



Efficacy of Trauma-Focused Cognitive Behavioral Therapy in Facilitating Posttraumatic Growth and Emotional Management Among Physically Abused Children

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Abstract

Background: Numerous children are abused by their caregivers. Physical abuse is among the most destructive kinds of maltreatment that is highly related to physical and psychological problems in victims.

Objectives: This study was conducted to determine the effectiveness of trauma-focused cognitive behavioral therapy in facilitating posttraumatic growth and emotional management among physically abused children.

Methods: This study was a quasi-experimental research with pretest-posttest design and control group; 40 abused primary school boys in Kermanshah were selected with cluster sampling and divided into case and control groups each of 20 subjects. Data analysis was performed by SPSS22 using descriptive statistics and covariance analysis.

Results: Posttest scores of posttraumatic growth variable were significantly different between experimental and control groups. The mean score of emotional management variable in the experimental group was considerably higher than that of the control group.

Conclusions: TF - CBT can facilitate posttraumatic growth and emotional management in physically abused children.

Keywords: Trauma-Focused Cognitive Behavioral Therapy, Posttraumatic Growth, Emotional Management

1. Background

Childhood is the era of growth, development, and personality formation. Violence experienced in such sensitive years of life is the cause of serious harm to the growth as well as to the total health of children (1). Each year many children are abused by their caregivers. The world health organization (2006) defines child abuse as any behavior leading to intentional physical, emotional, sexual, or neglect-based harm to children (2). Study results bring us to the conclusion that child abuse is of high prevalence throughout the world (3). For instance, Ji and Finkelhor (2015) in a study showed that the prevalence of child abuse is up to 0.036 in China (4). Aboul-Hagag and Hamed (2012) also reported a 38.8 and 21.2 of abused cases among male and female children, respectively, in a study assessing child abuse prevalence in Egypt (5). Physical abuse is one of the most destructive types of maltreatment regarding outcomes.

Child physical abuse has been defined as any action that causes or provides the background of bodily harm or

injury to the child (6). These assaults may include burning, biting, pushing, torture, and so on (7). Child physical abuse is importantly related to the same upcoming physical and psychological problems. Depression, anxiety, self-reproach, and intimacy problems are all among the possible consequences of child abuse (8).

Children bearing a history of complex hurting events show severe behavioral and emotional complications due to an immature capacity of emotional regulation and self-calming (9). Exciting literature relating to childhood traumas is mostly focused on the signs and symptoms of consequent (PTSS) and posttraumatic stress disorder (PTSD) as well as on the factors that seem to affect children's adaptive abilities (10). Nevertheless, these problems only justify a small portion of children's life troubles and it would be possible to provide conditions towards facilitating posttraumatic growth after experiencing a troublesome event. In fact, beyond just negative outcomes of trauma, there would be more emphasis on measures of clear helpfulness that make tangibly more flexibility and growth in trauma.

matized children (11). Posttraumatic growth (PTG) refers to positive personal and psychological change achieved through personal challenges related to stressor events after the exposure, which is assumed to be of adaptive importance (12). Joseph and Linley (2006) conceptualized and viewed self-perspective as well as the philosophy of life. This phenomenon, although known for centuries, is scientifically studied just in recent years (13, 14). From the aspect of clinical psychology, after years of focusing merely on the problems of hurt children, under the influence of the nation of positive psychology, now a fully positive scenario with a focus on facilitating growth in such children is presented (11).

Besides studying child reactions after an experienced violence, emotional management problems of abused children should be taken of importance (15, 16). Emotional management specifically explains how people experience and modify and how such a regulation affects human behavior (17). The question of therapy choice raised following (18). Child abuse and neglect, chronically or sporadically, can exert destructive effects on the important process of attachment formation, which leads to impaired comfort desiring attempts and adjusting emotional processing in children (16).

Effectiveness of medication-based therapies in minimizing abused children complications has been a matter of controversy and doubt in recent studies (19). In recent years, cognitive behavioral approach has been the dominant therapeutic approach in lessening the problems of abused victims. Nevertheless, the effectiveness of this approach on different traumatic experiences of different people has been reported as having not constant outcomes in abused children (20). The weak result directed the researcher towards trauma-focused psychotherapies, among which is TF-CBT, which is the selected entity in this research (21).

The knowledge gathered psychological problems of abused children. One of such interventions suggested for treatment of abused children sufferings is trauma-focused cognitive behavioral therapy (TF-CBT) (22). This therapy method was presented first specifically for treatment of abused children by Deblinger and Cohen (2003). TF-CBT was applied in children with histories of familial maltreatment and several experiences of trauma on both genders and in children of different ethnic and racial groups and was mainly focused on alleviating emotional and behavioral complications related to trauma (11). Hebert and Daignault (2015) applied the method for treating sexually abused children and reported it as effective in decreasing the associated problems. The externalized and internalized behavioral problems of abused children, with a stability of good treatment, result in a one-year follow-up (23).

