

Investigating the Effectiveness of Eye Movement Desensitization and Reprocessing (EMDR) on Children with Post-Traumatic Stress Disorder (Traffic Accident)

Matin HassanzadehMoghaddam¹, Dr Javad Khalatbari^{2*}

ABSTRACT

The study aim was to investigate Eye Movement Desensitization and Reprocessing (EMDR) EMDR therapy on children with post-traumatic disorder (PTSD) in traffic accidents. The research population consists of children 7-11 years old in Tehran city who are surviving serious traffic accidents in 2014 that after screening 20 patients selected as sample who had the highest prevalence PTSD and divided into two groups of 10 patients randomly that the first group, called control group and second group was experimental group.

The tools used in the study were anxiety depression scale and 42- DASS stress scale that had good convergent and discriminative validity and reliability by Cronbach's alpha for the subscales depression, anxiety and stress at an acceptable level 0.91, 0.84 and 0.84 calculated, respectively. At first, 42- DASS test performed in the experimental and control group and then experimental group treated by Eye Movement Desensitization and Reprocessing therapy (EMDR), re-test in both groups was performed, and the results were analyzed. However, there is no significant difference between the two groups in terms of anxiety. As a result, it stated that EMDR therapy has been effective on depression and stress in children with post-traumatic stress disorder (PTSD).

Keywords: *Desensitization, Eye Movements, Reprocessing, Post-Traumatic Disorder*

Post-traumatic stress disorder (or PTSD) is a common reaction that people have shown in front of stressful or traumatic events. A variety of events can lead to PTSD, such as, car accident, attack or the victim of another crime being abused physically or sexually abused; living through a disaster such as a flood or explosion, with control of death. This disorders is the last

¹ M.A in clinical psychology, Tonekabon Branch, Islamic Azad University, Tonekabon, Iran

² Department of Psychology, Tonekabon Branch, Islamic Azad University, Tonekabon, Iran

*Responding Author

Investigating the Effectiveness of Eye Movement Desensitization and Reprocessing (EMDR) on Children with Post-Traumatic Stress Disorder (Traffic Accident)

subcategory of anxiety disorders after viewing, direct experience or and hear a traumatic stressor and intense that could lead to actual or threatened death or serious a disaster (Pinel, translated by Firozbakht, 2008). Post-traumatic stress disorder (PTSD) is a syndrome with a set of symptoms can be found exposure to traumatic life events; person will respond to this experience as fear and helplessness and imagine event constantly and yet wants to remind the refrain (Hedi, Resnick; Acierno; Amstadter & Shannon, 2007). The disorders like other DSM disorder defined by a collection of symptoms but unlike other disorders exposure with a certain type of traumatic accident are criterion for diagnosis it. A person must have experienced or seen an accident involving actual or possible death, serious damage or threat to the physical integrity of self or others (Mirzaee and Karami, and Sadock2007 and Kaplan, 2003). Eye Movement Desensitization and open processing (EMDR) is one of the efficient methods and effective in helping people who experience mental wounds caused by traumatic injury, anxiety, panic, post-traumatic stress disorder because of unpleasant and life, sorrow and suffering other types of emotional problems (Davidson & Parker, 2001; Chambless et al., 1998; Foa, Keane and Friedman 2000). Eye Movement Desensitization and Reprocessing (EMDR) therapy is a new approach in the treatment of psychotic disorders and symptoms such as anxiety, depression, anxiety, sleep disturbances, feelings of guilt, anger and return the old memory is used. Eye Movement Desensitization and open processing (EMDR) is complex form and consistent incorporation of many aspects of different approaches to psychology. It seems that Eye Movement Desensitization and open processing (EMDR) creates a physiological effect that re-accelerated processing of information are stored as impaired. In the meta-analysis of the effects of Eye Movement Desensitization and open processing (EMDR), Van Etten and Taylor (1998) showed that eye movement desensitization, reprocessing therapy in the treatment of PTSD protests is more effective than drug therapy, and EMDR therapy is more effective than other methods. In another study, Sperng (2001) indicated that symptoms Eye Movement Desensitization and Reprocessing in reducing symptoms of bereavement are more effective than cognitive - behavioral therapy.

