

## Effect of Trauma-Focused Cognitive Behavioral Therapy on Reduction Social and Emotional Maladjustment of Physically Abused Children: A Clinical Trial

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### Abstract

#### Background

One of the most important and destructive forms of child abuse is the physical abuse which can lead to the maladjustment among abused children; the aim of this study was to determine the effectiveness of trauma focused cognitive-behavioral therapy on reduction social and emotional maladjustment of physically abused children.

#### Materials and Methods

This study was a randomized controlled clinical trial. A number of 40 abused boys, who study in the elementary schools in Kermanshah- Iran, were selected by random cluster method, and randomly divided in intervention and control groups. Before and after Trauma-focused cognitive behavioral therapy (TF.CBT), the Sinha and Singh adjustment questionnaire were used to assess the level of social and emotional maladjustment. In the intervention group, trauma-focused cognitive behavioral therapy was held in ten one-hour sessions.

#### Results

The results showed that after the intervention, the mean of social and emotional maladjustment was decreased significantly in the intervention group ( $P < 0.001$ ), while in the control group the mean of social and emotional maladjustment were not significantly different between pre-test and post-test.

#### Conclusion

At current study, results showed that TF.CBT reduced the social and emotional maladjustment among physically abused children.

**Key Words:** Child Abuse, Cognition, Emotional maladjustment, Social maladjustment.

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## 1- INTRODUCTION

Children have historically been the most vulnerable stratum of society and it appear that this trend continues yet (1). Each year many children are abused by their caregivers. Child abuse includes any behavior that entails deliberate physical, emotional, sexual abuse / or negligence and neglecting the child (2). The results of studies show that child abuse is very prevalent in the world (3). For example, Finkelhor et al., in a study investigated the prevalence of child abuse among 4,000 children, of which 37.3% were physically abused (4). Child abuse in Iran also had a rising trend. Reports from 1386 indicate the 3.5% growth of the during a year (5). According to the "Society for the protection of Children's Rights in Iran" , the highest type of child abuse in Iran (67.6%) is physically (6).

Abused children are deprived from the educational, psychological and effective support of parents and also the benefits of peaceful living in a family. Childcare, empathic understanding, participation, the power of transparent power and problem-solving are the essential functions of a family, which play a vital role in providing mental health of children. Deprivation from essential functions of a family may cause the abused children to be subject to numerous problems including low social adjustment, drug abuse, emotional problems and running away from home (7-9). Among the adverse effects of child abuse, discussing the problems of these children in the adjustment area is of a great importance (10-12).

Adjustment is a general concept and it is said to be the all strategies that the person uses to handle the stressful life situations (real or unreal threats). In other words, dealing successfully with peers in the community, is called adjustment (13). Adjustment dimensions include the physical, social, emotional and moral adjustment that on top of all is the social

and emotional adjustment and it is an introduction to achieve the other dimensions of adjustment (14, 15). Abused children are weak in terms of social and emotional development (16-18), and lack the necessary skills to meet the social expectations, they are involved in communication problems with others and their surroundings and often have difficulty in relationships with peers and show maladaptive behaviors (19-22).

In recent years the dominant treatment to reduce the problems caused by child abuse was the cognitive-behavioral approach. However, using this method in various studies and on patients experienced different traumas has shown various effect sizes and the effect of this method in the treatment of psychological symptoms associated with child abuse has been reported to be varying and low (23), this indicate the low efficacy of this treatment in reducing the problems of abused children, which has caused the researchers to look for trauma-focused psychotherapies to treat the abused children (24), that that one of them is trauma-focused cognitive-behavioral therapy.