In studying child abuse, posttraumatic stress disorder has often been of much given prominence by psychologists, which seems to be the answer of question why the notion of posttraumatic growth is overlooked to the extent that after a decade of familiarity with the concept of posttraumatic growth, it has not become a known variable of studies led by researchers involved in our country (Iran). On the other hand, TF-CBT for abused children is a new therapy option used just recently worldwide. Child abuse is a prevalent phenomenon with short-term and long-term effects on mental and physical health as well as on cognitive skills and social behavioral growth. This knowing makes us deal early with these children using therapeutic interventions as a necessary measure. This study, based on the mentioned facts, aimed to assess TF-CBT effectiveness in facilitating posttraumatic growth and emotional regulation improvement in physically abused children.

2. Objectives

The aim of this study was to assess the effectiveness of trauma-focused cognitive behavioral therapy in facilitating posttraumatic growth and emotional management in physically abused children.

3. Methods

3.1. Study Design

This research, with registration code of IRCT 2016011923705N3 in Iranian children trials registration center, is a quasi-experimental (pretest, posttest with control group) study.

In the pretest stage conducted in a two-month period from August to September 2016, first the child abuse questionnaire was completed. After the analysis and scoring, children with scores higher than cutoff-point were meticulously assessed and after the interview with the child and parents, children with a history of proved abuse were randomly divided into control and experimental groups (groups were matched with age, gender, and the sort of experienced abuse). Questionnaires of posttraumatic growth and emotional management were also completed in this stage for both groups.

In the intervention stage from October to mid November 2016, 10 separate hourly sessions of TF-CBT twice a week were held. In the current research, the package was devised based on the model proposed by Cohen (24). During the first session titled treatment objectives and expectation determination, primary acquaintance with participants was achieved and therapy basics as well as session

rules were explained in brief. During 2nd, 3rd, and 4th sessions, awareness toward trauma and out coming personal reactions, focus on positive self-aspects, management of emotional responses to trauma, and detection of facial expressions of emotions were dealt with. In 5th and 6th sessions, educated topics were relating thoughts to emotions and behavior and assessment of daily thought stopping technique through writing and painting. 7th and 8th sessions were assigned to cognitive defiance, knowing about thought distortions and detection of negative thoughts and challenging them. Finally, during 9th and 10th sessions, coping with trauma related problems and enhancing environmental support were the educated issues.

In the posttest stage that was performed since the mid-December to the end of January, the post-traumatic and emotion management inventories were implemented, completed, and scored.

3.2. Population

Inclusion criteria were having a history of physical abuse, aged 9 - 12 years, and not being on psychology or other treatments simultaneously while exclusion criteria were having noticeable psychotic symptoms and suffering chronic disability. Statistical population included all primary school boy students in 2016 - 2017 school year in Kermanshah. To identify abused children, at first items of physical abuse were checked for 263 students of a boy primary school in Kermanshah and 40 out of 45 students with the highest scorers were chosen as study group.

3.3. Measurement

3.3.1. Posttraumatic Growth Inventory

This inventory was presented by Kilmer and colleagues (2010). This self-report questionnaire is composed of 21 items with a Likert scale. For the whole scale, Cronbach's alpha was calculated as 0.81. The validity of PTG inventory was also confirmed through its correlation with posttraumatic stress symptoms questionnaire resulting in a 0.88 correlation coefficient (10). Because the questionnaires had not been used in Iran until the current study, first the questionnaire was translated into Persian separately both by the researchers and by a translator of doctorate degree in English literature. In the next step, the Persian version was translated back into English by an English literature expert of doctorate degree. After matching the original and the produced versions, corrections were made to finalize the questionnaire for the study purpose. In this study, the reliability coefficient of posttraumatic growth questionnaire was 0.73 through Cronbach's alpha. To determine the validity of posttraumatic growth questionnaire, because in the English version and for the purpose of validity testing, posttraumatic stress disorder questionnaire

had been used, we utilized the method of divergent correlation, and the correlation of this questionnaire with YOLF's children's international posttraumatic stress disorder questionnaire, which measures a factor other than posttraumatic growth, was calculated that resulted in a correlation of 0.73 with a meaningfulness at level of 0.1.

3.3.2. Children's Emotional Management Scale (CEMS)

This scale was created by Zeman. It includes 38 questions with a Likert scale (seldom = 1, sometimes = 2, often = 3) and studies the approach taken by children to manage their emotions regarding anger (11 items), sadness (12 items), and worry (15 items). The assessment of psychometric specificities of CEMS revealed Cronbach's alpha coefficients between 0.62 and 0.77. Test-retest reliability has been reported 0.61 to 0.8 (25-27). In Iran, validity and reliability of the questionnaire was studied by Afshari and colleagues in 2015 for children aged 9 - 13 through which the validity and reliability were determined as favorable (28).

3.3.3. Child Abuse Questionnaire

To measure child abuse quantitatively, we used child abuse questionnaire in Iran. Hossein Khani and colleagues created this questionnaire specified to Iranian society. It includes three subscales of emotional and physical neglect scale and a total score total maltreatment scale. The reliability has been reported to be 0.92 and 0.95 through retest and Cronbach's alpha, respectively (29).

