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Research Paper

An EMDR group therapy for traumatized former child slaves in India: a pilot randomized controlled trial

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ABSTRACT

Child slavery is a major problem in India: 12% of the children between the age of 5 to 14 years old are forced to work excessively and in unbearable circumstances. These circumstances often involve traumatic events, that may lead to posttraumatic stress disorder (PTSD) and other mental health problems. Adequate treatment of these problems is typically unavailable and the effectiveness of treatments used in Western countries is unclear in Indian youth. The purpose of the current pilot randomized controlled trial is to determine if a protocolized brief Eye Movement Desensitization and Reprocessing (EMDR) group therapy, called the EMDR Group-Traumatic Episode Protocol (G-TEP), can reduce symptoms of PTSD, dysfunctional trauma-related cognitions and depression symptoms in former child slaves with PTSD or partial PTSD. The study was executed in a rehabilitation centre for children liberated from slavery near Jaipur. Based on the Mini-International Neuropsychiatric Interview (MINI), 26 boys between 8 and 18 years who were diagnosed with PTSD or partial PTSD were randomly allocated to an experimental EMDR-condition or a waiting-list control condition. Reductions of PTSD symptoms, dysfunctional trauma-related cognitions and depression symptoms in the EMDR-condition and control condition were not significantly different when controlling for baseline symptom levels. Explanations for the lack of treatment effects include suboptimal circumstances for training and delivery of the treatment, insufficient treatment engagement due to cultural unfamiliarity with psychological treatment or unease with disclosing psychological problems in the participants, and the possibility that participants suffered from complex forms of PTSD for which individual and more comprehensive therapy is indicated. Further studies that remedy these limitations are

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warranted, given the large and continuous need for effective but brief PTSD interventions in India.

Keywords: *EMDR G-TEP Therapy, PTSD, depression, child slavery, India, trauma*

Child slavery is a major problem in India: 12% of the children between the age of 5 to 14 years old are forced to work excessively and in unbearable circumstances (Mathur, Rathore, & Mathur, 2009; Unicef, 2014). These circumstances often involve events that meet the stressor criteria for post-traumatic stress disorder (PTSD) that have been described in the Diagnostic and Statistical Manual of Mental Disorders 5 (DSM-5), i.e., (in)direct exposure to, witnessing or learning that a relative was exposed to a traumatic event such as (threatened) death, injury or sexual violence. This may thus lead to PTSD, that is characterized by intrusion symptoms, avoidance, negative alterations in cognition and mood, and alterations in arousal and reactivity (American Psychiatric Association, 2013). Besides the debilitating PTSD symptoms itself, the disorder may cause impairment in educational and social functioning (Diehle, Schmitt, Daams, Boer, & Lindauer, 2014), and can lead to comorbid disorders such as anxiety, mood, or substance use disorders (Kessler, 2000). PTSD is related to low quality of life and may become chronic in the absence of effective treatment (Mollica et al., 2001; Kessler, 2000). Therefore, there is a strong need for accurate assessment and evidenced-based treatment of PTSD in former child slaves in India.

One of the currently available evidence-based treatments for PTSD is Eye Movement Desensitization and Reprocessing (EMDR) therapy, a protocolized procedure introduced by Francine Shapiro in 1989. In EMDR, working memory is taxed by the dual task of reactivating traumatic memories while making sets of Bi-Lateral Stimulation eye movements. Because the capacity of working memory is limited, the vividness and emotionality of the traumatic memories is reduced and PTSD symptoms will decrease (van den Hout & Engelhard, 2012). Meta-analytic studies suggest that EMDR therapy leads to reductions of PTSD in adults as well as in children and adolescents (Chen et al., 2014; Cusack et al., 2016; Rodenburg et al., 2009).