Trauma-focused cognitive-behavioral therapy is a well-known and very effective treatment for children who have been abused; this treatment has been suggested by Cohen and Deblinger, specifically to help the abused children and its main focus is on reducing the emotional and behavioral problems caused by trauma (25). In this treatment we focus on the psychological education for children about false believes and mental errors and correcting them and help children to be able to regain their overcome and control feeling over the situations (26). In various studies, this treatment has been used to reduce the problems of abused children (27, 28). Child abuse and physical abuse of children and adolescents is an issue that apart from causing the present and future

life of children to be painful, will have negative and problematic effects for children and also would impose very high costs for the treatment of signs and symptoms of child abuse on society (11-12). On the other hand, studies on trauma-focused cognitive-behavioral therapy have been started in recent years and various studies were conducted in this area and there is no sign of reduction in these researches. While researches done in this area in our country are very few, also researches done in the area of child abuse in terms of method are often descriptive and reducing the problems of these children are rarely considered. In general it can be said that given to the increasing number of abused children in Iran more than before and the lack of researches done, this research aimed to investigate the effect trauma-focused cognitive-behavioral therapy on social and emotional adjustment of abused children.

## 2- MATERIALS AND METHODS

### 2-1. Study design and Population

This randomized controlled clinical, registered in the clinical trial registry center of Iran with IRCT.2016011923705N3. This study has been approved by ethics committees of Kermanshah University of Medical Sciences. The research population is comprised of all abused children studying in the boy's primary schools in Kermanshah city in 2016-2017. Sampling was performed in two stages.

1) Identification phase: At this stage, 263 boy's students were randomly selected using multi-stage cluster sampling. For this goal, out of the three educational districts in Kermanshah city, District II was randomly selected. Furthermore, among 10 boy's primary schools, one was randomly selected, and all of the students in the school were evaluated, and finally 40 physical abused children were identified by making reference to the paper published

by Dalgleish et al. (29), and using Child Abuse Inventory and also interview with parents and children.

2) Random selection: the identified children were randomly assigned to the intervention and control groups (per group=20 students). To perform assimilation among the two groups, the subjects of the control were comprised of the boys who had experienced abuse, and due to moral considerations, the control group received cognitive trauma-focused behavioral therapy after completing the study. After coordination, obtain consent of the subjects, and also identification, recognition and interview with the physically abused children, the research's objective was explained to them, the questionnaires were distributed in the pre-intervention stage, and finally the subjects were asked to carefully read the questions, to choose the answers consistent with their own characteristics and attempt to respond to the entire questions.

The inclusion criteria were the physical type of child abuse, 9-12 years old, not receiving the psychological treatment and drug therapy along with the research. Exclusion criteria included the obvious symptoms of psychosis in the child, suffering from chronic diseases and mental disorders in the child. Written consent form was obtained from one parent of all the participants. These children were allocated in the intervention and control groups randomly. The level of social and emotional maladjustment were assessed with Sinha and Singh adjustment questionnaire in the two groups.

In the intervention stage, trauma-focused cognitive-behavioral therapy based on Cohen's protocol (30), was performed in the intervention group in 10 one-hour sessions, twice a week, as explained below. The control group also was on the waiting list, and in order to observe the ethical morals they received the trauma-focused cognitive-behavioral therapy after

the research. In the post-test, again the maladjustment questionnaire was performed and scored.

## **2-2. Interventions**

### **2-2-1. Trauma-focused cognitive-behavioral therapy**

In the first session that was for "understanding the goals and determining the expectations", the participants were introduced and the trauma-focused cognitive-behavioral therapy and rules of group were explained briefly. In the second, third and fourth sessions, informing about trauma and reaction to it, focusing on the positive aspects of oneself, managing the emotional responses to the trauma, and identifying various types of emotions on the face were discussed. In the fifth and sixth sessions, communicating the thought, emotions and behavior, examining the daily thoughts, learning to stop thinking through writing or painting, were trained. In the seventh and eighth sessions we concentrated on the cognitive coping, introduction to cognitive distortions and discovering the negative thoughts and challenging them. Also, the trauma was narrated. In the ninth and tenth sessions, overcoming the fears associated with trauma, discussing the trauma reminders, and increasing the environmental supports, was addressed.

## **2-3. Instruments**

### **2-3-1. Social adjustment questionnaire**

This questionnaire was made by Sinha and Singh (1993) to determine the social, emotional and academic adjustment (31). In Iran, Aghdasi Ahghar has examined the 55-questions form of this scale in a sample of 3,000 students from different levels of education. The scoring of this test is by zero and one, that a high score and low score indicate the high and low adjustment, respectively. Developers achieved the reliability of the test by

dividing, re-test and Kuder-Richardson equal to 95%, 94% and 92%, respectively (32). In Iran, the reliability of subscales of social, emotional, educational and total were achieved 0.92%, 0.92%, 0.96% and 0.94%, respectively. Also, the content validity of the test was confirmed by Khanizadeh and Bagheri (2012) (32).