Shapiro (2002) has introduced Eye Movement Desensitization and open processing (EMDR) as an integrated protocols in eight steps. During the hearings on experiences and given the time and learns that focuses on the stimulation of mutual therapist. Research indicates that Eye Movement Desensitization and open processing (EMDR) is effective in reducing anxiety types (Marquis, 1991; Vaugan & Armstrong, 1994; Arnold, 2004). Many single initial case studies show the significant effectiveness of Eye Movement Desensitization and open processing (EMDR) (Puk, 1991, Wolpe & Abrams, 1991; Kleinknecht and Morgan, 1992; MacCanon, 1992; Pellicer, 1993). This method also affected the soldiers by the war (Carlson, Chemtob, Rusnak and Hedlund, 1998), victims of violent assaults (Kleinknecht and Morgan, 1992), post-traumatic stress disorder and other diagnoses that used Eye Movement Desensitization and open processing (EMDR) significantly (Vaughan, Wise, Gold and Taryr, 1994), has confirmed. Doolatabadi (1999) Abdoli Bidhendi (2001) Mahani, Abbasnejad and Zamyad (2006) Mahani and

Investigating the Effectiveness of Eye Movement Desensitization and Reprocessing (EMDR) on Children with Post-Traumatic Stress Disorder (Traffic Accident)

Bahramnezhad (2006) in their study of the therapeutic effects of this approach have approved. According to Legal Medicine Organization in the first 8 months of 2011, the number of 14977 people has lost their lives in traffic accidents. Although these figures decreased by 13% compared to the same period last year, however, every day more than 60 people die in traffic accidents across the country (Gorgi, 2011). In each of these accidents involved nearly three households. If the average population per family considers 5 people, stats involved in road accidents can be quite dramatic (Ansari, 2007). These events not only directly physical damage disaster for people to follow, but also indirectly has effects on physical, psychological, economic, social, cultural, environmental, human and family functions (Wang, Tsay & Elaine Bond, 2005). The findings of numerous studies indicate that some psychological, social and economic damages in traffic accident (Mayou, Ehlers, & Hobbs, 2000; Wu, Chan & Ma 2005 Zehnder, Meuli, & Landolt, 2010). In the meantime, mental damage families who lost their loved ones because of traffic accidents are more than any other people involved. Some of health damages affected overall familie's performance (Jabali, Shussainat Al-salem & Zraikat, 2013 Khodadadi, Ghanbari, Yusef-Zadeh, Meskini, Asgari and Kochiki Nejaf, 2009).

Therefore, the effects and consequences of traffic accidents as one of the most important psychological issues, and social psychiatry in the world, according to sociologists and experts in psychology have attracted (Wang, Tsay & Elaine Bond, 2005). Therefore, traffic accidents are events that have harmful effects on the mental health of survivors. Review of Landolt, Vollrath, Timm, Gnehm, & Sennhauser (2002) also suggests that the most important immediate response in children after accidents, along with a variety of anxiety states, depression, violent and belligerent behavior, low self-esteem, health problems and grief reactions, development of post-traumatic stress disorder PTSD. Landolt, Vollrath, Timm, Gnehm, & Sennhauser (2005) in his studies on children Germany and Switzerland showed that the incidence of post-traumatic stress disorder among children is the most common psychological reactions following the accident. Regarding this issue, the question arises, as "what is the effect of new therapeutic EMDR treatment on children in the field of psychology?"

Theoretical foundation

Post-traumatic stress disorder was studied in many countries and population groups (Galovski, 2003). Psychological disorders after a traumatic event is not a new phenomenon has been since before interest and understanding. The frequency and severity of posttraumatic stress disorder depends on the severity of the trauma that the person is experienced. In addition, chronic exposure to stress can be an important factor in the post-traumatic stress disorder (Kazemipour, Maryam, 2010). Any traumatic stress disorder can be triggers, but some situations, such as accidents, exceed and conflict is always stressful. Experience has shown that victims of such events mainly acute stress disorder are severe. If symptoms persist for more than a month, it said post-traumatic stress disorder happened. PTSD or post-traumatic stress disorder, usually after a traumatic accident show symptoms such as nightmares, intrusive memories, re-experiencing

Investigating the Effectiveness of Eye Movement Desensitization and Reprocessing (EMDR) on Children with Post-Traumatic Stress Disorder (Traffic Accident)

trauma in different ways, guilt and your irritability and symptoms from one to six months and sometimes even years and can distort one's life. Although the disorder may occur at any age, but is more common among young people due to accelerating fields (Kalat, James, 2007).

