

Original research

Explaining and predicting mental health and self-satisfaction based on childhood traumaMaedeh Khoshakhlagh^{*},¹ Mojtaba Sedaghati fard²**Abstract**

Introductio: Adverse childhood experiences/childhood trauma is a sensitive topic that is rarely addressed. However, childhood trauma can lead to personality change and mental health instability in adulthood; In this regard, the present study was conducted with the aim of explaining and predicting mental health and self-satisfaction based on childhood trauma.

Research method: In a descriptive-correlational design, 440 students were selected as a research sample in a multi-stage cluster method among the students studying at the Islamic Azad University of Garmsar branch in the second half of the academic year 1401-1402. Data collection was done using Goldberg et al.'s general health questionnaire, Abbas-Nia's self-satisfaction and Bernstein et al.'s short form of childhood trauma questionnaire.

Findings: The research results showed that childhood trauma can only explain and predict mental health. So that emotional abuse and emotional neglect were able to explain 21% of anxiety and sleep disorder. 19% of the impairment in social functions was explained by emotional abuse, physical abuse and emotional neglect. 10% of physical symptoms could be explained by the dimensions of sexual abuse and emotional neglect, and finally 7% of depression could be explained by emotional neglect. Another finding of the research showed that among the dimensions of childhood trauma, only sexual abuse can explain 4% of the variance of self-satisfaction in students.

Conclusion: This finding has important consequences in how to understand and treat psychological problems and self-satisfaction in people with trauma experience in clinical environments.

Keywords: childhood trauma, mental health, self-satisfaction

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Introduction:

The World Health Organization defines mental health as a state of complete physical, mental and social well-being and not simply as the absence of mental illness (1). This definition specifies that mental health includes positive elements that highlight well-being as a main element in understanding health. Therefore, the presence or absence of a mental disorder does not determine a person's level of mental health; Because some people with mental illness may report high levels of well-being. In the same way, the mere absence of mental disorders does not guarantee optimal mental health. From this point of view, positive mental health and mental illness can be interpreted as distinct phenomena that "achieve in different paths" but may intersect with each other (2). Without mental health, people feel less able to perform activities of daily life, including self-care, education, employment, and participation in social life. Accordingly, investing in mental health is necessary for the sustainability of health and socio-economic policies (1).

Mental health can be affected by many factors such as family conditions, school and life events (3). Being exposed to adverse experiences in childhood is one of the phenomena that has the greatest impact on mental health (4). Adverse childhood experiences/childhood trauma are acute or chronic events that threaten a child's physical or emotional health. The complexity of this concept has made it difficult to create an acceptable definition. This term was originally used in the study of Felitti, Anda, Nordenberg, Williamsom, Speight et al. (5) and refers to all experiences of abuse (physical, emotional and sexual) and neglect (physical and emotional) such as dysfunctional family, growing up It refers to having a family member with mental illness, parental divorce, or domestic violence. In a study using self-report data from approximately 17,000 mostly white, middle-class adults, it was determined that childhood trauma is very common and that these experiences are associated with several major chronic diseases, life expectancy, and social problems. It is related (6).

Studies show that between 49 and 61 percent of children in America have experienced at least one trauma (7-8). In parent reports of children 0–17 years of age, where childhood trauma was defined in terms of family dysfunction, 34 million children—almost half of US children—had experienced at least one trauma event (7). There is extensive evidence that trauma that is repeatedly experienced over long periods of time affects various aspects of child development, including neurobiological, cognitive, emotional, and general health. (9-10). The high prevalence of childhood trauma has made it a global problem. Exposure to childhood trauma has long-term consequences and is associated with the occurrence of various diseases in adulthood and recently in old age - for example, with inflammatory, autoimmune and chronic diseases (11-12). In addition, it is strongly related to the increased risk of anxiety disorders, mood disorders, behavioral disorders, drug use (11-13) and suicidal thoughts (8).

