Chapter 3: Review of Literatures

The aim of this control-trial study was to evaluate and compare the effectiveness of cognitive behavioral therapy (CBT) and eye movement desensitization and reprocessing (EMDR) in the treatment of child victims of domestic violence (DV) in Iran. Besides, study aimed to find out the effectiveness of each treatment method and whether any difference occurred between them in the treatment of the psychological sequelae of domestic violence. Another objective was to find out gender differences regarding the impact of domestic violence and effectiveness of both methods after treatment implementation. So boys and girls differences were compared before and after each treatment.

Besides, evaluating clinical significant changes (by applying the effect size of each treatment) participants normality rate and reliable significant changes (RCI) were other goals of this study.

Domestic Violence Sequelae

Domestic violence results in long and short term sequelae. For example, death and permanent physical damages are short term, but psychological impacts like growth failure, intellectual retardation and emotional development problems are long term difficulties (Browne, 1988). It has been documented widely that children who have experienced maltreatment are at a risk for maladaptation and psychopathology (Briere and Scott, 2006).

Kermanshahi, Hamidi and Asadollahi (1997) assessed child maltreatment by parents in 555 girls, 7-11 years old students in Tabriz city of Iran. They found that,
physical abuse was reported by 67.7% and mental maltreatment was reported by 47.6% of girls.

Greenwald and Rubin (1999) and Kaminer, Seedat and Stein (2005) have explained the post traumatic symptoms (PTS). They stated that trauma could lead to a wide range of PTS in children, potentially including post-traumatic stress disorder (PTSD), developmental delays, increased anxiety and depressive symptoms, internalizing, externalizing and psychosomatic symptoms, and disruptive behavior, sexually inappropriate, and regressive behaviors.

Herrera and McCloskey (2001) did a research that was aimed to illuminate gender differences in adolescent delinquency against a backdrop of childhood exposure to both marital violence and physical child abuse. It was a prospective study of 299 children who were interviewed with their mothers in 1991 about forms of abuse in the family and approximately 5 years later a search of juvenile court records was performed for these same children. Preliminary analyses indicated no gender differences in overall referral rates to juvenile court, although boys were more likely than girls to be referred for property, felony, and violent offenses. Exposure to marital violence in childhood predicted referral to juvenile court. Girls with a history of physical child abuse were arrested for violent offenses more than boys with similar histories, but the context of violent offenses differed dramatically by gender: Nearly all referrals for a violent offense for girls were for domestic violence. Although boys and girls share similar family risk factors for delinquency, girls are more likely than boys to be arrested for violent offenses in the aftermath of child physical abuse. These findings suggested that it takes more
severe abuse to prompt violence in girls than is necessary to explain boys’ violent offending.

Hobbs, Hanks and Wynne (2001) divided the psychological sequelae for child abuse in two groups: A-often perform below average on IQ tests, are aggressive and lack impulse control and are frustrated, anxious and non-complainant. B-have low self steam and confidence, problems in social relationship with peers and adults, anxious attachment, difficulties in accepting and giving affection and poor relationship within the family and at school show a high degree of avoidance, non-compliance and fail to make transition into adulthood.

Begic and Jokic-Begic (2002) in their review on violent behavior and PTSD suggested that violent behavior creates PTSD and PTSD contains violence. There is an established connection between violent exposure and the occurrence of post traumatic stress disorder. They also stated that exposure to domestic violence, especially childhood sexual abuse can lead to depression, aggression, interpersonal problems and PTSD.

McFarlane, Groff, O’Brien and Watson (2003) conducted a study in which 258 abused mothers completed the Child Behavior Checklist (CBCL) on one of their randomly selected children between the ages of 18 months and 18 years. An ethnically similar sample of 72 nonabused mothers also completed the CBCL. Results suggested no significant differences in demographic characteristics between children from the abused women and nonabused women were observed. Children, ages 6 to 18 years, of abused mothers exhibited significantly more internalizing, externalizing, and total
behavior problems than children for the same age and sex of nonabused mothers. In addition, the mean internalizing behavior score for boys 6 to 11 years of age as well as girls and boys 12 to 18 years of age of abused mothers were not significantly different from the clinical referral norms. Internalizing behaviors of anxiety, withdrawal, and depression were consistent with suicidal risk. Data demonstrated that children of abused mothers have significantly more behavioral problems than the nonclinically referred norm children but also, for most children, displayed significantly fewer problems than the clinically referred children. These children of abused mothers were clearly suspended above normal and below deviant, with children aged 6 to 18 being at the greatest risk.

Thompson, Kingree and Desai (2004) in their study investigated the effects of physical abuse in childhood on health problems in adulthood and assessed gender differences in these associations. Data from 8000 men and 8000 women who were interviewed in the National Violence Against Women Survey. Results suggested that, men were more likely than women to have experienced physical abuse during childhood. Whereas abuse had negative sequelae for both boys and girls, it was generally more detrimental for girls. Physical abuse in childhood was more prevalent among men than women. They also found that physical abuse in childhood was related to health problems in adulthood for the sample as a whole and adversely affected the mental health and general perceptions of health of women more than men. Female abuse victims appear to be at greater risk for some health problems than their male counterparts. As with prior studies, they found this to be the case with mental health problems.
Brown (2005) in his review revealed that children in the United States are exposed to a variety of violent events. Psychosocial sequelae to these events vary in their nature and severity. PTSD is a common, debilitating response to traumatic events that may alter the normal developmental course for children. Risk and protective factors in the development of PTSD include child, caregiver, and family characteristics. To date, empirical evidence reveals the efficacy of psychosocial treatments, especially cognitive-behavior therapy. Caregiver involvement in treatment is indicated. Aside from participation in psychosocial interventions, caregivers should be encouraged to convey belief of and empathy for their children, provide a forum for children to discuss the trauma if they choose, and promote coping skills that have been helpful following other stressful events.

Stephenson, Sheikhattari, Assasi, Zamani and Eftekhar (2006) examined the determinants of three types of child maltreatment in Kurdestan province of Iran. Data were collected from 1370 school students, aged 11-18 years. Results showed that boys were maltreated more than girls in any kind of child maltreatment. Residency in a rural area, poor parental relationships and the use of addictive substances by household members were associated with increased reporting of child maltreatment.

Sternberg, Baradaran, Abbott, Lamb and Guterman (2006) in a mega-analytic study which was designed to exploit the power of a large data set combining raw data from multiple studies (n=1870) to examine the effects of type of family violence, age, and gender on children's behavior problems assessed using the Child Behavior Checklist (CBCL). Findings confirmed that children who experienced multiple forms of family violence were at greater risk than children who experienced only one form of
abuse, and witnesses of inter-parental violence were at similar risk as victims of violence. Age moderated the effects of family violence on externalizing behavior problems, but not on internalizing behavior problems. No main or interaction effects involving children’s gender were evident. These results underscore the need to take children’s age, type of violence, and type of outcome into account when examining the effects of family violence on children’s behavior problems.

Sternberg, Lamb, Guterman and Abbott (2006) did a study to examine the effects of different forms of family violence at two developmental stages by assessing a sample of 110 Israeli children. Information about the children’s adjustment was obtained from parents, teachers, and the children themselves when the children averaged 10.6 and 15.9 years of age using the Child Behavior Checklist (CBCL), Teacher Report Form (TRF), Youth Self-Report (YSR), and Children’s Depression Inventory (CDI). The results paint a mixed picture of the effects of family violence on children and adolescents. The relationship between concurrent behavior problems and abuse group varied by informant and study phase, although they were strongest when children were the informants. Predictions regarding the relationship between early abuse and later adjustment were only partially confirmed. Different informants did not agree about which groups of children were most adversely affected, there was little stability over time in the pattern of reported effects, and children were more likely than other informants to report levels of maladjustment that varied depending on recent or concurrent exposure to family violence. Many families changed their abuse status over time, and children who were new victims at follow-up had the most internalizing problems. Girls were found to be at more risk for internalizing and externalizing behavior problems than boys. Multiple
informants are necessary to evaluate and assess the effects of family violence on children’s behavior. Younger children may be more susceptible to the effects of family violence than older children, but problems manifest by some children may not carry over to adolescence. Changes in family and parenting practices, as well as in children’s capacity to appraise and cope with family violence may help mitigate the adverse effects of family violence.