Although EMDR therapy was originally intended and investigated as an individual therapy, several studies of EMDR in group settings show promising results. In 2014, Elan Shapiro developed the EMDR Group Traumatic Episode Protocol (G-TEP) therapy for adults, adolescents, and older children with PTSD symptoms. Two randomized controlled trials examined the effectiveness of EMDR G-TEP therapy to date (Lehnung, Shapiro, Schreiber, & Hofmann, 2017; Yurtsever et al., 2018). In the first study, a group of 12 Arabic-speaking refugees from Syria and Iraq received two 2-hour sessions of EMDR G-TEP therapy on two consecutive days. Compared to waitlist, this resulted in significantly lower PTSD symptoms and a trend (p = .06) towards lower depression symptoms one week after treatment (Lehnung et al., 2017). In the second study, a group of 18 Syrian refugees received two 4-hour sessions of EMDR G-TEP therapy on three consecutive days. Although repeated-measures analyses revealed no greater reductions of PTSD and depression symptoms after EMDR G-TEP therapy compared to the waiting list control condition, post-hoc tests showed significant reductions of PTSD and depressive symptoms after EMDR G-TEP therapy that were not observed in the waiting list control condition. Also, the percentage of PTSD cases significantly decreased after EMDR G-TEP therapy (from 100.0% to 44.4%) but not after waiting list control condition (from 100.0% to 89.7%), and remained stable during the four-

week follow-up in both study conditions (38.9% and 93.1%, respectively) (Yurtsever et al., 2018).

Its brevity and group format make EMDR G-TEP therapy a potentially interesting treatment in settings with limited resources, such as in the present study. In addition, its group format may help to reduce children's feelings of guilt and shame about their traumatic experiences and PTSD symptoms. The purpose of the current pilot randomized controlled trial was therefore to determine if EMDR G-TEP therapy can reduce PTSD symptoms and dysfunctional trauma-related cognitions in former child slaves with PTSD. In addition, the effect of EMDR G-TEP therapy on comorbid depression symptoms was assessed. The study was executed in a rehabilitation centre near Jaipur, India, called Bal Ashram, where children liberated from slavery are cared for. EMDR G-TEP therapy was expected to result in larger decreases of PTSD symptoms, dysfunctional trauma-related cognitions and depression symptoms compared to a waiting-list control (WLC) condition.

METHODOLOGY

Sample

Participants had to meet the following eligibility criteria: (1) PTSD or partial PTSD according to DSM-IV-TR (i.e., meeting criterion A, B, E and F, plus criterion C or D) (Blanchard, Hickling, Taylor, Loos, & Gerardi, 1994) and (2) age between 8-18 years old. Of the 56 children who lived in the rehabilitation centre at the time of the study, 7 (12.5%) were unable to complete the MINI psychiatric diagnostic interview (Lecrubier et al., 1997) due to scheduling difficulties and 49 (87.5%) completed this interview to evaluate the first eligibility criterion. Of these 49 children, 22 (44.9%) were diagnosed with PTSD and 4 (8.2%) with partial PTSD. Consequently, 26 children met our eligibility criteria and were included in the study. Of these 26 included children, two (7.7%) were offered individual EMDR outside of the study because of severe problems or absence during randomization, and one (3.8%) went home before the treatment took place. As a result, 23 children were randomly allocated (stratified by age) to the experimental (n = 11) or WLC (n = 12) condition and were included in the analysis (see Figure 1 for the flow of participants through the study). All children were boys, whose age did not significantly differ between the experimental (M = 13.55, SD = 2.42) and control (M = 14.50, SD = 2.61) condition (t = -.906, df = 21, p = .375).

Instruments

In addition to the MINI psychiatric diagnostic interview (Lecrubier et al., 1997) described above, the primary outcome variables were posttraumatic stress symptoms and dysfunctional trauma-related cognitions, and the secondary outcome variable was depression symptoms. All outcome variables were assessed by means of self-report measurements.

Posttraumatic stress symptoms were assessed with the Children's Impact of Event Scale-13 (CRIES-13; Children and War Foundation, 1998). The CRIES-13 consists of 13 items that are self-rated on a four-point Likert scale (0 = 'Not at all', 1 = 'Rarely', 2 = 'Sometimes', 3 = 'Often'). In addition to a total score for posttraumatic stress symptoms, it yields subscale scores for intrusion, avoidance, and arousal symptoms. The CRIES-13 and its subscales showed satisfactory internal consistency in children who had experienced the war in Mostar, Bosnia (Smith, Perrin, Dyregrov, & Yule, 2002).

Dysfunctional trauma-related cognitions were assessed with the Child Post-Traumatic Cognitions Inventory (CPTCI; Meiser-Stedman et al., 2009). The CPTCI consists of 25 items that are self-rated on a four-point Likert scale (1 = 'Don't agree at all', 2 = 'Don't agree a bit', 3 = 'Agree a bit', 4 = 'Agree a lot'). In addition to a total score for dysfunctional trauma-related cognitions, it yields subscale scores for 'Disturbing and permanent change' (DPC) and 'Feeble person in a scary world' (FPSW). The CPTCI showed good psychometric characteristics in community and trauma-exposed samples of children and adolescents (Meiser-Stedman et al., 2009).