Studies have widely highlighted the role of childhood trauma as a major risk factor for developing and maintaining depression in adulthood (13-15). In addition, depressive episodes often occur more often and are more stable, which affects the course of the disease and hinders the success of

treatment (13, 17-18). Interestingly, an increase in trauma-related depressive symptoms has been observed, especially in adults (18-23 years) (19). Regarding the specific effects associated with different forms of trauma, evidence shows that threats such as physical and emotional abuse are strongly associated with mental health outcomes (18-19). In addition to these studies, they have shown that psychological abuse and neglect are types of misbehavior that are strongly related to the consequences of depression (13,8,19). For example, individuals who reported emotional abuse in childhood reported a nearly threefold increased risk of developing a depressive disorder in their lifetime, and this risk was greater for women than for men (15). It has also been shown that the consequences of emotional abuse and neglect in childhood affect other psychological aspects such as self-satisfaction. Self-satisfaction is defined as happiness resulting from positive and good feelings towards oneself and life (20). When people feel happy in every aspect of their life and are satisfied with their life situation; This satisfaction comes from the fulfillment of personal and work goals (20). According to Pasopoletti, Ellen, Lambert and Clos-Tula (21), when people feel happy about themselves and believe that they have achieved what they aimed for in life, they are happier than others, and this has a positive effect on the way of life. Dealing with people and even their work. Those who are satisfied are better able to manage personal and work problems. This is because they have control over their psychological feelings and therefore they can better focus on the issue instead of their negative feelings - such as feeling stress and anxiety (21). In addition, Donovan and Halpern (22) found that people who are satisfied are more open and artistic, which means that they are more open and creative in their thinking, which can lead to manage their work life better. Although the effect of childhood trauma on self-satisfaction has not yet been investigated in domestic and foreign researches; But it has been proven that experiences and perceptions of child abuse increase self-shame and decrease self-esteem, which in turn leads to depression symptoms in adulthood (23-24). While secure attachment during childhood is critical in developing positive self-esteem (25). In children and adolescents who have adverse experiences and benefit less from parental care and support, the risk of creating a distorted self-concept and feeling of low value, i.e. low self-esteem or negative self-evaluation and withdrawal from socialization increases. 25). This leads to the assumption that similar relationships can be found between childhood trauma and self-satisfaction.

The review of the research background indicates that in Iran, very limited researches have investigated the psychological consequences of childhood trauma in adulthood (26-27). On the other hand, in Iran and other western countries, university life has been highlighted as a period of exploration and transition to build a personal identity (28). ... it can play a role in the occurrence of psychological problems and at the same time severely challenge the adaptive resources of students and become a very important stressful event that increases the incidence of psychological problems such as depression in this population. explains (29). Therefore, more evidence is needed to understand the mental health and self-satisfaction of childhood trauma in this group. In this regard, this study was conducted with the aim of investigating the impact of childhood trauma on the mental health and satisfaction of students themselves; And the main research question can be

posed as follows: Does childhood trauma have the ability to explain and predict mental health and self-satisfaction?

In terms of purpose, the present study is in the field of applied research and based on the method of a descriptive-correlational research, in which the relationships between childhood trauma, mental health and self-satisfaction are investigated. The statistical population includes all students studying at the Islamic Azad University, Garmsar branch, in the second half of the academic year 1401-1402. According to the information obtained from the education center of Azad University, Garmsar branch, the number of male and female students is 8000. The research sample size was calculated based on Cochran's formula. Based on this, the sample size of the research was determined to be 366 people. In order to increase the accuracy of sampling, the possible loss of participants or defects in completing the instruments, the sample size of the research was increased by 20% to 440 people. The samples were selected in a multi-stage cluster method based on the criteria for entering the research. In this way, among the faculties of Islamic Azad University of Garmsar branch, three faculties and four classes from each faculty were randomly selected. In the next stage, with the cooperation of the professors, the research tools that were prepared electronically were placed in the educational groups and the students who were willing to cooperate were requested to complete the questionnaires. Criteria for entering the research: Working male and female students studying at Islamic Azad University, Garmsar branch, in the second half of the academic year 1401-1402. The minimum age of the subjects is 20 and the maximum is 50 years. Exclusion criteria from the research: Use of psychiatric drugs based on personal report, Reluctance to cooperate, Obvious physical defect. Research tool:

General Health Questionnaire: Goldberg et al. (31) compiled this questionnaire with the aim of discovering and identifying mental disorders in medical centers and different situations. The 28-item form of this questionnaire evaluates the four dimensions of physical symptoms (questions 1 to 7), anxiety and sleep disorder (8 to 14), social functioning disorder (15 to 21) and depression symptoms (22 to 28). All items of the public health questionnaire have four options and there are two scoring methods for these options. One is the scoring method (G.H.Q) in which the test options are scored as (0; 0; 1; 1) and as a result the individual's score will vary from 0 to 28. The second method is the Likert scoring method, based on this scoring method, each of the four graded questions of the test is (0, 1, 2, 3) and as a result, the total score of a person ranges from zero to 84 will be variable. In both scoring methods, a lower score indicates better mental health. Likert scoring method was used in this research. The 28-question version of this questionnaire has the highest level of validity, sensitivity and specificity compared to other versions (60, 30 and 12 questions). A review of the studies conducted in different countries of the world in the field of public health questionnaire validation indicates the high reliability and validity of this test (31). In Iran, Nazifi, Makrami, Akbari-Tabar, Faraji Kojardi and colleagues (31) investigated the reliability, validity and factor structure of Persian translation. The findings showed that the general health questionnaire has a suitable internal consistency for measuring general health in the examined sample. Also, factor analysis with the method of principal components identified four

factors and these four factors explained 60% of the total variance. Also, the reliability of the questionnaire using Cronbach's alpha method for physical symptoms, anxiety and insomnia, failure of social functioning, severe depression and general health index was 0.86, 0.88, 0.74, 0.89 and 0.92 reported. Ebrahimi, Molavi, Mousavi, Barnamanesh and Yaqoubi (32) confirmed the four factors of the questionnaire in factor analysis. In addition, it was found that the best cut point of this questionnaire is 24, which has high psychometric indices. In the present study, the face validity of the questionnaire was evaluated by asking opinions from professors and experts. Also, the reliability coefficient was calculated by Cronbach's alpha method for physical symptoms, anxiety and insomnia, social function failure, severe depression and total general health index as 0.66, 0.75, 0.68, 0.79 and 0.80 respectively.

Self-satisfaction Questionnaire: This questionnaire was designed and validated by Abbas Nia, the questionnaire has 6 items that are scored based on a five-point Likert scale. The scoring of items 3 and 6 is done in reverse. In this questionnaire, the lower limit of scores is 6 and the upper limit is 30; Therefore, if the scores of the questionnaire are between 6 and 12, the variable rate in this community is weak. Questionnaire scores between 12 and 24 indicate that the variable level is at an average level, and finally, scores above 24 indicate that the level of self-satisfaction is at a high level. In the present study, the face validity of the questionnaire was evaluated by asking opinions from professors and experts. Also, the reliability coefficient was calculated using Cronbach's alpha method of 0.80.

Short form of childhood trauma questionnaire: This questionnaire was developed by Bernstein et al. (33) in order to measure childhood injuries and trauma. This questionnaire evaluates five types of childhood misbehavior, which include sexual abuse (items 20, 21, 23, 24, 27), physical abuse (items 9, 11, 12), emotional abuse (items 3, 8, 14, 18, 25), emotional neglect (items 5, 7, 13, 19, 28) and physical neglect (items 1, 2, 4, 6, 26). Out of the 28 items of the questionnaire, 25 questions are used to measure the main components of the questionnaire and 3 questions are used to identify people who deny their childhood problems. In the research of Bernstein et al. (2003), the Cronbach's alpha coefficient of the questionnaire on a group of teenagers for the dimensions of emotional abuse, physical abuse, sexual abuse, emotional neglect and physical neglect was equal to 0.87, 0.86, 0.95, 0.89 and 0.78 were reported. Also, its concurrent validity with therapists' ratings of the amount of childhood traumas was obtained in the range of 0.59 to 0.78. In Iran, Ebrahimi, Dezhgam and Thagha-e-Islam (34) reported the Cronbach's alpha of this questionnaire from 0.81 to 0.98 for its five components. In the present study, the face validity of the questionnaire was evaluated by asking opinions from professors and experts. Also, the reliability coefficient was calculated by Cronbach's alpha method for the dimensions of emotional abuse, physical abuse, sexual abuse, emotional and physical neglect, respectively 0.75, 0.60, 0.85, 0.79 and 0.70.