Masten et al. (2008) examined processing of facial emotions in a sample of maltreated children showing high rates of post-traumatic stress disorder (PTSD). Maltreated children displayed faster reaction times than controls when labeling emotional facial expressions, and this result was most pronounced for fearful faces. Relative to children who were not maltreated, maltreated children both with and without PTSD, showed enhanced response times when identifying fearful faces. There was no group difference in labeling of emotions when identifying different facial emotions. Maltreated children show heightened ability to identify fearful faces, evidenced by faster reaction times relative to controls. This association between maltreatment and atypical processing of emotion is independent of PTSD diagnosis.

Alink, Cicchetti, Kim and Rogosch (2009) investigated underlying processes of the effect of maltreatment on psychopathology (i.e., internalizing and externalizing problems) in a group of 111 maltreated and 110 no maltreated, 7–10 year-old children (60% boys). Emotion regulation, but not the pattern of relatedness, mediated the relation between maltreatment and psychopathology.
Bordin et al. (2009) did a cross-sectional study in Embu, São Paulo, Brazil, on children aged 6–17 years (n = 480) to examine the relationship between specific types of child mental health problems and severe physical punishment, in combination with other important known risk factors. Multivariate modeling showed that severe punishment was an independent correlate of comorbid internalizing and externalizing problems but was not associated with internalizing problems only. It increased the risk of externalizing problems alone only for children and adolescents not exposed to maternal anxiety or depression. Severe punishment may be related to child mental health problems, with the mechanism depending on the type of problem. Its influence persists in the presence of family stressors such as the father’s absence and maternal anxiety or depression.

Brown et al. (2009) examined associations between exposure to physical violence (PV) or sexual violence (SV) and adverse health behaviors among a sample of children in five African countries (Namibia, Swaziland, Uganda, Zambia and Zimbabwe). Moderate to strong associations were observed between exposure to PV or SV and measures of mental health, suicidal ideation, current cigarette use, current alcohol use, lifetime drug use, multiple sex partners and a history of sexually transmitted infection (P ≤ 0.05) for all associations.

Greenfield and Marks (2009) examined linkages between physical and psychological violence in childhood from parents and three dimensions of adult health (self-rated health, functional limitations, chronic conditions) by using data from the 1995 and 2005 waves of the National Survey of Midlife in the U.S. Results suggested that having a history of frequent physical and psychological violence in childhood is a risk
factor for poorer adult health status and declining trajectories of health throughout adulthood.

McDonald, Jouriles, Tart and Minze (2009) in their research on 258 children and their mothers who were recruited from domestic violence shelters, examined whether additional forms of family violence (partner-child aggression, mother-child aggression, women’s intimate partner violence [IPV]) contribute to children’s adjustment problems in families characterized by men’s severe violence towards women. The relation of mother-child aggression to externalizing problems was stronger for boys than for girls; gender differences were not observed for internalizing problems or threat appraisals. Men’s severe IPV seldom occurs in the absence of other forms of family violence, and these other forms appear to contribute to children’s adjustment problems.

Panter-Brick, Eggerman, Gonzalez and Safdar (2009) did a survey of young people (11–16 years old) in Afghanistan to assess mental health, traumatic experiences, and social functioning. In 2006, they interviewed 1011 children, 1011 caregivers, and 358 teachers, who were randomly sampled in 25 government-operated schools within three purposively chosen areas (Kabul, Bamyan, and Mazar-e-Sharif municipalities). They assessed probable psychiatric disorder and social functioning in students with the Strength and Difficulties Questionnaire multi-informant (child, parent, teacher) ratings. They also used the Depression Self-Rating Scale and an Impact of Events Scale. They assessed caregiver mental health with both international and culturally-specific screening instruments (Self-Reported Questionnaire and Afghan Symptom Checklist). They implemented a checklist of traumatic events to examine the exposure to, and nature of, traumatic experiences. They analyzed risk factors for mental health and
reports of traumatic experiences. Result showed that, trauma exposure and caregiver mental health were predictive across all child outcomes. Probable psychiatric ratings were associated with female gender, five or more traumatic events and caregiver mental health. The same variables predicted symptoms of depression. Two thirds of children reported traumatic experiences. Symptoms of post-traumatic stress were associated with five or more traumatic events, caregiver mental health, and child age. Children's most distressing traumatic experiences included accidents, medical treatment, domestic and community violence, and war-related events. Young Afghans experience violence that is persistent and not confined to acts of war.

Moylan et al. (2010) in a study examined the effects of child abuse and domestic violence exposure in childhood on adolescent internalizing and externalizing behaviors. Data for this analysis were from the Lehigh Longitudinal Study, a prospective study of 457 youth addressing outcomes of family violence and resilience in individuals and families. Results showed that child physical abuse, domestic violence, and both in combination (i.e., dual exposure) increase a child's risk for internalizing and externalizing outcomes in adolescence. When accounting for risk factors associated with additional stressors in the family and surrounding environment, only those children with dual exposure had an elevated risk of the tested outcomes compared to non-exposed youth. However, while there were some observable differences in the prediction of outcomes for children with dual exposure compared to those with single exposure (i.e., abuse only or exposure to domestic violence only), these difference were not statistically significant. Analyses showed that the effects of exposure for boys and girls were statistically comparable.
Wood and Sommers (2011) in their meta-analysis stated that intimate partner violence (IPV) is a serious social problem that affects all members of a household. Approximately 22% of violent crimes perpetrated against women and 3% against men are related to IPV, and often children witness these crimes. A systemic review and analysis of the literature was performed with 24 articles from 2000 to 2010 that were identified through electronic search strategies. Differences were found in the behaviors of children who witness and do not witness IPV that have short- and long-term sequelae and affect relationships with same-sex peers, dating partners, and future partners with a clear pattern of dose-response.

Fry, McCoy and Swales (2012) in their study explored the sequelae of child maltreatment in East Asia and the Pacific region based on the results of a systematic review of 16 English and non-English databases for journal articles and "gray" literature published between January 2001 and November 2010. This review showed that children in the region experiencing maltreatment are at increased risk of experiencing mental health consequence, physical health sequelae, high-risk sexual behaviors, and increased exposure to future violence including intimate partner violence (IPV) as an adult. Children who suffered from child sexual abuse had a median twofold increased risk of experiencing mental health disorders than those who had never experienced child maltreatment. Similar findings were found for those who experience physical abuse. Children who had been maltreated in the region were also at an increased risk of suicide ideation and attempts than those that had experienced child sexual or physical abuse being at a median fourfold increased risk. Children who had experienced physical abuse or those who had witnessed parental domestic abuse as a child were at median
twofold increased risk of experiencing IPV as an adult, while children who had been sexually abused had a median threefold increase in risk of IPV later in life.

Keyes et al. (2012) in their research stated that childhood maltreatment increases vulnerability to numerous specific psychiatric disorders through diverse, specific mechanisms or that childhood maltreatment engenders a generalised liability to dimensions of psychopathology. Although these competing explanations have different implications for intervention, they have never been evaluated empirically. In this order, data were drawn from a nationally representative survey of 34,653 US adults. Lifetime DSM-IV psychiatric disorders were assessed using the AUDADIS-IV. Physical, sexual and emotional abuse and neglect were assessed using validated measures. Analyses controlled for other childhood adversities and socio demographics. The effects were fully mediated through the latent liability dimensions, with an impact on underlying liability levels to internalising and externalising psychopathology rather than specific psychiatric disorders. Important gender differences emerged with physical abuse associated only with externalising liability in men, and only with internalising liability in women. Neglect was not significantly associated with latent liability levels. The association between childhood maltreatment and common psychiatric disorders operates through latent liabilities to experience internalising and externalising psychopathology, indicating that the prevention of maltreatment may have a wide range of benefits in reducing the prevalence of many common mental disorders. Different forms of abuse have gender-specific sequelae for the expression of internalising and externalising psychopathology, suggesting gender-specific etiological pathways between maltreatment and psychopathology.
Min, Minnes, Kim and Singer (2012) in their study examined whether a self-reported history of childhood maltreatment (physical, emotional, and sexual abuse and physical and emotional neglect) is related to poor adult physical health through health risk behaviors (obesity, substance dependence, and smoking), adverse life events, and psychological distress. Two hundred and seventy nine (279) women aged 31-54, primarily poor, urban, and African American with a history of substance use during pregnancy, were assessed for perceived physical health status using the Health Status Questionnaire (SF-36) and any reported chronic medical condition. More than two-thirds (n=195, 70%) of the sample reported at least 1 form of childhood maltreatment, with 42% (n=110) having a lifetime history of substance dependence and 59% (n=162) having a chronic medical condition. Controlling for age, education, and race, childhood maltreatment was related to increased likelihood of lifetime history of substance dependence, more adverse life events, and greater psychological distress. Psychological distress and adverse life events partially mediated the relationship between childhood maltreatment and perceived physical health, accounting for 42% of the association between childhood maltreatment and perceived physical health. Adverse life events accounted for 25% of the association between childhood maltreatment and chronic medical condition. Findings provided additional evidence that the ill health effects associated with childhood maltreatment persist into adulthood. Adverse life events and psychological distress were key mechanisms shaping later physical health Sequelae associated with childhood maltreatment among relatively young urban women with a history of substance use.
Usta, Farver and Danachi (2012) in their study examined the prevalence, risk factors and sequelae associated with child maltreatment in the home. The samples was 1028 (556 boys; 472 girls) Lebanese children aged 8-17 years (M = 11.89; SD = 1.67). Children were administered an interview questionnaire that included the International Child Abuse Screening Tool, the Trauma Symptom Checklist and the Family Functioning in Adolescence Questionnaire. Results showed that approximately 30% of the children reported at least one incident of witnessing violence, 65% reported at least one incident of psychological abuse and 54% reported at least one incident of physical abuse over a 1-year period. The results showed an overlap between children's reports of witnessing violence in their homes and physical and psychological abuse that were associated with adolescents' trauma symptoms. Family-related variables significantly predicted three forms of child maltreatment.