### **2-3-2. Child abuse questionnaire**

In order to assess child abuse, Hosseinkhani et al. child abuse questionnaire was used. Hosseinkhani et al., to assess child abuse in Iran, provided a Questionnaire based on the ISPCAN Child Abuse Screening Tool according to Iranian culture.

ICAST was prepared by Zolotor and colleagues in USA firstly and Cronbach's alpha was evaluated 0.68 to 0.85 (33). The questionnaire is comprised of 26 items, and the metrics to measure each item is multiple-choice Likert scale (never=0, rarely=1, often=2, always= 3) including three subscales namely neglect, emotional abuse, and physical abuse. The items 1-10 measures emotional child abuse, 11-20: physical abuse, and 21-26: child abuse in terms of neglect.

In the area of subscale namely 'neglect' the minimum score is (0), and the maximum score is (18). In terms of 'emotional and physical abuse', the minimum score is (0), and the maximum score is (30). Hosseinkhani et al. reported the reliability of subscales by two methods of retest and Cronbach's Alpha between 0.92% to 0.95 (34).

## **2-4. Data analyses**

Data were analyzed using SPSS software version 17.0. For descriptive data analysis Chi-square test, to inferential data analysis and to comparison of intra-group and inter-group means independent and paired t-test were used. P-value less than 0.05 were significant.

### 3-RESULTS

In the present study, 40 physical abused with the age range of 9-12 years were selected by cluster sampling from elementary schools of Kermanshah-Iran, and were randomly assigned to intervention and control groups. Demographic characteristics and descriptive findings are shown in **Table.1**. Results showed that the baseline were not different between two groups.

As **Table.2** shows, using the results obtained from independent groups t-test, a significant difference can be observed between the mean scores of social and emotional maladjustment in the intervention group and the control before intervention. However, a statistically significant difference was observed

between the mean scores of social and emotional maladjustment in the intervention and control groups, indicating the fact that the research's intervention played an effective role and led to a reduction in social and emotional maladjustment among the abused children ( $P < 0.001$ ).

Results of **Table.3** show that there is a significant difference between the average before and after intervention of social-emotional maladjustment in the intervention group; so that the mean of emotional maladjustment of post- test was significantly lower than before intervention. Also, as shown in **Table.3**, in the control group, mean difference of social and emotional maladjustment were not statistically significant between pre-test and post-test.

**Table-1:** Demographic characteristics in two groups

Variables		Group, number (%)		Chi-Square	P-value
		Intervention	Control		
Age (year)	9	5(25.0%)	6(30.0%)	1.08	0.78
	10	6(30.0%)	5(25.0%)		
	11	4(20.0%)	6(25.0%)		
	12	5(25.0%)	3(15.0%)		
Father's educational Level	Diploma and High school	14(70.0 %)	16(80.0 %)	71	0.35
	Over diploma	6(30.0 %)	4 (20.0 %)		
Father's job	Employee	5 (25.0%)	3 (15.0%)	62	0.34
	Self-employed and Unemployed	15 (75.0 %)	17 (85.0 %)		
History of addiction in family	Yes	6 (30.0%)	8 (40.0%)	44	0.37
	No	14 (70.0%)	12 (60.0%)		

**Table-2:** The comparison of the mean of the social maladjustment and emotional maladjustment before and after intervention

Variables		Mean $\pm$ Standard deviation	
		Before Intervention	After Intervention
Social maladjustment	Intervention	13.85(2.13)	10.05(1.70)
	Control	12.85(1.81)	12(1.45)
Significance Level of t-test		0.11	0.001
Emotional maladjustment	Intervention	12.05(1.66)	8.80(1.76)
	Control	11.75(1.44)	12.40(1.50)
Significance Level of t-test		0.54	0.001

**Table-3:** The comparison of the mean of the social maladjustment and emotional maladjustment in intervention and control group