History of post-traumatic stress disorder (PTSD)

In 2000 BC, the ancient Egyptians were familiar with the symptoms of post-war psychological and the Greeks after the war of Marathon in 450 BC Athens took place between the army and the government of Darius the Great, symptoms of post-traumatic stress disorder (PTSD) seen in soldiers (Golzari, Mahmoud, 2010). The psychological impact of traumatic events has long described by poets and writers. Therefore, that William Shakespeare clear definition of the post-traumatic stress disorder (PTSD) reactions expressed in their works. Samuel Pepi in his diary response to the Great Fire of London in 1666 include anxiety, insomnia, nightmares, feelings of guilt for the sake of his life and explains his wealth. Charles Dickens constant nightmares and fears because of the events described. Syndrome, post-traumatic stress disorder (PTSD) during the years of war between people in different names like syndrome caused by the blast wave or shock camp Heart Syndrome soldiers and shelling has taken (Coleman, translated by Hashemian, 1376). American soldiers returning from Vietnam in 1975 out of fear, anxiety and nightmares complained after the war (Vietnam) the term post-traumatic stress (PTSD) introduced in 1980 in the world of psychiatry.

The importance of post-traumatic stress disorder (PTSD)

Most people has habit related many their physical ailments to stress. Although the idea in some cases hardly a stretch and sometimes completely unrelated, but new research suggests that at least in the case of post-traumatic stress disorder to the ordinary people. Studies conducted over four thousand American veterans of the Vietnam War researchers to conclude that post-traumatic stress disorder can be more than any other risk factor for long-term ill health and premature death a person (Momtazbakht, Maryam, 2005). Although his post-traumatic stress disorder, (PTSD) independently is a risk factor for health but it is possible to prepare the ground for unhealthy habit health, more health threatening. For example, 45 percent of people with post-traumatic stress disorder (PTSD) are smokers (Mirzaee, Jafar and Karimi, Golamreza, 2011). Some of these patients also tend to turn to alcohol to escape the mental problems which is separate from the physical effects worsen the symptoms of post-traumatic stress disorder as well.

REVIEW OF LITERATURE

Behnam Moghaddam et al (2013) investigate the impact of e Eye Movement Desensitization and Reprocessing (EMDR) on anxiety in patients with myocardial infarction, 60 patients with myocardial infarction admitted to CCU of Qazvin (2011) to (1391) to collect data, demographic questionnaire and Beck Anxiety Inventory were used. Eye Movement Desensitization and Reprocessing (EMDR) therapy has performed in two sessions every other day for 45 to 90

Investigating the Effectiveness of Eye Movement Desensitization and Reprocessing (EMDR) on Children with Post-Traumatic Stress Disorder (Traffic Accident)

minutes. The anxiety was measured before and after the intervention. Data collected by descriptive statistics, independent t test, t-test, and chi-square and Wilcoxon tests were analyzed. The results showed that eye movement desensitization and reprocessing as an effective, useful, new, performance, non-invasive to treat or reduce the severity of anxiety in patients with heart failure. Nurses, especially intensive care unit nurses can use this new and effective method in the treatment of anxiety patients.

Hasan Nia et al (2013) conducted a study entitled “Psychological consequences of fatal traffic accidents in the families of the victims. The results indicate the incidence of symptoms of depression, of anxiety states, ADD, PTSD, adjustment disorders, phobias, death, fear of traveling and driving, was complicated grief symptoms. Arabia et al (2011) study titled efficiency Eye Movement Desensitization and Reprocessing (EMDR) after damage in the post-traumatic stress disorder (PTSD) and symptoms of anxiety and depression in 40 patients with myocardial infarction survivors, and heart transplant had heart surgery. The results showed that the mean anxiety before treatment after treatment was significantly increased compared with the effects of Eye Movement Desensitization and Reprocessing (EMDR) therapy was stable after the six-month follow-up.

Schneider et al (2005) study showed that after Eye Movement Desensitization and Reprocessing (EMDR) therapy, significant improvements in hospital anxiety and depression and post-traumatic stress disorder was associated with seizures.

Tavanti (2008) compared two methods of Eye Movement Desensitization and Reprocessing (EMDR) between sertraline and EMDR to treat the symptoms of post-traumatic stress disorder (PTSD). The results of this study showed that both EMDR therapy and sertraline resulted had a significant reduction in PTSD symptoms ($P < 0.001$) and EMDR therapy leads to faster recovery PTSD symptoms was compared with the drug sertraline.