Vinayak and Jaberghaderi (2012) did a survey on 507 primary and secondary urban students (aged 7-15 years) from 17 different schools of Kermanshah city of Iran who were selected by using cluster random sampling. Children and their parents were interviewed using a Life Incidence Traumatic Events scale (LITEs), Child Report Of Post traumatic Symptoms (CROPS) and Parents Report Of Post traumatic Symptoms (PROPS). The findings suggest that physical abuse was the most common event. Most of the children were exposed to marital conflict. While the boys significantly more than girls, had reported experiencing hardship yet girls reported family violence twice as boys. Children reported more post traumatic symptoms than their parents. Also, the girls and secondary school children significantly reported more post traumatic symptoms.
This study explained violence against children as a challenge in Kermanshah city of Iran.

Holmes (2013) in a study stated that, IPV rarely occurs without other forms of violence and aggression in the home. IPV is associated with mental health and parenting problems in mothers, and children experience a wide variety of short-term social adjustment and emotional difficulties, including behavioral problems. Study investigated the influence of IPV exposure on children's aggressive behavior, and tested if this relation was mediated by poor maternal mental health, and, in turn, by maternal warmth and child maltreatment, and moderated by children's age and gender. Study findings highlighted the indirect sequelae of IPV in the home on children's aggressive behavior. Secondary data analysis using structural equation modeling (SEM) was conducted with the National Survey of Child and Adolescent Well-Being (NSCAW). Children were between the ages of 3-8 (n=1,161). Mothers reported past year frequency of physical assault by their partner, frequency of child psychological and physical abuse, maternal mental health, and children's aggressive behavior problems. Maternal warmth was measured by observation. IPV was significantly related to poor maternal mental health. Poor maternal mental health was associated with more child aggressive behavior, lower maternal warmth, and more frequent child physical and psychological abuse. Psychological abuse and low maternal warmth were directly related to more aggressive behavior while IPV exposure and physical abuse were not directly associated with aggressive behavior. Neither age nor gender moderated the modeled paths. The results identified maternal mental health as an important variable in mediating the relationship between IPV exposure and aggressive behavior.
Gap in the literature:

The findings indicated that child physical abuse, inter parental violence and both have numerous internalizing and externalizing and long term sequelae in child victims. There are still gaps in our understanding of the sequelae of child maltreatment, but we do know that the sequelae are profound and far-reaching. Considering diversity of child rearing culture in case of gender differences might result in different sequelae in domestic violence situation.

The present study tried to find gender differences on the psychological sequelae in child victims of domestic violence in Kermanshah city of Iran.

Cognitive Behavioral Therapy (CBT)

Here are some of the clinician studies which have used CBT for the treatment of post traumatic symptoms with children:

Wolfe, Edwards, Manion and Koverola (1988) found that individualized parent-child sessions combinations condition showed greater improvement on child behavior problem, fewer parental adjustment problems and lowest risk of maltreatment but not in other outcomes like child-rearing environmental and children's adoptive abilities.

Oates, Gray, Schweitzer, Kempe and Harmon (1995) in the KEEPSAFE (Kempe early education project serving abused families) program consisting of therapeutic preschool (play, speech, physical therapy, family therapy, parents education, supportive group counseling and crisis line over 9 month period) and home visitation, found improved intellectual functioning and receptive language at discharge one year later. Several of these children were able to enter regular classrooms. Yet, because of the
absence of controlled design, it is not possible to conclude that the program is responsible for these improvements.

Kolko (1996a, 1996b) in a case study done on 6-12 years old children in Individual education/skill development found that, there were significantly fewer percentages of physical force reported by children in the individual child/parent cognitive-behavioral treatment (CBT) group as compared to the children in the family therapy (FT) group. Also, parents in the CBT group reported significantly fewer percentages of physical force compared to the parents in the FT group. The children in the CBT group reported significantly lower ratings for the parental anger compared to the children in the FT group. Also, the parents in the CBT group reported significantly lower ratings for the parental anger compared to the parents in the FT group. The children in the CBT group reported significantly lower ratings for family problems compared to the children in the FT group. There were no significant effects on parent reports of family problem ratings. All these conditions did report several improvement across time (in parental anger, parental practice and children fears). During treatment, the overall level of parental anger and physical discipline / force based on children reports and their offending parents decreased rapidly in CBT than FT families, though each group showed a reduction on these items from the early to late treatment sessions. Between 20% and 23% of all children and their parents independently reported high level of physical discipline/force during early and late phases of treatment. Although few incidents seemed to result in injuries and an even higher percentage of cases reported heightened parental anger and family problems.
Swenson and Brown (1999) in their case study on six physically abused children applied a multi-module cognitive behavioral group children conducted over a 16-weeks period. Outcomes assessment based on child reports revealed improvement in anger reactions and posttraumatic symptoms. For some, not all, group participants, parents reports indicated some decrease in behavioral and emotional problems in post treatment.

Nemeroff et al. (2003) in their clinical trial on 681 patients with chronic forms of major depression who were treated with an antidepressant (nefazodone), Cognitive Behavioral Analysis System of Psychotherapy (CBASP), or the combination found that: overall, the effects of the antidepressant alone and psychotherapy alone were equal and significantly less effective than combination treatment. Among those with a history of early childhood trauma (loss of parents at an early age, physical or sexual abuse, or neglect), psychotherapy alone was superior to antidepressant mono therapy. Moreover, the combination of psychotherapy and pharmacotherapy was only marginally superior to psychotherapy alone among the childhood abuse cohort.

Stein et al. (2003) did their research on sixth-grade students at 2 large middle schools in Los Angeles who reported exposure to violence and had clinical levels of symptoms of PTSD. Students were randomly assigned to a 10-session standardized cognitive behavioral therapy (the Cognitive-Behavioral Intervention for Trauma in Schools) early intervention group (n=61) or to await-list delayed intervention comparison group (n=65) conducted by trained school mental health clinicians. Compared with the wait-list delayed intervention group (no intervention), after 3 months of intervention
students who were randomly assigned to the early intervention group had significantly lower scores on symptoms of PTSD, depression and psychosocial dysfunction (12.5 vs. 16.5, adjusted mean difference. Adjusted mean differences between the 2 groups at 3 months did not show significant differences for teacher-reported classroom problems in acting out, shyness/anxiousness, and learning. At 6 months, after both groups had received the intervention, the differences between the 2 groups were not significantly different for symptoms of PTSD and depression; showed similar ratings for psychosocial function; and teachers did not report significant differences in classroom behaviors. They included that, a standardized 10-session cognitive-behavioral group intervention can significantly decrease symptoms of PTSD and depression in students who are exposed to violence and can be effectively delivered on school campuses by trained school based mental health clinicians.