In this research, data analysis was done at two levels of descriptive and inferential statistics. At the level of descriptive statistics, the mean and standard deviation were used, and at the level of inferential statistics, the Kolmogorov-Smirnov test was used to check the normality of the

distribution of variables, the Pearson correlation test and regression analysis were used to check the research hypotheses. All tests were analyzed using SPSS26 statistical software.

Findings:

The descriptive indices of the research variables are given in Table 1

Table 1. Descriptive indices of research variables

Variable	Average	standard deviation	minimal	Maximum	Crooked	Elongation	Number
physical symptoms	6/03	2/51	1	12	0/11	-0/69	440
Anxiety and sleep disorder	5/40	2/21	1	11	0/48	-0/32	440
Disruption of social functions	5/10	2/21	0	11	0/21	-0/39	440
Symptoms of depression	2/98	1/88	0	7	0/70	-0/29	440
General health index	19/54	0/61	4	33	-0/09	-0/33	440
self-satisfaction	19/60	2/82	15	26	0/29	-0/30	440
Emotional abuse	17/31	3/80	7	25	0/009	-0/24	440
Physical abuse	16/19	3/82	8	25	0/18	-0/06	440
sexual abuse	9/17	4/06	8	25	-0/17	-0/50	440
emotional neglect	2/17	3/98	8	25	-0/18	-0/23	440
physical neglect	16/64	4/62	5	25	0/48	-0/19	440
Total trauma index	84/24	18/11	40	125	0/009	-0/10	440

Table 2 Kolmogorov-Smirnov test to measure the normality of the data

Variable	statistical test	meaningful
mental health	0/089	0/051
self-satisfaction	0/091	0/0042
Childhood trauma	0/079	0/130

Table (2) measures the degree of normality of the data using the Kolmogorov-Smirnov test. As can be seen in the table above, the results obtained from the test in all variables are normal.

Therefore, it can be said that the presumption of parametric tests for testing hypotheses is established.

Table 3. Examining the assumption of independence or non-collinearity between predictor variables

Model	Significance level	Collinearity statistics		Watson camera
		Tolerance statistics	Variance inflation	
mental health	0/00	0/98	1/01	2/01
self-satisfaction	0/00	0/98	1/01	
Childhood trauma	0/00	0/98	1/01	

Considering the realization of the assumptions of normality of distribution, independence of errors and non-collinearity, we will present the findings by separating the research hypotheses.

Childhood trauma can predict mental health and self-satisfaction in students. Simple regression analysis was used to investigate the main research hypothesis. The results of the analysis are shown in table (4). Table (4) shows the results of simple regression between childhood trauma, mental health and self-satisfaction. In the regression equation, childhood trauma was considered as a predictor variable, and mental health and self-satisfaction were separately considered as criterion variables.

Table 4. Summary of regression model, analysis of variance and statistical characteristics of childhood trauma with mental health and self-satisfaction

Model/ mental health	Indicator						
	F	R	R ²	SE	β	T	sig
regression	7/81	0/34	0/20	5/63			0/000
Childhood trauma					0/34	3/42	0/001
Model/ self-satisfaction	Indicator						
	F	R	R ²	SE	β	T	sig
regression	1/54	0/12	0/01	2/81			0/21
Childhood trauma					0/12	1/24	0/21

Based on the results of table (4) in the first model, which shows the summary of variance analysis results and statistical characteristics of regression between childhood trauma and mental health, the amount of F observed at the level of 0.01 percent is significant ($0.000 \geq P$, $F=7.81$). The value of $R^2 = 0.20$ means that childhood trauma explains 20% of mental health changes. The effect

coefficient of childhood trauma ($\beta=0.34$), according to the t-statistics, shows that childhood trauma predicts changes related to mental health with 99% certainty. This means that experiencing trauma in childhood is associated with mental health problems in adulthood. Considering the positive sign of the beta coefficient, it can be concluded that experiencing trauma in childhood leads to an increase in mental health problems in adulthood.

In the second model, which summarizes the results of the analysis of variance and the statistical characteristics of the regression between childhood trauma and self-satisfaction, the observed F level is not significant at the 0.01 level ($P<0.000$, $1.54= F$). This means that the experience of trauma in childhood is not related to the level of self-satisfaction in adulthood. According to the obtained results, it can be said that because the predictor variable had a significant effect on at least one criterion variable, the main hypothesis of the research is confirmed and it can be said that childhood trauma can explain and predict health. has the soul; This variable is able to explain 20% of mental health changes in students.