Triffleman et al (1999) in his study of post-traumatic stress disorder using cognitive-behavioral approach, especially trauma, including coping skills training, stress inoculation training, exposure therapy and cognitive restructuring, the show that this approach reduces symptoms of post-traumatic stress disorder.

Ravenscroft (2009) in their study showed that people who work in emergency medical centers, occupational stress is the leading cause of morbidity and 15 percent of them are on the verge of PTSD (Rothbaum, 1994). Job stress in emergency departments and acute or chronic stress could cause (Anderson et al., 1991). However, few studies have done about people working in this sector and stress reactions and PTSD.

Investigating the Effectiveness of Eye Movement Desensitization and Reprocessing (EMDR) on Children with Post-Traumatic Stress Disorder (Traffic Accident)

Rothbaum (1997) study concluded that after three sessions of eye movement desensitization and reprocessing through, 90 percent of participants entirely from post-traumatic stress disorder symptoms were saved.

Sarichlo (1996) study showed that EMDR treatment resulted a significant reduction in symptoms of post-traumatic stress disorder, mental distress(SUD), anxiety and depression and the increased positive cognition (Sarichlo, 1996).

RESEARCH METHODOLOGY

The study is a quasi-experimental with pretest-posttest control group design it for two groups (experimental group and control group) and two pre-test and post-test. Independent variable, EMDR therapy is applied in the experimental group and its influence on post-test scores in experimental group and the control group was compared. Therefore, quasi-experimental study with regard to the experimental and control groups among children with the disorder, PTSD.

Study Population

The research population consists of children 7-11 years old in Tehran city who are surviving serious traffic accidents in 2014

Sample and sampling

After the first available number of children injured in DASS-42 questionnaire in post-traumatic stress, depression and anxiety were measured children and people with poor score, in other words, suffer from mental disorders have identified, among them 20 people who had the highest prevalence PTSD selected as a sample group and 10 patients randomly divided into two groups. The first group, called control group, and second was experimental group.

Data analysis

After the experimental group treated in 8 sessions during the course of treatment, a questionnaire was distributed between the two groups. Data obtained by using descriptive statistics such as mean, standard deviation describes the data and then using inferential statistics (analysis of covariance) after adjusting for pretest differences between the control group and the experimental group examined.

Investigating the Effectiveness of Eye Movement Desensitization and Reprocessing (EMDR) on Children with Post-Traumatic Stress Disorder (Traffic Accident)

DATA ANALYSIS

Inferential statistics

Table 1: Analysis of variance for the assumption of homogeneity of the line slope of the regression

Variable	SS	df	MS	F	sig
Independent variables interacting with depression	0.768	1	0.768	0.016	0.902
Error	579.373	12	48.281		
Independent variables interact with anxiety	1.149	1	1.149	0.21	0.655
Error	784.695	22	65.391		
Independent interaction with stress	8.003	1	8.003	0.166	0.691
Error	807.697	22	67.308		

As can be seen from the above table sig interaction between independent variables and depression 0.902 and the dependent variable as well as anxiety 0.655, stress 0.691 that all three of them are bigger than the alpha level 0.05 with the possibility 0.95 states the assumption of homogeneity of the slope of the regression line is met.

Table 2: significant test of homogeneity of variance - covariance

sig	F	dF ₂	dF ₁	test BOX
401.0	035.1	347.2	6	6.6

As can be seen in table sig =0.401 value that is greater than the alpha level 0.05 and probability 0.950 states that the assumption of homogeneity of variance with probability - covariance is met.

Table 3: Test error equal variances

Variable	dF ₁	dF ₂	F	sig
Depression	1	18	714.0	409.0
Anxiety	1	18	203.1	287.0
Stress	1	18	319.0	579.0

Investigating the Effectiveness of Eye Movement Desensitization and Reprocessing (EMDR) on Children with Post-Traumatic Stress Disorder (Traffic Accident)

As can be seen in the table above three variables sig amount 0.409 depression 0.409, anxiety 0.278 and stress 0.579 that are larger than the alpha level and thus the same assumptions about the error variance for variable compliance.