Babcock, Green and Robie (2004) in the meta-analytic review examined the findings of 22 studies evaluating treatment efficacy for domestically violent males. The outcome literature of controlled quasi-experimental and experimental studies was reviewed to test the relative impact of Duluth model, cognitive-behavioral therapy (CBT), and other types of treatment on subsequent recidivism of violence. Study design and type of treatment were tested as moderators. Treatment design tended to have a small influence on effect size. There were no differences in effect sizes in comparing Duluth model vs. CBT-type interventions. Overall, effects due to treatment were in the small range, meaning that the current interventions have a minimal impact on reducing recidivism beyond the effect of being arrested.
Ehntholt, Smith and Yule (2005) in their study evaluated the effectiveness of a school-based group intervention designed for children who have experienced trauma. Twenty-six children (aged 11–15 years) who were refugees or asylum-seekers from war-affected countries participated. The manual-based intervention consisted of cognitive-behavioral therapy (CBT) techniques and was implemented within secondary schools. The treatment group \( (n = 15) \) received six sessions of group CBT over a 6-week period, while the control group \( (n = 11) \) were placed on a waiting list for 6 weeks and then invited to enter treatment. Children in the CBT group showed statistically significant, but clinically modest improvements following the intervention, with decreases in overall severity of post-traumatic stress symptoms. Significant improvements were also found in overall behavioral difficulties and emotional symptoms. Children in the waiting list control group did not show any improvements over the same period. However, follow-up data, which were only available for a small subset of eight children, suggest that gains in the CBT group were not maintained at 2-month follow-up.

James, Soler and Weatherall (2005) meta-analytically assessed the efficacy of cognitive behavioral therapy (CBT) on traumatized children and adolescents with anxiety disorder. Cognitive behavioral therapy appears an effective treatment for childhood and adolescent anxiety disorders in comparison to waiting list or attention control. CBT can be recommended for the treatment of childhood traumas and anxiety disorders, although with only just over half improving.

Existent literature on the effectiveness of CBT on children, specially randomized controlled trials which assessing the effectiveness of interventions with traumatized
children suggested that children who have significant PTSD symptoms benefit from CBT intervention for both the PTSD and related difficulties such as depression, social competence and behavioral problems (Vickers, 2005).

Barlow, Johnston, Kendrick (2006) meta analytically found that physical abuse and neglect of children are significant problems and changing parenting practices may be an important means of addressing them. This review examines the extent to which parenting programmes (relatively brief and structured interventions that are aimed at changing parenting practices) are effective in treating physically abusive or neglectful parenting. A total of seven studies of mixed quality were included in the review. The findings show that there is insufficient evidence to support the use of parenting programmes to reduce physical abuse or neglect (i.e. using objective assessments of abuse such as reports of child abuse; children on the children protection register etc). There is, however, limited evidence to show that some parenting programmes may be effective in improving some outcomes that are associated with physically abusive parenting. There is an urgent need for further rigorous evaluation of the effectiveness of parenting programmes that are specifically designed to treat physical abuse and neglect, either independently or as part of broader packages of care.

Deblinger, Mannarino, Cohen and Steer (2006) did a follow up study to ascertain whether the differential responses that previously have been found between trauma focused, cognitive behavioral therapy (TF-CBT), child centered therapy (CCT) for treating posttraumatic stress disorder (PTSD) and related problems in children who had been sexually abused would persist following treatment and to examine potential predictors of treatment outcomes. Sample was 183 (8-14 years) children. Children and
caregivers assigned to TF-CBT continued to have fewer symptoms of PTSD, feeling of shame, and abuse-specific parental distress at 6-12 month assessments as compared to participants assigned to CCT.

Willson and White (2006) examined 4 mothers and 1 father, ranged between 22 years and 38 years old and the children were aged between 3 and 8 years old. They aimed to explore whether and how an intervention with a cognitive component changed parental attributions about child behavior and parents’ reports of their own behavior. The results suggest change in parental attributions and behaviors. However, the changes were in both positive and negative directions. The results call for more understanding of the mechanisms involved in change in parental attributions. These results reflect our limited understanding about the role of attributions in the development and maintenance of young children’s behavior problems. Research suggests that believing that the causes of your child’s misbehavior are internal to the child, stable and controllable and something about your child as a person constitutes having a maladaptive attributional style. This is because this pattern is associated with children’s behavior problems and also with parents’ reports of their punitive responses in situations where they believe these things. This study provides evidence that interventions can change parental attributions, however, until more is known about the mechanisms involved, it is not clear what conclusions can be made about the effect of adding cognitions to behavioral interventions for children’s behavior problems.

In Hong Kong, Wong (2006) in 20 months, has found 136 cases of parent conflict witness in which 50% were referred by schools and 40% by the Harmony House Shelter. Over 270 interview sessions and therapeutic groups were conducted. Various
therapeutic means, such as play, music and art were used in the intervention process. An indigenous therapeutic intervention model for child witnesses to domestic violence was developed in local context. Experience has shown that the group intervention is effective in increasing children’s awareness of domestic violence, ability in expressing and protecting themselves. Feedback from children and their parents was overall very positive. To complement early identifications of children exposed to domestic violence, they reached out to young students through educational mobile classroom, “Harmony Express,” in partnership with schools. Follow-up counseling groups were provided to students at risk. Over 80% of participants indicated that they could express their feelings better and they are more confident in protecting and expressing themselves.

Cohen, Mannarino, Perel and Staron (2007) examined the potential benefits of adding a selective serotonin reuptake inhibitor, Sertraline, versus placebo, to trauma-focused cognitive-behavioral therapy (TF-CBT) for improving posttraumatic stress disorder and related psychological symptoms in 24,10-17 years old children who have experienced sexual abuse. Both groups experienced significant improvement in posttraumatic stress disorder and other clinical outcomes. A drawback of adding Sertraline was determining whether TF-CBT or Sertraline caused clinical improvement for children with comorbid depression. Current evidence therefore supports an initial trial of TF-CBT or other evidence-supported psychotherapy for most children with PTSD symptoms before adding medication.

Hetzel-Riggin, Brausch and Montgomery (2007) meta-analytically investigated the independent effects of different treatment elements on a number of secondary
problems related to childhood and adolescent sexual abuse. Cognitive-behavioral, abuse-specific, and supportive therapy in either group or individual formats was most effective for behavior problems. Cognitive-behavioral, family, and individual therapy seemed to be the most effective for psychological distress, and abuse-specific cognitive-behavioral, and group therapy appeared to be the most effective for low self-concept.

Sijbrandij et al. (2007) evaluated the efficacy of brief cognitive behavioral therapy for patients with acute posttraumatic stress disorder (PTSD) resulting from various types of psychological trauma. They randomly assigned 143 patients with acute PTSD (irrespective of the time criterion), within 3 months after experiencing a traumatic incident, to either brief cognitive behavioral therapy (N=79) or a waiting list comparison group (N=64). Cognitive behavioral therapy consisted of four weekly sessions containing education, relaxation exercises, imaginal exposure, in vivo exposure, and cognitive restructuring. Brief early cognitive behavioral therapy accelerated recovery from symptoms of acute PTSD but did not influence long-term results. Brief early cognitive behavioral therapy showed enhanced efficacy in patients with baseline co-morbid depression and patients who were included within 1 month after their traumatic experience.

Smith et al. (2007) in their study evaluated the efficacy of individual trauma-focused cognitive-behavioral therapy (CBT) for treating posttraumatic stress disorder (PTSD) in children and young people. Following a 4-week symptom-monitoring baseline period, 24 children and young people (8-18 years old) who met full DSM-IV PTSD
diagnostic criteria after experiencing single-incident traumatic events (motor vehicle accidents, interpersonal violence, or witnessing violence) were randomly allocated to a 10-week course of individual CBT or to placement on a waitlist (WL) for 10 weeks. Compared to the WL group, participants who received CBT showed significantly greater improvement in symptoms of PTSD, depression, and anxiety, with significantly better functioning. After CBT, 92% of participants no longer met criteria for PTSD; after WL, 42% of participants no longer met criteria. CBT gains were maintained at 6-month follow-up. Effects of CBT were partially mediated by changes in maladaptive cognitions, as predicted by cognitive models of PTSD. Individual trauma-focused CBT is an effective treatment for PTSD in children and young people.