4. Results

Descriptive indices including mean and standard deviation of pretest and posttest variables for both experimental and control groups are presented in Table 1.

Results of covariance analysis (Table 2) show a significant difference in at least one dependent variable between experimental and control groups. This difference became revealed after modification of pretest scores and comparison of the posttest scores of experiment and control groups. Univariate covariance analysis was performed to get more details about dependent variables (Table 3).

As shown in Table 3, there is a meaningful difference in posttraumatic growth variable after modifying pretest scores and comparing the posttest scores of experimental and control groups ($F = 33.579$, $P > 0.001$), which leads to the conclusion that therapy intervention has been effective considering comparatively increased scores of posttraumatic growth variable.

Table 3 also reveals that for emotional management variable and the subscales of anger ($F = 63.976$, $P < 0.001$), sadness ($F = 149.760$, $P < 0.001$), and worry ($F = 131.279$, P

Table 1. Mean and Standard Deviation of Variables for Experimental and Control Groups in Pretests and Posttests

Variables	Pretest		Posttest	
	Mean	Standard deviation	Mean	Standard deviation
Posttraumatic growth				
Experimental	10.75	1.97	15.55	1.90
Control	10.05	1.90	10.35	1.95
Emotional management				
Anger				
Experimental	20.70	3.14	12.80	2.44
Control	21.35	3.64	21.40	3.92
Sadness				
Experimental	23.55	2.72	11.20	2.54
Control	22.95	3.44	22.55	2.60
Worry				
Experimental	22.30	2.63	10.95	2.54
Control	23.15	2.36	22	2.71

Table 2. Summary of Multivariate Test Results

Test	Value	F	DF Hypothesis	DF Error	Effect size	Significance
Pillai's trace	0.894	65.43	4	31	0.894	0.001
Wilks lambda	0.106	65.43	4	31	0.894	0.001
Hotelling's trace	8.433	65.43	4	31	0.894	0.001
Roy's largest root	8.433	65.43	4	31	0.894	0.001

Table 3. Results of Univariate Covariance Analysis for Study Variables in Experimental and Control Groups

Variables	Sum of Squares	Df	Mean of Squares	F	Effect Size	Level of Significance
Posttraumatic growth	213.489	1	213.489	33.579	0.497	001.0
Emotional management						
Anger	559.543	1	559.543	63.976	0.653	001.0
Sadness	1159.116	1	1159.116	149.760	0.815	001.0
Worry	953.601	1	953.601	131.279	0.794	001.0

< 0.001), there are meaningful differences in the posttest scores after modification of pretest scores, conveying that therapy intervention has been effective in improving emotional regulation capability in experimental group.

5. Discussion

As shown in Table 3, TF-CBT has been effective when utilized for abused children. This was in agreement with the findings of Zoellner and Maercker (2011) studying CBT effectiveness in facilitating posttraumatic growth among motor vehicle accident survivors (25). It is also congruent

with the study of Stockton and Hunt (2011) who could facilitate posttraumatic growth through CBT (30). There is also a compatibility with the results of Nightingale study (2010) regarding the positive effects of cognitive methods on facilitating posttraumatic growth and reducing post-traumatic stress symptoms (31).

To explain this finding, it could be said that during TF-CBT sessions, the child's negative thoughts are dealt with and corrected and various techniques like thought stopping, thought-emotion relation finding, and daily thought recording are taught to decrease child's rumination (19). Thought stopping, as a method aiming to overcome cognitive distortion and worry, supports the child with thought

processing because the method makes the child insightful. That thought is observable and controllable. The method puts an end to abused child's attention to crisis-inducing thoughts and at the same time drives attention towards other thoughts of lesser stress-causing nature (24).

Another finding of this study was that TF-CBT is effective in improving the emotional management ability of abused children. The results are in agreement with those of Cohen, Mannarino, and Knudsen (2004) denoting the effectiveness of TF-CBT in reducing depression as well as behavioral and emotional problems of treated children (32). TF-CBT includes cognitive and behavioral techniques to replace non-functional styles and strategies with more adaptive ones. Cognitive and behavioral patterns provide opportunity to achieve positive emotional management. Because of the more prominent emphasis on the emotional aspect of problems and using experimental and emotional techniques, in this method, children become more aware of their emotions and find the ability to accept and regulate them, as a result.

Although this study found TF-CBT effective in facilitating posttraumatic growth and emotional management among physically abused children, more research is recommended both to retest the degree of such effectiveness and to explore the mechanism through which this therapy acts. Small sample size, quasi-experimental design, recruiting just physically abused children, and lack of follow-up were the limitations of this study. Studying other abused children including sexually abuse and neglected children, choosing larger sample sizes, and scheduling for follow-up are recommended for future similar studies. It could be generally concluded that TF-CBT can be helpful in facilitating posttraumatic growth and emotional management of physically abused children.

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Footnote

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