Table 4: Analysis of variance of the variables studied in combination

Variable	value	dF ₁	dF ₂	F	sig	η^2
Wilks Lambda	504.0	3	13	259.4	027.0	496.0

As can be seen in table sig =0.027 an alpha level is smaller 0.05 with probability 0.95 suggest that the efficacy of eye movement desensitization and reprocessing (EMDR) in children with post-traumatic stress disorder there is a significant difference between the two groups.

F_(3,13) = 25.4 ; P < 01.0 ; Lambda 504.0 , η^2 =496.0

Table 5: Univariate analysis of variance on the variable depression

Variable	SS	dF ₁	MS	F	sig	η^2
Depression	569.432	1	569.432	52.10	005.0	412.0
Error	807.616	15	12.41			

As can be seen in table sig =0.005 an alpha level is smaller 0.017 with probability 0.95 suggest that the efficacy of eye movement desensitization and reprocessing (EMDR) in children with post-traumatic depression disorder there is a significant difference between the two groups.

F_(1,15) = 52.10 ; P < 017.0 Partial η^2 =412.

Table 6: Univariate analysis of variance on the variable anxiety

Variable	SS	dF ₁	MS	F	sig	η^2
Depression	562.370	1	562.370	011.7	018.0	319.0
Error	805.792	15	854.52			

Investigating the Effectiveness of Eye Movement Desensitization and Reprocessing (EMDR) on Children with Post-Traumatic Stress Disorder (Traffic Accident)

As can be seen in table sig =0.018 an alpha level is smaller 0.017 with probability 0.95 suggest that the efficacy of eye movement desensitization and reprocessing (EMDR) in children with post-traumatic anxiety disorder there is a significant difference between the two groups.

$$F_{(1,15)} = 011.7 ; P < 017.0 \text{ Partial } \eta^2 = 319.0$$

Table 7: univariate analysis of variance on the variable stress

Variable	SS	dF ₁	MS	F	sig	η^2
Depression	588.708	1	588.708	368.9	008.0	384.0
Error	573.1134	15	638.75			

As can be seen in table sig =0.008 an alpha level is smaller 0.017 with probability 0.95 suggest that the efficacy of eye movement desensitization and reprocessing (EMDR) in children with post-traumatic stress disorder there is a significant difference between the two groups.

$$F_{(1,15)} = 368.9 ; P < 017.0 \text{ Partial } \eta^2 = 384.0$$

DISCUSSION AND CONCLUSION

This study showed that treatment of eye movement desensitization and reprocessing (EMDR) is effective in reducing symptoms of post-traumatic stress disorder (PTSD). The result of the effectiveness of EMDR treatment are consistent with the findings of other research in this field in Iran such; research of Dibajnia et al (2011), Narimani and Rajabi (2009) and Nickmorad et al. (2013) and in abroad with research Arabya et al. (2011), Spates and Cusack (1999), Tavanti (2008), Rothbaum (1997), Sarichlo (2001), Field and Kortl (2011), Vander Kulak (2010), McLean (2000), Van Etten and Taylor (1998). They indicated eye movement desensitization and reprocessing therapy effects in reduce post-traumatic stress disorder. In addition to some research conducted on the efficacy of eye movement desensitization and reprocessing to reduce the anxiety by Behnam Moghaddam et al (2013), Ashayeri et al (2009), Mohammad Tehrani et al (2011), Marcus, Marquis and Sakai (1991), Vaughan, Armstrong (1994), Arnold Ellison (2004). Many single initial case studies show the significant effectiveness of Eye Movement Desensitization and open processing (EMDR) (Puk, 1991, Wolpe & Abrams, 1991; Kleinknecht and Morgan, 1992; MacCanon, 1992; Pellicer, 1993). This method also affected the soldiers by the war (Carlson, Chemtob, Rusnak and Hedlund, 1998), victims of violent assaults (Kleinknecht and Morgan, 1992), has confirmed. Doolatabadi (1999) Abdoli Bidhendi (2001) Mahani, Abbasnejad and Zamyad (2006) Mahani and Bahramnezhad (2006) in their study of the therapeutic effects of this approach have approved.

Investigating the Effectiveness of Eye Movement Desensitization and Reprocessing (EMDR) on Children with Post-Traumatic Stress Disorder (Traffic Accident)

In explaining the effectiveness (EMDR) in reducing symptoms of post-traumatic stress disorder (PTSD) can be said, it seems that eye movement desensitization and processing, creates a physiological effect that re-accelerated processing of information is which are stored disrupted.