Barlow, Johnston, Kendrick, Polnay and Stewart-Brown (2008) meta-analytically assess the efficacy of group-based or one-to-one parenting programmes in addressing child physical abuse or neglect. Studies evaluating the effectiveness of brief (i.e. between 6 and 30 weeks) individual or group-based parenting programmes that were provided on a targeted basis (i.e. to parents with a history of abuse or at high-risk of abuse) with a view to preventing the (re)occurrence of child maltreatment were eligible for inclusion irrespective of the theoretical basis underpinning the programme. Only three of the included studies assessed the impact of the programme on objective measures of child abuse. This may reflect the fact that such assessments require long-term follow-up, and the majority of included studies provided immediate post intervention assessment only. The effect sizes obtained are on the whole only small to medium. Furthermore, while most of the results favored the intervention group, many also failed to achieve statistical significance. While many of the included papers provide
further information about the broader risk status of the parents in terms of poverty, education and ethnicity, it is not clear to what extent the included parents were homogenous in terms of their use of physical abuse. This makes it difficult to know exactly which group of physically abusing parents are most likely to benefit from a parenting programme. One further study that compared stress training with child management training produced slightly better results for the stress group in terms of child positive affect. This is an interesting finding and may point to the fact that the use of child management techniques on their own i.e. without changing other aspects of the parents behavior such as mood or stress, are less effective in terms of the child’s wellbeing. This study also showed that the group that combined both stress and child management training fared less well in comparison with the stress management or child management groups independently. Overall, these comparative studies suggest that parenting programmes that incorporate additional components aimed specifically at addressing problems associated with abusive parenting (e.g. excessive parental anger, misattributions, poor parent-child interaction) may be more effective than parenting programmes that do not incorporate these.

Bryant, Resick and Galovski (2008) did a randomized controlled trial to determine the efficacy of exposure therapy or trauma-focused cognitive restructuring on civilians who experienced trauma and who met the diagnostic criteria for acute stress disorder (ASD) (N = 90) seen at an outpatient clinic. Exposure-based therapy leads to greater reduction in subsequent PTSD symptoms in patients with ASD when compared with cognitive restructuring. Exposure should be used in early intervention for people who are at high risk for developing PTSD.
Silverman et al. (2008) reviewed the current status (1993-2007) of psychosocial treatments for children and adolescents who have been exposed to traumatic events. Meta-analytic results for four outcomes (e.g., posttraumatic stress, depressive symptoms, anxiety symptoms, and externalizing behavior problems) across all treatments compared to waitlist control and active control conditions combined reveal that, on average, treatments had positive, though modest, effects for all four outcomes.

Simons and Herpertz-Dahlmann (2008) reviewed the Cognitive Behavioral Treatments for traumatized children and adolescents. They have found that of the different cognitive-behavioral validated programs, trauma-focused cognitive-behavioral therapy yields the best evidence, particularly in the treatment of abused children and adolescents.

Carrion and Hull (2009) described the application of The Stanford Cue-Centered Therapy (CCT) is a short-term, multimodal therapy in school setting for 11-15 years youths who have witnessed multiple family and neighborhoods violence. Both cases (Andrew and Sharonda) showed a decrease in anxiety symptoms and overall caretaker-reported symptoms. In Andrew’s case, this work resulted in symptomatic relief and improvement of function. Sharonda’s response may indicate the need to repeat the protocol sessions in those children with more severe trauma and to allow them to experience interventions of longer duration. The PTSD symptoms scale shows an increase, but only modest (from 21 to 24). Although internalizing and anxiety symptoms improved in both cases, both children continue to be highly symptomatic, including symptoms of PTSD.
Morsette et al. (2009) in their study examined a pilot school-based treatment program for American Indian adolescents residing on a reservation who presented with symptoms of Posttraumatic Stress Disorder (PTSD) and symptoms of depression. This was the first study directed at treating American Indian children with trauma; seven case studies demonstrated our findings that a manualized cognitive behavior therapy intervention delivered in group format for 10 weeks had potential for helping some children who experienced PTSD symptoms and depression. The findings generally replicated previous research conducted with groups of non-Indian adolescents in urban settings. PTSD and depressive symptoms decreased for three of the four students who completed treatment. Directions for future research included the need to understand and control attrition and to address cultural influences, including making adaptations in the cognitive behavioral formulations and techniques regarding feelings as operant behaviors. Results contributed to knowledge of feasibility and acceptability of cultural adaptations of CBT for trauma in an under-served population.

Dorrappall et al. (2010) conducted a study aimed at improving complex PTSD by using psycho-education and cognitive behavioral interventions on 36 patients with history of child abuse. Improvement was found for PTSD and borderline symptoms. Post-treatment 64% and after 6 months 78% of patients no longer met criteria for complex PTSD. This open study indicates both the feasibility of investigating treatment outcome and the initial efficacy of stabilizing group treatment in severely ill patients with complex PTSD related to childhood abuse.
Cohen, Mannarino and Iyengar (2011) in their study evaluated community-provided trauma-focused cognitive behavior therapy (TF-CBT) compared with usual community treatment for children with intimate partner violence (IPV)-related posttraumatic stress disorder (PTSD) symptoms. Randomized controlled trial conducted using blinded evaluators. Recruitment, screening, and treatment were conducted at a community IPV center between September 1, 2004, and June 30, 2009. Of 140 consecutively referred 7- to 14-year-old children, 124 participated. Children and mothers were randomly assigned to receive 8 sessions of TF-CBT or usual care (child-centered therapy). The TF-CBT completers experienced significantly greater PTSD diagnostic remission ($\chi^2(2) = 4.67, P = .03$) and had significantly fewer serious adverse events. Community TF-CBT effectively improves children's IPV-related PTSD and anxiety.

Dorsey, Briggs and Woods (2011) in their review stated that a number of Cognitive Behavioral Therapy (CBT) approaches are available for treating child and adolescent posttraumatic stress disorder (PTSD). Similar to other CBT treatments, particularly those for anxiety disorders, these treatments all include common elements (e.g., psycho-education, relaxation and affective modulation skills, exposure). The two common treatments were Trauma-focused Cognitive Behavioral Therapy (TF-CBT) and Cognitive Behavioral Intervention for Trauma in Schools (CBITS). They indicated that, other CBT approaches include many of the common elements; however, these approaches have accumulated less evidence of effectiveness to date.

Kar (2011) in a randomized controlled trial, children and young people with PTSD who received individual trauma-focused CBT experienced significantly greater
improvement in symptoms not only of PTSD, but also depression and anxiety, with significantly better functioning compared with wait-list. While 92% of participants no longer met criteria for PTSD after CBT, this figure was 42% in the wait-list group. CBT gains were maintained at six-month follow-up. An 18-week, group-administered course of CBT for pediatric PTSD after a single-incident stressor reported that the majority of patients (82.4%) completed treatment. Of these, 57% no longer met the criteria for PTSD immediately after treatment, and 86% were free of PTSD at six-month follow-up.

Kolko, Iselin and Gully (2011) examined (AF-CBT) as delivered by practitioners in a community-based child protection program who had received training in the model several years earlier. Seven practitioners participated in a year-long learning collaborative in AF-CBT and in similar training programs for 4 other evidence based treatment (EBT). The agency's routine data collection system was used to document the clinical and adjustment outcomes of 52 families presenting with a physically abused child who received their services between 2 and 5 years after the AF-CBT training had ended. Measures of the use of all 5 EBTs documented their frequency, internal consistency, and inter correlations. Controlling for the unique content of the other four EBTs, the amount of AF-CBT, abuse-specific content delivered was related to improvements on standardized parent rating scales (i.e., child externalizing behavior, anger, anxiety, social competence) and both parent and clinician ratings of the child's adjustment at discharge (i.e., child more safe, less scared/sad, more appropriate with peers). The amount of AF-CBT General content was related to a few discharge ratings (better child prognosis, helpfulness to parents).
Kowalik, Weller, Venter and Drachman (2011) in order to find out gold standard treatment for childhood posttraumatic stress disorder (PTSD), an annotated bibliography and meta-analysis were used to examine the efficacy of cognitive behavioral therapy (CBT) in the treatment of pediatric PTSD as measured by outcome data from the Child Behavior Checklist (CBCL). A literature search produced 21 studies; of these, 10 utilized the CBCL but only eight were both 1) randomized; and 2) reported pre- and post-intervention scores. Results showed that the annotated bibliography revealed efficacy in general of CBT for pediatric PTSD. Using four indices of the CBCL, the meta-analysis identified statistically significant effect sizes for three of the four scales: Total Problems (TP; -.327; p = .003), Internalizing (INT; -.314; p = .001), and Externalizing (EXT; -.192; p = .040). The results for TP and INT were reliable as indicated by the fail-safe N and rank correlation tests. The effect size for the Total Competence (TCOMP; -.054; p = .620) index did not reach statistical significance. The efficacy of CBT in the treatment of pediatric PTSD was supported by the annotated bibliography and meta-analysis, contributing to best practices data. CBT addressed internalizing signs and symptoms (as measured by the CBCL) such as anxiety and depression more robustly than it did externalizing symptoms such as aggression and rule-breaking behavior, consistent with its purpose as a therapeutic intervention.