Childhood trauma can predict mental health in students. Pearson's correlation coefficient was used to check this hypothesis. Table (5) shows the correlation matrix of the relationship between the dimensions of childhood trauma and mental health.

Table 5. Correlation matrix of the relationship between the dimensions of childhood trauma and mental health

number	Variable	1	2	3	4	5	6	7	8	9
1	Emotional abuse	1								
2	Physical abuse	0/80**	1							
3	sexual abuse	0/78**	0/69**	1						
4	emotional neglect	0/82**	0/75**	0/76	1					
5	physical neglect	0/76**	0/64**	0/78**	0/81**	1				
6	Physical symptoms	0/08	0/42**	0/40**	0/43**	0/28*	1			
7	Anxiety and sleep disorder	0/23*	0/08	0/27*	0/50**	0/28*	0/39**	1		
8	Disruption of social functioning	0/41**	0/40**	0/14*	0/50**	0/34*	0/47*	0/72**	1	
9	Symptoms of depression	0/01	0/07	0/45**	0/20*	0/004	0/45**	0/20*	0/37**	1

According to the results of table (5), the correlation coefficient of emotional abuse with anxiety and sleep disorder is 0.23 and social functioning disorder is 0.41, which is significant at the 0.05

level. Therefore, there is a positive and moderate correlation between predictor and criterion variables. The relationship between physical abuse was with physical symptoms ($R=0.42$; $P<0.01$) and impairment in social functioning ($R=0.40$; $P<0.01$). Sexual abuse with physical symptoms ($R=0.40$; $P<0.01$), anxiety and sleep disorder ($R=0.27$; $P<0.01$), social functioning disorder ($R=0.14$; $P<0.01$) $P<0.01$) and depression symptoms ($R=0.45$; $P<0.01$) showed a positive and significant correlation. Relationship between emotional neglect and physical symptoms ($R=0.43$; $P<0.01$), anxiety and sleep disorder ($R=0.50$; $P<0.01$), social functioning disorder ($R=0.50$; $P<0.01$) $P<0.01$) and depression symptoms ($R=0.42$; $P<0.5$) were also positive and significant. Finally, the relationship between physical neglect and physical symptoms is 0.28, anxiety and sleep disorder is 0.28, and social functioning disorder is 0.34, which is significant at the 0.05 level. Therefore, there is a weak and positive correlation between predictor and criterion variables.

Table 6. Summary of regression model, variance analysis and statistical characteristics of childhood trauma with mental health

Model/ Physical symptoms	Indicator						
	F	R	R ²	SE	β	T	sig
regression	7/81	0/34	0/20	5/63			0/000
Emotional abuse					0/02	0/42	0/66
Physical abuse					0/05	0/85	0/39
sexual abuse					0/24	4/17	0/000
emotional neglect					0/28	4/17	0/000
physical neglect					0/16	0/85	0/39
Model/ Disruption of social functioning	Indicator						
	F	R	R ²	SE	β	T	sig
regression	4/19	0/46	0/21	0/02			0/001
Emotional abuse					0/67	2/70	0/008
Physical abuse					0/27	1/10	0/27
sexual abuse					0/13	0/65	0/51
emotional neglect					0/80	3/12	0/002
physical neglect					0/03	0/17	0/86
Model/ Symptoms of depression	Indicator						
	F	R	R ²	SE	β	T	sig
regression	3/79	0/44	0/19	0/002			0/001
Emotional abuse					0/62	2/47	0/01
Physical abuse					0/53	2/12	0/03
sexual abuse					0/04	0/24	0/80
emotional neglect					0/83	3/18	0/002

physical neglect					0/08	0/39	0/71
Model/ Anxiety and sleep disorder				Indicator			
	F	R	R ²	SE	β	T	sig
regression	5/70	0/26	0/07	3/83			0/000
Emotional abuse					0/02	0/30	0/76
Physical abuse					0/05	0/84	0/40
sexual abuse					0/00	0/004	0/99
emotional neglect					0/28	4/11	0/000
physical neglect					0/08	1/28	0/19