Depression symptoms were assessed with the Depression Self-Rating Scale for Children (DSRS-C; Birleson, 1981; Birleson, Hudson, Grey-Buchanan, & Wolff, 1987). The DSRS-C consists of 18 items that are self-rated on a three-point Likert scale (0 = 'Never', 1 = 'Sometimes', 2 = 'Mostly') and showed good psychometric characteristics in depressed children (Birleson, 1981).

Hindi translations of the CRIES-13, CPTCI and DSRS-C were developed using a formal translation (into Hindi) and back-translation (into English) process, after which discrepancies between the original and back-translated English versions were resolved through discussion. A preliminary psychometric analysis showed varying, but predominantly positive psychometric qualities (Cronbach's α = .69, .77, and .60 respectively; Daemen, Dekker, Khubsing, Hendriks, & van Emmerik, in preparation).

Procedure

Prior to the study, all children were informed and were given permission by the rehabilitation centre and their caretakers to participate in this study. To maximize homogeneity in age within each treatment group, children in the experimental condition were ranked according to their age and divided into three treatment groups of ascending age that each received EMDR G-TEP therapy. EMDR G-TEP therapy consisted of two sessions of 60 to 90 minutes that were scheduled three days apart and was provided by a Dutch government-licensed clinician and experienced EMDR therapist (1st author) who was trained by the originator of EMDR G-TEP therapy (5th author). During the first session, EMDR G-TEP therapy progressed through seven steps, including (1) the drawing of a place where the child felt safe or calm on a worksheet using colored pencils, (2) making a drawing related to the onset of the traumatic episode, (3) making a drawing of a positive memory, (4) formulating a positive future thought about the child and about the traumatic episode, (5) the identification and reprocessing of a Point of Disturbance (residual trauma memory relating to the trauma episode), desensitizing it with self Bi-Lateral Stimulation performed by alternatingly tapping on the drawings of the safe place and the traumatic episode on the worksheet with their hands, following this with their eyes, for 9 sets of 20 back and forth taps with eye movements. This is repeated for up to three trauma memories per session, (6) checks of the current level of distress are made after each three sets, and (7) completion of the session. The second session started with a check of the current level of distress, and then continued with the steps on the worksheet, identifying up to three additional residual Points of Disturbance and reprocessing them (see Lehnung et al. [2017] for a more detailed description of the treatment). Directly after the last treatment session, participants in both study conditions completed the follow-up questionnaires (see Figure 1). Time between the eligibility assessment and randomization was 3 to 5 days, and between randomization and follow-up 3 days.