Salloum and Storch (2011) in their case study stated that due to the prevalence of childhood posttraumatic stress disorder and barriers to treatment, novel service delivery approaches such as parent-led, therapist-assisted, trauma-focused cognitive behavioral therapy (PTA-TF-CBT) within a stepped care model are needed. This case study presents the treatment of a 4-year-old boy with posttraumatic stress symptoms
whose parent led the treatment with therapist assistance and empirically supported materials. Findings from this case study indicated that: (a) PTA-TF-CBT was an acceptable and satisfactory treatment to the parent, (b) therapist time delivering the treatment was limited thereby conserving resources, and (c) clinically significant improvements in child and parent distress were reported posttreatment and at 5 weeks follow-up.

Scheeringa, Weems, Cohen, Amaya-Jackson and Guthrie (2011) in their research found that the evidence base for trauma-focused cognitive behavioral therapy (TF-CBT) to treat posttraumatic stress disorder (PTSD) in youth is compelling, but the number of controlled trials in very young children is few and limited to sexual abuse victims. These considerations plus theoretical limitations have led to doubts about the feasibility of TF-CBT techniques in very young children. This study examined the efficacy and feasibility of TF-CBT for treating PTSD in three- through six-year-old children exposed to heterogeneous types of traumas. Procedures and feasibilities of the protocol were refined in Phase 1 with 11 children. Then 64 children were randomly assigned in Phase 2 to either 12-session manualized TF-CBT or 12-weeks wait list. In the randomized design the intervention group improved significantly more on symptoms of PTSD, but not on depression, separation anxiety, oppositional defiant, or attention deficit/hyperactivity disorders. After the waiting period, all participants were offered treatment. Effect sizes were large for PTSD, depression, separation anxiety, and oppositional defiant disorders, but not attention-deficit/hyperactivity disorder. At six-month follow-up, the effect size increased for PTSD, while remaining fairly constant for the comorbid disorders. The frequencies with which children were able to understand
and complete specific techniques documented the feasibility of TF-CBT across this age span. The majority were minority race (Black/African-American) and without a biological father in the home, in contrast to most prior efficacy studies. These preliminary findings suggest that TF-CBT is feasible and more effective than a wait list condition for PTSD symptoms, and the effect appears lasting. There may also be benefits for reducing symptoms of several comorbid disorders.

Gillies, Taylor, Gray, O'Brien and D'Abrew (2012) in their meta-analysis on psychotherapy for post traumatic stress disorder in children suggested that Fourteen studies including 758 participants were included in this review. The types of trauma participants had been exposed to included sexual abuse, civil violence, natural disaster, domestic violence and motor vehicle accidents. Most participants were clients of a trauma-related support service. The psychological therapies used in these studies were cognitive behavioral therapy (CBT), exposure-based, psychodynamic, narrative, supportive counseling, and eye movement desensitization and reprocessing (EMDR). Most compared a psychological therapy to a control group. No study compared psychological therapies to pharmacological therapies alone or as an adjunct to a psychological therapy. Across all psychological therapies, improvement was significantly better and symptoms of PTSD, anxiety and depression were significantly lower within a month of completing psychological therapy compared to a control group. The psychological therapy for which there was the best evidence of effectiveness was CBT. Improvement was significantly better for up to a year following treatment. No adverse effects were identified. No study was rated as a high risk for selection or detection bias but a minority was rated as a high risk for attrition, reporting and other
bias. They concluded that there was evidence for the effectiveness of psychological therapies, particularly CBT, for treating PTSD in children and adolescents for up to a month following treatment. At this stage, there was no clear evidence for the effectiveness of one psychological therapy compared to others. There was also not enough evidence to conclude that children and adolescents with particular types of trauma are more or less likely to respond to psychological therapies than others. The findings of this review are limited by the potential for methodological biases, and the small number and generally small size of identified studies. In addition, there was evidence of substantial heterogeneity in some analyses which could not be explained by subgroup or sensitivity analyses.

Jansen et al. (2012) in their study applied revised version of a cognitive behavioral therapy manualized program called 'Thinking + Doing = Daring' (TDD) was developed for children between 8 and 12 years old with an anxiety disorder in the Netherlands. The main aim of this project was to conduct a Randomized Controlled Trial (RCT) to evaluate the effectiveness of TDD. The CBT program tested with a RCT with 120 clinically anxious children (8-12 years old) referred to one of three mental health care agencies. Children randomly assigned to the experimental (N = 60, TDD) or to the control condition (N = 60, treatment as usual). The primary outcome measure were the child's anxiety symptoms level. Secondary outcome measures were externalizing (e.g. aggression) and internalizing problems (e.g. depression). Two potential mediators of change were examined in the current study: therapeutic alliance and parenting. Mother and child in both the experimental and control condition surveyed at baseline, post treatment and after 6 and 12 months (follow-up).
Macdonald et al. (2012) in their meta-analysis on CBT effect on psychological outcomes of child sexual abuse found that all studies examined CBT programmes provided to children or children and a non-offending parent. Control groups included wait list controls (n = 1) or treatment as usual (n = 9). Treatment as usual was, for the most part, supportive, unstructured psychotherapy. Generally the reporting of studies was poor. Only four studies were judged 'low risk of bias' with regards to sequence generation and only one study was judged 'low risk of bias' in relation to allocation concealment. All studies were judged 'high risk of bias' in relation to the blinding of outcome assessors or personnel; most studies did not report on these, or other issues of bias. Most studies reported results for study completers rather than for those recruited. Depression, post-traumatic stress disorder (PTSD), anxiety and child behavior problems were the primary outcomes. Data suggest that CBT may have a positive impact on the sequelae of child sexual abuse, but most results were not statistically significant. Strongest evidence for positive effects of CBT appears to be in reducing PTSD and anxiety symptoms, but even in these areas effects tend to be 'moderate' at best. Meta-analysis of data from five studies suggested an average decrease of 1.9 points on the Child Depression Inventory immediately after intervention (95% confidence interval (CI) decrease of 4.0 to increase of 0.4; I(2) = 53%; P value for heterogeneity = 0.08), representing a small to moderate effect size. Data from six studies yielded an average decrease of 0.44 standard deviations on a variety of child post-traumatic stress disorder scales (95% CI 0.16 to 0.73; I(2) = 46%; P value for heterogeneity = 0.10). Combined data from five studies yielded an average decrease of 0.23 standard deviations on various child anxiety scales (95% CI 0.3 to 0.4; I(2) = 0%; P
value for heterogeneity = 0.84). No study reported adverse effects. The review confirms the potential of CBT to address the adverse sequelae of child sexual abuse, but highlights the limitations of the evidence base and the need for more carefully conducted and better reported trials.

Nixon, Sterk and Pearce (2012) in their study compared the efficacy of trauma-focused cognitive behavior therapy (CBT) with trauma-focused cognitive therapy (without exposure; CT) for children and youth with posttraumatic stress disorder (PTSD). Children and youth who had experienced single-incident trauma (N = 33; 7-17 years old) were randomly assigned to receive 9 weeks of either CBT or CT which was administered individually to children and their parents. Intent-to-treat analyses demonstrated that both interventions significantly reduced severity of PTSD, depression, and general anxiety. At post-treatment 65% of CBT and 56% of the CT group no longer met criteria for PTSD. Treatment completers showed a better response (CBT: 91%; CT: 90%), and gains were maintained at 6-month follow-up. Maternal depressive symptoms and unhelpful trauma beliefs moderated children’s outcome. It is concluded that PTSD secondary to single-incident trauma can be successfully treated with trauma-focused cognitive behavioral methods and the use of exposure is not a prerequisite for good outcome.