Groups	Variables	Mean (SD)	Statistical results	
			Paired t-test	P- value
Intervention	Social maladjustment	3.80(2.21)	7.67	0.001
	Emotional maladjustment	0.85(1.46)	9.16	0.001
Control	Social maladjustment	3.25(1.58)	2.60	0.18
	Emotional maladjustment	0.65(1.53)	1.89	0.73

#### 4- DISCUSSION

At current study, the analyzing the findings indicated that trauma-focused cognitive behavioral therapy is effective on social adjustment of the abused children. This finding is consistent with Konanur et al., (27), Koglin and Petermann (26), Deblinger et al., (28) that showed that children who received the trauma-focused cognitive behavioral therapy had a significant improvement in interpersonal skills and social relationships. In explaining this finding it can be said that, in the therapy sessions it was attempted to increase the adaptive skills of abused children and be able to effectively deal with the trauma experience and these children were encouraged to identify the adaptive ways which are more effective for them; for example, they are taught to prepare a list of strategies that are useful in stressful situations, also they were asked to prepare a card and name it the happiness and vitality and write on it the ways that can be helpful during stress and tension and use these methods when the stress symptoms occur.

Also, they were asked to avoid the strategies with high risk of negative consequences (such as long and repeated isolation and/or negative emphasis sentences caused by cognitive distortions), because the more appropriate strategies are used by the abused children to reduce the stress, the more successful they are in social interactions and will have more social adjustment (13). On the other hand,

in trauma-focused cognitive-behavioral therapy they were helped, and in an empathic process it was tried to reduce the emotions associated with abuse. Also, using this therapy we tried to reduce the social problems of these children which have continued as a result of irrational thinking, using a variety of behavioral, emotional and cognitive techniques. Another finding of this study was that trauma-focused cognitive-behavioral therapy is effective on the emotional adjustment of abused children. This finding is consistent with the findings of Cisler et al., (35), GoldbeckL et al., (36), and Cohen, and Knudsen (37).

In explain this finding, it can be said that considering that in trauma-focused cognitive-behavioral therapy various techniques such as identifying emotions and thoughts, to stop the negative thoughts and improving the sense of safety and relaxation are used. The same techniques because of affecting the emotions of abused children, can have a good impact on their emotional adjustment.

Also, during the therapy sessions a special attention was paid to the children's emotions, and the emotional experience and proper responses to them were emphasized, and the children were helped to learn how to face their bad emotions and thus helped to their emotional adjustment. Also, trauma-focused cognitive-behavioral therapy try to training the children to logically think about things happen in their live and they are encouraged to face

inefficient feelings and thoughts properly and try to have new thoughts and behaviors (29, 31). On the other hand, using methods such as trauma narrative in this treatment, which has done by literary writing, painting and analyzes of trauma and expressing the feelings about it; it can help the abused children against negative cognitions and dealing better with the traumatic event that all of these could underlie the improvement of emotional adjustment in these children. However, this study showed that, trauma-focused cognitive-behavioral therapy can be effective on the social and emotional adjustment of physically abused children, but it is necessary to repeat the study to clarify the amount of effectiveness and mechanism of this method.

#### 4-1. Limitations of the study

Among the limitations of this study, we could mention the small sample size, semi-intervention method of study, limiting the group to physically abused children. It is recommended for future research to perform this treatment for other types of child abuse such as mental, neglecting and sexual abuse with expanded sample number.

#### 5- CONCLUSION

In general it can be said, since abused children have grown in the tense family, and one parent or both of them usually deal with their children violently, abused children have several problems in communication, social adjustment and emotional control. For this reason, the current article examines the effect of trauma-focused cognitive-behavioral therapy in reducing social and emotional maladjustment among the abused children. The results showed that, there was a significant difference in means of emotional and social maladjustment between the abused children in the intervention group compared to the control. In general terms, it could be said

that trauma focused cognitive-behavioral therapy help abused children to avoid from negative and maladaptive thoughts, and by learning different techniques to control their emotions, can increase the social and emotional adjustment of physically abused children.

**6- CONFLICT OF INTEREST:** None.

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