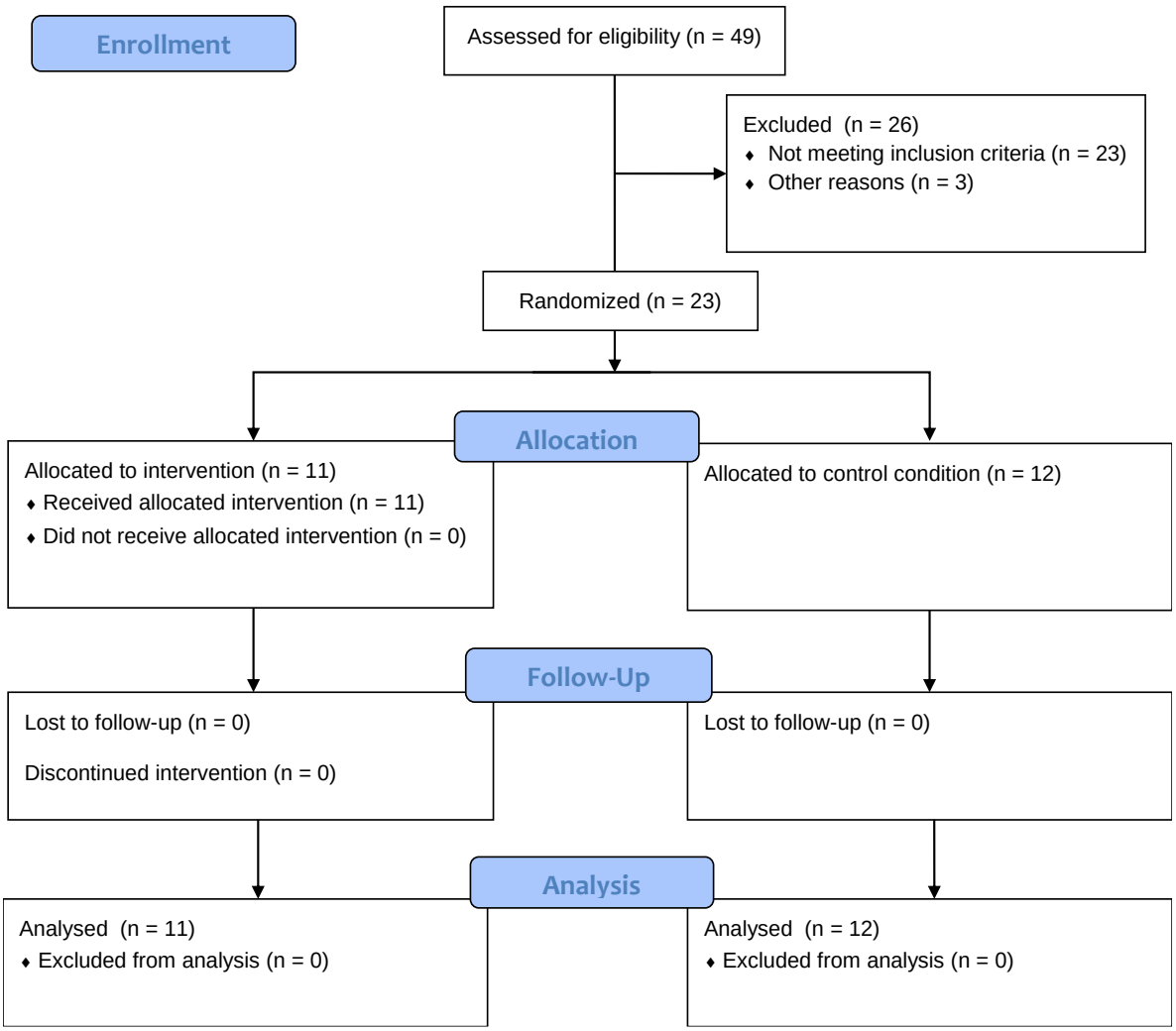

Figure No. 1 Flow of participants through the study.

Data Analyses

All analyses were performed in SPSS version 24 (IBM Corp., 2016). Considering the small sample size, the differences in changes of PTSD symptoms, dysfunctional trauma-related cognitions and depression symptoms were compared by means of a multilevel analysis. Since this technique uses maximum likelihood estimation in the case of missing data, all the available data can be used without the need to resort to listwise deletion (Enders, 2011).

RESULTS

When controlling for the pretest scores, we found no significant differences between the EMDR G-TEP therapy condition and the WLC condition on the total scales or the subscales of the CRIES-13, CPTCI, and DSRS-C at follow-up (see table 1). On the CRIES-13 Avoidance subscale, the EMDR G-TEP therapy condition showed lower scores than the WLC condition at follow-up, but this finding was not significant anymore after a post-hoc Bonferroni correction.

Table No. 1 Multilevel Analysis of Differences between the EMDR G-TEP Therapy Condition and the Control Condition at Follow-up Controlling for Pretest Scores.

Instrument	EMDR G-TEP		WLC		Test statistic
	Pretest	Follow-up	Pretest	Follow-up	
	M (SD)	M (SD)	M (SD)	M (SD)	
CRIES-13					
Total	21.52 (13.46)	21.85 (12.21)	35.18 (11.94)	33.09 (14.34)	F (1, 21) = 1.83, p = .19
Intrusion	5.73 (5.02)	7.00 (3.85)	8.79 (5.85)	7.91 (5.07)	F (1, 22) = 0.00, p = .96
Avoidance	8.09 (6.24)	7.03 (5.81)	13.00 (4.97)	13.86 (7.21)	F (1, 21) = 4.99, p = .04
Arousal	7.73 (5.87)	7.82 (7.37)	12.90 (5.00)	11.27 (5.52)	F (1, 21) = 0.14, p = .72
CPTCI					
Total	52.94 (12.55)	51.01 (11.47)	68.19 (9.32)	60.92 (11.03)	F (1, 21) = 1.57, p = .22
DPC	27.82 (7.24)	25.80 (5.76)	35.13 (7.60)	30.28 (5.25)	F (1, 21) = 1.27, p = .27
FPSW	25.15 (6.19)	25.22 (7.34)	33.11 (5.20)	30.67 (7.51)	F (1, 21) = 0.18, p = .67
DSRS-C					
Total	12.52 (4.83)	10.41 (5.05)	12.58 (4.39)	13.75 (6.40)	F (1, 21) = 2.74, p = .11