Smith et al. (2013) in their review found recent evidence regarding risk factors for childhood posttraumatic stress disorder (PTSD) and treatment outcome studies from 2010 to 2012 including dissemination studies, early intervention studies and studies involving preschool children. Recent large-scale epidemiological surveys confirm that
PTSD occurs in a minority of children and young people exposed to trauma. Detailed follow-up studies of trauma-exposed young people have investigated factors that distinguish those who develop a chronic PTSD from those who do not, with recent studies highlighting the importance of cognitive (thoughts, beliefs and memories) and social factors. Such findings are informative in developing treatments for young people with PTSD. Recent randomized controlled trials (RCTs) confirm that trauma-focused cognitive behavior therapy (TF-CBT) is a highly efficacious treatment for PTSD, although questions remain about effective treatment components. A small number of dissemination studies indicate that TF-CBT can be effective when delivered in school and community settings. One recent RCT shows that TF-CBT is feasible and highly beneficial for very young preschool children. Studies of early intervention show mixed findings. Various forms of theory-based TF-CBT are highly effective in the treatment of children and adolescents with PTSD. Further work is needed to replicate and extend initial promising outcomes of TF-CBT for very young children.

Gap in literature:

Above literatures suggested that there are several studies on the effectiveness of CBT in treating PTSD and other posttraumatic symptoms in various traumatic events. The effect of TF-CBT on kinds of traumatic events including domestic violence such as sexual abuse, physical abuse and parents violence also examined. But, there are dissemination studies on the effect of TF-CBT on parent violence witnessing and also AF-CBT effect on child physical abuse. However, in most of these studies and reviews,
CBT recognized as a well-established treatment. So, dissemination studies and early intervention studies show mixed findings and further work is needed.

There are a lack of studies on the effectiveness of CBT on particularly both child physical abuse and parents violence in child victims of domestic violence in Iran, in existent literature.

**Eye Movement Desensitization and Reprocessing**

Here are some of the clinical studies which have used EMDR for the treatment of post traumatic symptoms with children:

Puffer, Greenwald and Elrod (1997) in a non-randomized study examined a single EMDR session treatment on ten 7-10 years old traumatized students. It was found that over half of the participants moved from clinical to normal levels on the Impact of Events Scale, and all but 3 showed at least partial symptom relief on several measures at 1-3 months following a single EMDR session.

Davidson and Parker (2001) in their meta-analysis found that Eye movement desensitization and reprocessing (EMDR), a controversial treatment suggested for posttraumatic stress disorder (PTSD) and other conditions, was evaluated in a meta-analysis of 34 studies that examined EMDR with a variety of populations and measures. Process and outcome measures were examined separately and EMDR showed an effect on both when compared with no treatment and with therapies not using exposure to anxiety-provoking stimuli and in pre-post EMDR comparisons. However, no significant effect was found when EMDR was compared with other exposure
techniques. No incremental effect of eye movements was noted when EMDR was compared with the same procedure without them. In fact, EMDR is a potentially effective treatment for noncombat PTSD, but studies that examined such patient groups did not give clear support to this. In sum, EMDR appears to be no more effective than other exposure techniques, and evidence suggests that the eye movements integral to the treatment, and to its name, are unnecessary.

Liebermann, Hofmann and Flatten (2003) in their review stated that EMDR (Eye Movement Desensitization and Reprocessing) is a method, developed at the end of the nineteen-eighties, for the treatment of the post-traumatic stress disorder (PTSD). The patient is asked to concentrate on certain aspect of the traumatic memory while keeping his eyes fixed on the movements of the therapist's finger. Apparently, this triggers information processing that results in appreciable relief for the patient. The method has proven to be equally as effective as behavioral-therapeutic techniques, and, has in the meantime, been included in national and international guidelines for the treatment of PTSD. The indications for EMDR treatment include not only PTSD, but, increasingly, also other, sometimes more severely chronic, it trauma sequelae. Within the framework of basic care, EMDR must be embedded within a treatment plan and should, where applicable, be combined with other methods.

Ahmad, Larsson and Sundelin-Whalsten (2007) in a control –trial study examined thirty-three, 6-16 year-old children, with a DSM-N diagnosis of PTSD. Subjects were randomly assigned to eight weekly EMDR sessions or the WLC group. EMDR was found to be an effective treatment in children with PTSD from various sources and who were suffering from a variety of co-morbid conditions.
Van der Kolk et al. (2007) in their research on comparison the efficacy of EMDR, Fluoxetine and placebo on 88 PTSD patients found that psychotherapy intervention was more successful than pharmacotherapy in achieving sustained reduction in PTSD and depression symptoms, but this benefit primarily occurred for adult onset trauma survivors. At six month follow up of 75% adult onset versus 33.3% of child onset trauma onset receiving EMDR achieved to asymptomatic end-state functioning compared with none in the Fluoxetine group. For most childhood onset trauma patients neither treatment produced complete symptoms remission.

Bae, Kim and Park (2008) in a case study examined two adolescents with major depression. They processed the etiological disturbing memories, triggers and templates by applying EMDR. Result has shown complete remission of Major Depressive Disorder. Treatment duration was 3-7 sessions and effects were maintained at follow-up.

Hensel (2009) in a control–trial study examined 36 children ranging in age from 5-12 years were assessed at intake, post-waitlist/pretreatment, and at follow up. EMDR treatment resulted in significant improvement, demonstrating that younger children showed the same benefit as the school-age children.

Norgate (2012) in the review stated that Eye movement desensitization and reprocessing (EMDR) is a powerful psychotherapy with well-researched benefits for adults and children who are experiencing post-traumatic stress and post-traumatic stress disorder. There is a wealth of research and practice-based evidence demonstrating the effectiveness of EMDR in many differing clinical presentations but the
true potential of this extraordinarily beneficial therapeutic approach has not been fully embraced by the mental health profession.

Gap in literature:

Above literatures suggested that there are some dissemination control-trial studies on the effectiveness of EMDR in treating PTSD and other posttraumatic symptoms in various traumatic events within children. Most studies showed statistically significant improvement but were still methodologically lacking. However, in most of these studies and reviews, EMDR is promising and could ameliorated posttraumatic stress disorder.

There is a lack of studies which include of the effectiveness of EMDR on either child physical abuse or witnessing parents violence among children victims in existent literature. More research is required in order to expand our limited knowledge base.

CBT and EMDR

Recently some researchers have also tried to compare EMDR and CBT for the treatment of post traumatic symptoms.

Jaberghaderi, Greenwald, Rubin, Oliaee-Zand, and Dolatabadi (2004) have done a study on comparison of CBT and EMDR for 14(aged 12-13 years) sexually abused Iranian girls. Both treatments showed large effect sizes on the posttraumatic symptom outcomes, and a medium effect size on the behavior outcome, all statistically significant.
A non-significant trend on self-reported post-traumatic stress symptoms favored EMDR over CBT.

Adler-Nevo and Manassis (2005) in their review stated that despite the prevalence of childhood trauma, studies regarding psychotherapy for children suffering from posttraumatic stress disorder (PTSD) are scarce, especially regarding the treatment for pediatric PTSD following single-incident trauma. Treatment practiced for these population rely mainly on the paradigms of therapy for adult PTSD and pediatric PTSD following sexual abuse. This review outlined the studies published in the last 10 years pertaining to the treatment of pediatric PTSD following single-incident trauma. Of 742 articles dealing with treatment of pediatric trauma, 10 were found relevant to the treatment of pediatric PTSD following single-incident trauma. The modalities of treatment most frequently reported in this context were cognitive-behavioral therapy (CBT), eye movement desensitization and reprocessing (EMDR), and play therapy. As a whole, CBT studies were methodologically more rigorous, used manualized, reproducible treatment, and were group, school-based therapies. EMDR treatments were usually short and individual.

Rothbaum, Astin, and Marsteller (2005) evaluated the relative efficacy of Prolonged Exposure (PE) and Eye Movement Desensitization and Reprocessing (EMDR) compared to a no-treatment wait list control (WAIT) in the treatment of PTSD in adult female rape victims \( (n = 74) \). Improvement in PTSD as assessed by blind independent assessors, depression, dissociation, and state anxiety was significantly greater in both the PE and EMDR group than the WAIT group \( (n = 20 \) completers per...
group). PE and EMDR did not differ significantly for change from baseline to either post treatment or 6-month follow-up measurement for any quantitative scale.

Ehntholt and Yule (2006) did a review on promising treatments for young refugees, who have experienced traumatic events due to war. Young refugees are frequently subjected to multiple traumatic events and severe losses, as well as ongoing stressors within the host country. Although young refugees are often resilient, many experience mental health difficulties, including PTSD, depression, anxiety and grief. An awareness of relevant risk and protective factors is important. A phased model of intervention is often useful and the need for a holistic approach crucial. Promising treatments for alleviating symptoms of war-related PTSD include cognitive behavioral treatment (CBT), testimonial psychotherapy, narrative exposure therapy (NET) and eye movement desensitization and reprocessing (EMDR). Knowledge of the particular needs of unaccompanied asylum-seeking children (UASC), working with interpreters, cross-cultural differences, medico-legal report writing and the importance of clinician self-care is also necessary.