Based on the results of table (6) in the first model, which shows the summary of variance analysis results and statistical characteristics of the regression between the dimensions of childhood trauma and physical symptoms (from the components of mental health), the amount of F observed at level 01 0.0% is significant ($P \geq 0.000$, $F=8.93$). The value of $R^2 = 0.10$ means that childhood trauma explains 10% of the changes in physical symptoms. The effect coefficient of emotional abuse ($\beta=0.02$), physical abuse ($\beta=0.05$), sexual abuse ($\beta=0.24$), emotional neglect ($\beta=0.28$) and physical neglect ($\beta=0.16$) $\beta = 0$), according to the t-statistics, it shows that only the dimensions of sexual abuse and emotional neglect predict with 99% certainty the changes related to physical symptoms. This means that the experience of sexual abuse and emotional neglect in childhood is associated with physical symptoms (of mental health dimensions) in adulthood. According to the positive sign of the beta coefficient, it can be concluded that the experience of trauma in childhood is associated with an increase in physical problems in adulthood.

In the second model, which shows the summary of variance analysis results and statistical characteristics of regression between the dimensions of childhood trauma and anxiety and sleep disorder (from the components of mental health), the observed F level is significant at the level of 0.01%. ($P \geq 0.001$, $F=4.19$). The value of $R^2 = 0.21$ means that childhood trauma explains 21% of depression changes. The effect coefficient of emotional abuse ($\beta=0.67$), physical abuse ($\beta=0.27$), sexual abuse ($\beta=0.13$), emotional neglect ($\beta=0.80$) and physical neglect ($\beta=0.03$) $\beta = 0$), according to the t-statistics, it shows that only the dimensions of emotional abuse and emotional neglect predict with 99% confidence the changes related to anxiety and sleep disorder. This means that the experience of emotional abuse and emotional neglect in childhood is associated with symptoms of anxiety and sleep disturbance (of mental health dimensions) in adulthood. Considering the positive sign of the beta coefficient, it can be concluded that experiencing trauma in childhood leads to an increase in anxiety and sleep disorders in adulthood.

In the third model, which summarizes the results of the analysis of variance and the statistical characteristics of the regression between the dimensions of childhood trauma and impairment in social functioning (from the components of mental health), the observed F level is significant at the level of 0.01%. ($P \geq 0.001$, $F=3.79$). The value of $R^2 = 0.19$ means that childhood trauma

explains 19% of the changes in social functioning disorder. The effect coefficient of emotional abuse ($\beta=0.62$), physical abuse ($\beta=0.53$), sexual abuse ($\beta=0.04$), emotional neglect ($\beta=0.83$) and physical neglect ($\beta=0.08$) $\beta = 0$), according to the t-statistics, it shows that only the dimensions of emotional abuse, physical abuse, and emotional neglect predict with 99% certainty the changes related to the impairment of social functions. This means that the experience of emotional abuse, physical abuse and emotional neglect in childhood is associated with impaired social functioning (from the dimensions of mental health) in adulthood. Considering the positive sign of the beta coefficient, it can be concluded that experiencing trauma in childhood leads to an increase in the level of impairment in social functions in adulthood.

In the fourth model, which shows the summary of variance analysis results and statistical characteristics of the regression between childhood trauma dimensions and depression symptoms (of mental health components), the observed F level is significant at the 0.01% level ($000 / 0 \geq P$, $F=5.70$). The value of $R^2 = 0.07$ means that childhood trauma explains 7% of changes in anxiety and sleep disorder. The effect coefficient of emotional abuse ($\beta=0.02$), physical abuse ($\beta=0.05$), sexual abuse ($\beta=0.000$), emotional neglect ($\beta=0.28$) and physical neglect ($\beta=0.08$) $\beta=0$), according to the t-statistics, it shows that only emotional neglect predicts changes related to depression symptoms with 99% confidence. This means that the experience of emotional neglect in childhood is associated with depressive symptoms (of mental health dimensions) in adulthood. According to the positive sign of the beta coefficient, it can be concluded that experiencing trauma in childhood leads to an increase in depression symptoms in adulthood. between having a significant effect on at least one criterion variable, the first sub-hypothesis of the research is confirmed and it can be said that childhood trauma can explain and predict mental health; So that emotional abuse and emotional neglect were able to explain 21% of anxiety and sleep disorder. 19% of impairment in social functions was explained by emotional abuse, physical abuse and emotional neglect. 10% of physical symptoms could be explained by the dimensions of sexual abuse and emotional neglect, and finally 7% of depression could be explained by emotional neglect. Childhood trauma can predict self-satisfaction in students. Pearson's correlation coefficient was used to check this hypothesis. Table (7) shows the correlation matrix of the relationship between the dimensions of childhood trauma and self-satisfaction.