A. EMDR what distinguishes it from other methods, how to replace positive beliefs and new interpretations of old beliefs and interpretations that causes a person to achieve solutions and new possibilities

B. it can be completely impartial manner and without any particular bias, the results of desensitization to spend, the effects of relaxation techniques such as deep breathing, releasing of excitement and (behavioral therapy techniques) knew that during treatment in terms of conditions frequently used

RESEARCH SUGGESTION

- 1) It suggested that the effectiveness of EMDR treatment on other patients with traumatic stress disorder implementation and effects compared.
- 2) Due to high levels of stress, anxiety and depression in children injured in car accident injuries is suggested further research on the effectiveness of other therapies such as Acceptance and Commitment Therapy (ACT) is examined.

REFERENCES

- Chambless, D. L., Baker M., Baucom D. H., Beautler L. E., Calhoun K. S., et al. (1998). Update on empirically validated therapies, II. *Clin. Psychol.*,51(1),3-16
- Davidson, P. R. & Parker, K .C. H. (2001) . Eye movement desensitization and reprocessing (EMDR) : A meta- analysis . *Journal of Consulting and Clinical Psychology*, 69, 305-316.
- Foa , E. B., Keane, T. M. & Friedman, M. J. (2000). *Guidelines for Treatment of PTSD*. *Journal of Traumatic Stress*, 13, 539-588 .
- Foa EB, Riggs DS, Massie ED, Yarczower M.(1995) The impact of fear activation and anger on the efficacy of exposure treatment for posttraumatic stress disorder. *Behav Ther*; 26: 487-99.
- Foa EB, Rothbaum BO, Riggs DS, Murdock TB.(1997) Treatment of post-traumatic stress disorder in rape victs: a comparison between cognitive-behavioral procedures and counseling. *J Consult Clin Psychol* 59:115-23.
- Hedi, S; Resnick, Ron; Acierno, Ananda; B.Amstader and Shannon. self – Brow(2007) An acute pest- sexual assault ntervention to prevent drug abuse. updated Findings. 42: 2032-45
- Kalat, James. (2007). *Physiological psychology*, translation by Yahya Seyed Mohammad, first edition, Tehran: mental, Page 223
- Kaplan BJ, Kaplan VA (2003)Kaplan and Sadock's Synopsis of Psychiatry: Behavioral Sciences. *Clinical Psychiatry*. 9th ed. Philadelphia, Pa: Lippincott Williams & Wilkins; 906.

Investigating the Effectiveness of Eye Movement Desensitization and Reprocessing (EMDR) on Children with Post-Traumatic Stress Disorder (Traffic Accident)

- Kazemipour, Maryam (2010) . anxiety and stress <http://..drmkazemipour.com>
- Leahy, Robert, Holland, Stephen. (2000). Plan clinical interventions for depression and anxiety disorders, translation: Sohail Salehi Tehran:
- Mahmoudi Gharaee, J.; Mahmoodi, Mohammad Reza, Fakoor, Joseph, Momtazbakht, Maryam. (2005). The effect of psychosocial support interventions on the symptoms of post-traumatic stress disorder in adolescents affected by the earthquake, the Journal of Pediatrics, (3) 15230-236.
- Mirzaee, J. and Karami, G. (2011). Comprehensive guide to the theory and practice of post-traumatic stress disorder (PTSD). Tehran: Center for Engineering and Medical Sciences veterans.
- Mirzayee, J., and Karami, G.(2007) Textbook of PTSD.Tehran: Bonyad medical research center
- Mohammadi, Leila, Mohammad Khani, P, Dolatshahi, B Golzari, Mahmoud (2010) post-traumatic stress disorder and comorbidity with other disorders in adolescents 11 to 16 years old earthquake-stricken city of Bam. Iranian Journal of Psychiatry and Clinical Psychology, Vol. XVI, No. 3, 194-187.
- Mozaffari, M. (2009). A review of psychological treatments for PTSD, Proceedings of the Third Symposium psychological effects of war, Collector Mohammed Ali Hemmati, fourth edition, Tehran: Glban.

How to cite this article: M Moghaddam, J Khalatbari (2016), Investigating the Effectiveness of Eye Movement Desensitization and Reprocessing (EMDR) on Children with Post-Traumatic Stress Disorder (Traffic Accident), International Journal of Indian Psychology, Volume 3, Issue 3, No. 11, DIP: 18.01.195/20160303, ISBN: 978-1-365-21307-6