Bisson et al. (2007) in their meta-analysis stated that relative efficacy of different psychological treatments for chronic post-traumatic stress disorder (PTSD) is unclear. In a systematic review of randomized controlled trials, eligible studies were assessed against methodological quality criteria and data were extracted and analyzed. Results have shown that thirty-eight randomized controlled trials were included in the meta-analysis. Trauma-focused cognitive-behavioral therapy (TFCBT), eye movement desensitization and reprocessing (EMDR), stress management and group cognitive-
behavioral therapy improved PTSD symptoms more than waiting-list or usual care. There was inconclusive evidence regarding other therapies. There was no evidence of a difference in efficacy between TFCBT and EMDR but there was some evidence that TFCBT and EMDR were superior to stress management and other therapies, and that stress management was superior to other therapies. The first-line psychological treatment for PTSD should be trauma-focused (TFCBT or EMDR).

Mendes et al. (2008) did a systematic review on the efficacy of CBT in comparison with studies that used other psychotherapy techniques. Results have shown that the 23 clinical trials included in the review comprised 1923 patients: 898 in the treatment group and 1,025 in the control group. CBT had better remission rates than EMDR (RR = 0.35; 95% CI: 0.16; 0.79; p = 0.01) or supportive therapies (RR = 0.43; 95% CI: 0.25; 0.74; p = 0.002, completer analysis). CBT was comparable to Exposure Therapy (ET) (RR = 0.90; 95% CI: 0.58; 1.40; p = 0.64), and cognitive therapy (CT) (RR = 1.01; 95% CI: 0.67; 1.51; p = 0.98) in terms of efficacy and compliance. These findings suggest that specific therapies, such as CBT, exposure therapy and cognitive therapy are equally effective, and more effective than supportive techniques in the treatment of PTSD.

Wanders, Serra, and de Jongh (2008) in a control –trial study examined twenty-six children (average age 10.4 years) with behavioral problems who were randomly assigned to receive either 4 sessions of EMDR or CBT. Both were found to have significant positive effects on behavioral and self-esteem problems, with the EMDR group showing significantly larger changes in target behaviors.
Bronner, Beer, Jozine van Zelm van Eldik, Grootenhuis and Last (2009) did a case study to assess the effects of trauma-focused cognitive behavior therapy (TF-CBT) and Eye Movement Desensitization and Reprocessing (EMDR) for the treatment of acute stress in an adolescent. A combination of TF-CBT and EMDR was provided to a 16-year-old girl with distressing memories, anxiety and flashbacks. For measurement of the efficacy of the treatment package, the Children's Revised Impact of Event Scale (CRIES-13) was used. Acute stress reactions decreased considerably after treatment and remained stable. CRIES-13 scores showed substantial reduction in stress scores. The girl reported no more flashbacks of the injury, sleeping difficulties or recurrent and distressing memories. This case study illustrates the potential efficacy of a combination of TF-CBT and EMDR for patients with acute stress reactions.

Ehlers, Bisson and Clark (2009) stated that a recent meta-analysis by Benish, Imel, and Wampold (2008) concluded that all bona fide treatments are equally effective in posttraumatic stress disorder (PTSD). In contrast, seven other meta-analyses or systematic reviews concluded that there is good evidence that trauma-focused psychological treatments (trauma-focused cognitive behavior therapy and eye movement desensitization and reprocessing) are effective in PTSD; but that treatments that do not focus on the patients' trauma memories or their meanings are either less effective or not yet sufficiently studied. International treatment guidelines therefore recommend trauma-focused psychological treatments as first-line treatments for PTSD. Ehlers, Bisson and Clark (2009) examined possible reasons for the discrepant conclusions and argue that (1) the selection procedure of the available evidence used in Benish, Imel and Wampold (2008) meta-analysis introduces bias, and (2) the analysis...
and conclusions fail to take into account the need to demonstrate that treatments for PTSD are more effective than natural recovery. Furthermore, significant increases in effect sizes of trauma-focused cognitive behavior therapies over the past two decades contradict the conclusion that content of treatment does not matter.

Rodenberg, Benjamin, Roos, Meijer and Stams (2009) meta-analytically examined the efficacy of eye movement desensitization and reprocessing (EMDR) in children with posttraumatic stress symptoms from the perspective of incremental efficacy. Results indicated that incremental efficacy for EMDR is medium but when effect sizes are based on comparisons between EMDR and established (CBT) trauma treatment then EMDR adds a small but significant incremental value. In this meta-analytically, studies used combination of parent and child reports showed medium to large effect size whereas using child report solely yielded small effect size. Studies with more completers and/or more girls have shown smaller effect size.

Rolfsnes and Idsøe (2011) did a review and meta-analysis of school-based intervention programs which targeted at reducing symptoms of posttraumatic stress disorder (PTSD). Nineteen studies conducted in 9 different countries satisfied the inclusionary criteria. The studies dealt with various kinds of type I and type II trauma exposure. Sixteen studies used cognitive-behavioral therapy methods; the others used play/ art, eye movement desensitization and reprocessing, and mind-body techniques. The overall effect size for the 19 studies was $d = 0.68$ (SD = 0.41), indicating a medium-large effect in relation to reducing symptoms of PTSD. The authors' findings suggest
that intervention provided within the school setting can be effective in helping children and adolescents following traumatic events.

de Roos et al. (2011) compared the effectiveness and efficiency of Cognitive Behavioral Therapy (CBT) and Eye Movement Desensitization and Reprocessing (EMDR). Children (n=52, aged 4-18) were randomly allocated to either CBT (n=26) or EMDR (n=26) in a disaster mental health after-care setting after an explosion of a fireworks factory. All children received up to four individual treatment sessions over a 4-8 week period along with up to four sessions of parent guidance. Blind assessment took place pre- and post-treatment and at 3 months follow-up on a variety of parent-rated and self-report measures of post-traumatic stress disorder symptomatology, depression, anxiety, and behavior problems. Analyses of variance (general linear model repeated measures) were conducted on the intention-to-treat sample and the completers. Results showed that both treatment approaches produced significant reductions on all measures and results were maintained at follow-up. Treatment gains of EMDR were reached in fewer sessions. Yet, standardized CBT and EMDR interventions can significantly improve functioning of disaster-exposed children.

Nijdam, Gersons, Reitsma, de Jongh and Olff (2012) in their study on traumatized children compared the efficacy and response pattern of a trauma-focused CBT modality, brief eclectic psychotherapy for PTSD, with EMDR (trial registration). Out-patients with PTSD were randomly assigned to brief eclectic psychotherapy (n = 70) or EMDR (n = 70) and assessed at all sessions on self-reported PTSD (Impact of Event Scale - Revised). Other outcomes were clinician-rated PTSD, anxiety and
depression. Results have shown that both treatments were equally effective in reducing PTSD symptom severity, but the response pattern indicated that EMDR led to a significantly sharper decline in PTSD symptoms than brief eclectic psychotherapy, with similar drop-out rates (EMDR: n = 20 (29%), brief eclectic psychotherapy: n = 25 (36%)). Other outcome measures confirmed this pattern of results. However, although both treatments were effective, EMDR results in a faster recovery compared with the more gradual improvement with brief eclectic psychotherapy. It is therefore conceivable that the mean duration of the CBT sessions might have been shorter than that of the EMDR sessions.

Gap in literature:

Existant literature suggested that there are some researches which tried to compare CBT and EMDR on various kinds of traumatic events sequelae (particularly PTSD) in children and adolescents. However, control trials studies mostly compared CBT and EMDR effectiveness on sexually abused children. Besides, although CBT was always known as a well established treatment and EMDR results in faster recovery but in comparing with each other (regarding different groups and traumas), has suggested in different result. Mostly, both are recognized as equal in remission rate of PTSD, depression, anxiety and other trauma related problems but sometimes using size effect suggested better performance of EMDR on measured variables. Besides, study on gender differences regarding both CBT and EMDR effects is widely neglected in traumatized children. Research on the subject of treatment for pediatric post traumatic symptoms following witnessing of parents violence and/ or child physical abuse’s events’ trauma constitute a neglected part of the literature of pediatric post traumatic
symptoms. This stands in contrast to the obvious prevalence of this type of trauma in Kermanshah.