is often hidden and underreported due to fear, stigma, or social norms (Stoltzenborgh et al., 2015). Addressing it through appropriate care and access to trauma-informed services can promote resilience, facilitate recovery, and enhance societal well-being. The present study also suggests that future research should consider additional factors. As highlighted by other studies, social and environmental factors may mediate the relationship between childhood maltreatment and depression (Watson et al., 2025; Wang et al., 2025).

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