Table 7. Correlation matrix of the relationship between the dimensions of childhood trauma and self-satisfaction

number	Variable	1	2	3	4	5	6
1	Emotional abuse	1					
2	Physical abuse	0/80**	1				
3	sexual abuse	0/78**	0/69**	1			

4	emotional neglect	0/82**	0/75**	0/76**	1		
5	physical neglect	0/76**	0/64**	0/78**	0/81**	1	
6	self-satisfaction	0/12	0/35	0/02	-0/22*	0/09	1

According to the results of Table (7), the correlation coefficient of physical abuse with self-satisfaction is -0.22, which is significant at the 0.05 level. Therefore, there is a negative and weak correlation between predictor and criterion variables. Next, simple multiple regression analysis was used to investigate the contribution of sexual abuse in the students' self-satisfaction - other aspects of childhood trauma were not included in the regression equation due to the lack of significant correlation with self-satisfaction. In this analysis, sexual abuse as a predictor variable and self-satisfaction as a criterion variable were entered into the equation (Table 8).

Table 8. Summary of the results of self-satisfaction prediction model based on the predictor variable

Model	F	R	R ²	SE	sig
1	4/98	0/22	0/04	2/76	0/02

According to table (8), the multiple correlation coefficient of predictor variables with self-satisfaction is (0.22). These variables are able to explain 4% of the changes in self-satisfaction in students. According to the observed F, this amount of variance is explained and as a result, the regression model is significant at the level of 0.05. Standardized and unstandardized regression coefficients are reported in Table (9).

Table 9. Unstandardized and standardized regression coefficients of self-satisfaction prediction model based on predictor variables

Model	Not standardized coefficients		Standardized coefficients	T	Significance level
	B	Standard error of estimate	Beta		
Fixed	16/97	1/20		14/03	0/000
sexual abuse	0/15	0/06	-0/22	-2/23	0/02

As the results of table (9) show, the factor of sexual abuse with $\beta = -0.22$ has a significant effect on students' self-satisfaction at the level of 5%, and the negativity of this coefficient actually indicates that with increasing This factor decreases the self-satisfaction of students. According to the obtained results, it can be said that because at least one of the predictor variables (sexual abuse)

had a significant effect on the criterion variable, the second sub-hypothesis of the research is confirmed and it can be said that Among the dimensions of childhood trauma, only sexual abuse is able to explain 4% of the variance of self-satisfaction in students.

Discussion and conclusion:

The present study was conducted with the aim of explaining and predicting mental health and self-satisfaction based on childhood trauma. Childhood trauma can predict mental health and self-satisfaction in students. The main question of the research was that childhood trauma can explain and predict mental health and self-satisfaction in students. Part of this hypothesis was confirmed and the research findings showed that childhood trauma can only explain and predict mental health. This variable is able to explain 20% of mental health changes in students. Another finding of the research showed that there is no significant relationship between childhood trauma and self-satisfaction. In line with this finding, Shamali et al. (36) found in a research that childhood abuse is the basis for the use of experiential avoidance strategies, and this leads to an increase in depression, anxiety and stress in victims of childhood abuse. The results of Farazmand's research (37) also showed that the experience of emotional abuse in childhood can predict mental disturbances in adulthood. Another finding of this research showed that children and teenagers who were exposed to some kind of interpersonal trauma, compared to normal people, reported more mental health problems. In explaining the role of childhood trauma in predicting students' mental health, it can be said that traumatic events include injury or threat of injury (38).

This is especially true for traumatic events such as exposure to interpersonal violence, including physical abuse, sexual abuse, witnessing domestic violence, and exposure to other forms of violence in the home or community. Exposure to these types of traumatic events in childhood changes emotional and neurobiological development and consequently increases the identification of potential threats in the environment and increases emotional responses to those threats. Although these adaptations may enhance safety in dangerous environments, they are a central mechanism linking childhood trauma to the onset of internalizing and externalizing psychopathology (39). Children exposed to trauma show information processing biases that facilitate rapid identification of environmental threats. One of these biases includes increased perceptual sensitivity to anger. Children with a history of trauma identify anger with less perceptual information and classify a wider range of emotions as anger than children who have never experienced trauma (40). In addition, children who have been exposed to trauma show attentional biases towards threatening social information, including faster engagement and lack of attentional engagement with delayed anger (41). In social situations, extensive evidence shows that trauma-exposed children pay more attention to threatening cues, ignore non-threatening cues, and develop hostile attributions than children without a history of trauma (42).

Childhood trauma can predict mental health in students. The first sub-hypothesis of the research was proposed that childhood trauma can explain and predict mental health in students. This hypothesis was confirmed and the results showed that childhood trauma can explain and predict

mental health. So that emotional abuse and emotional neglect were able to explain 21% of anxiety and sleep disorder. 19% of impairment in social functions was explained by emotional abuse, physical abuse and emotional neglect. 10% of physical symptoms could be explained by the dimensions of sexual abuse and emotional neglect, and finally 7% of depression could be explained by emotional neglect. This finding is in line with the results of research carried out in the country by Shamali et al. (36), Farazmand (37), Rostami et al. et al. (44), Marshall et al. (45) based on the positive relationship of childhood trauma experience with mental health. The results of the study conducted by Mohammadpour et al. in 2013 indicated that there is no significant relationship between psychological abuse and depression; which is inconsistent with the results of the present study. In explaining the role of childhood trauma in predicting anxiety and depression, it can be stated that childhood trauma is related to the development of anxiety and depression in adulthood (46) and the history of abuse may be more identifiable in adulthood because emotional patterns and Behavior has evolved during this period. Hence, various disorders are likely to develop among victims of childhood abuse (47).

Childhood trauma has the ability to predict self-satisfaction in students. The second sub-hypothesis was proposed as such that childhood trauma can explain and predict self-satisfaction. This hypothesis was confirmed and the results showed that, among the dimensions of childhood trauma, only sexual abuse can explain 4% of the variance of self-satisfaction in students. Considering the lack of research background regarding the role of childhood trauma in predicting self-satisfaction, it is possible to compare the results with other previous studies and researches and discuss the possible causes of differences or similarities in the results obtained with other researches. It is not possible. But the results of the following research may be close to the research findings. The results of Downey and Kurumi's research (43) showed that the experience of trauma leads to creating a negative self-image and the use of alcohol and drugs. When people feel happy in every aspect of their life and are satisfied with their life situation; Satisfaction is obtained from the fulfillment of personal and work goals (20). According to Pasopoletti et al. (21), when people feel happy about themselves and believe that they have achieved their goals in life, they are happier than others, and this has a positive effect on their lifestyle, dealing with people, and even work. It has them. Those who are satisfied are better able to manage personal and business problems. This is because they have control over their psychological feelings and therefore they can better focus on the subject instead of their negative feelings - such as stress and anxiety (21). In addition, Donovan and Halpern (22) found that people who are satisfied are more open and artistic, which means that they are more open and creative in their thinking, which can lead to manage their work life better. Although the effect of childhood trauma on self-satisfaction has not yet been investigated in domestic and foreign researches; But it has been proven that experiences and perceptions of child abuse increase self-shame and decrease self-esteem, which in turn leads to depression symptoms in adulthood (23-24). While secure attachment during childhood is critical in developing positive self-esteem (25). In children and adolescents who have adverse experiences and benefit less from parental care and support, the risk of creating a distorted self-concept and feeling of low value, i.e. low self-esteem or negative self-evaluation and withdrawal from socialization increases. 25). This

shows that traumatic experiences from interpersonal relationships contribute to the child's general self-knowledge (48).

Limitations of the research: Like other researches, this research had limitations, and one of these limitations was the mental and emotional state of the students when answering the questions, which may affect the accuracy and accuracy of their answers, and this limitation was uncontrollable.

Conflict of interest: The authors hereby declare that this work is the result of an independent research and does not have any conflict of interest with other organizations and persons.

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