Note. WLC = waiting-list control. CRIES-13 = Children's Impact of Event Scale-13. CPTCI = Child Post-Traumatic Cognitions Inventory. DPC = Disturbing and Permanent Change. FPSW = Feeble Person in a Scary World. DSRS-C = Depression Self-Rating Scale for Children.

DISCUSSION

In this pilot randomized controlled trial, a group EMDR treatment (EMDR G-TEP therapy) was tested in 23 former child slaves in India meeting criteria for PTSD or partial PTSD. Unexpectedly, EMDR G-TEP therapy did not result in larger reductions of PTSD symptoms (including dysfunctional trauma-related cognitions) or depression symptoms compared to the WLC condition when controlling for pretest scores.

There are a number of limitations that may explain the lack of effect of EMDR G-TEP therapy in our population. First, the children received two group EMDR sessions of 60 to 90 minutes. Although in previous studies the same quantity of EMDR G-TEP therapy sessions resulted in lower PTSD and depression symptoms and less PTSD cases at follow-up (Lehnung et al., 2017; Yurtsever et al., 2017), this number of sessions may have been insufficient for the present population. Also, individual trauma treatment was shown to be more effective in reducing the trauma symptoms when compared to a group setting (Watts et

al., 2013). Second, the efficacy of this protocol was demonstrated in adult samples and the traumas of our younger sample were complex and originated at a young age. Therefore, this intervention may have been insufficient considering the young age and severe trauma history of our sample. Third, several cultural factors may have complicated the study. Since Hindi is spoken in many different dialects in India and some participants needed help in completing the questionnaires because they had not yet learned how to read at the time of the study, language problems may have played a role. Additionally, mental illness is still a taboo in India and our participants may have been reluctant to report or discuss their symptoms. Specifically, some participants said that they were grateful for finally living in a safe environment and for receiving education and did not want to 'complain' by reporting mental health problems. Fourth, the circumstances under which this study was executed were suboptimal. Because of practical reasons, the therapist (a Dutch government-licensed clinician who was well-trained in individual EMDR) was only able to follow an abbreviated online version of the training, instead of the regular two-day face-to-face training in EMDR G-TEP therapy. Furthermore, due to limited resources, the treatment process was not monitored by a second therapist as suggested in the original protocol, treatment fidelity could not be formally evaluated, and long-term outcomes could not be measured.

Although the hypotheses of this pilot study were not confirmed, we think further research of EMDR G-TEP therapy in former child slaves and other traumatized children in India is nevertheless warranted. Since this study was executed, a new simplified version of EMDR G-TEP therapy has been developed, called the Worksheet Protocol. It uses non-technical language, has optional analogue scales for non-readers and is more suitable for children. Also, in the first phase of this protocol, a thorough screening is included separately from the intake, to indicate for whom the group format may be suitable and who needs individual and more intensive attention. Therefore, this new protocol could be better suitable for the sample and circumstances in the current study.

Building on the first experiences of this pilot study, further research should consider including a larger number of treatment sessions, the option of additional individual sessions, involving a second therapist, and providing extensive training and supervision in delivery of the treatment. Lastly, one could debate on the efficacy of individual versus group trauma therapy within this context and sample. Future comparative research should clarify who could benefit most from which kind of treatment, in a context where there are large numbers in need, but resources are limited. And most importantly, a tremendous need for empirically supported treatments for traumatized Indian children remains.

REFERENCES

American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.

Barman, B., & Barman, N. (2014). A study on child working population in India. *IOSR Journal of Humanities and Social Science, 19*(2), 1-5.

Birleson, P. (1981). The validity of depressive disorder in childhood and the development of a self-rating scale: A research report. *Journal of Child Psychology and Psychiatry, 22*, 73-88.

Birleson, P., Hudson, I., Grey-Buchanan, D., & Wolff, S. (1987). Clinical Evaluation of a Self-Rating Scale for Depressive Disorder in Childhood (Depression Self-Rating Scale). *Journal of Child Psychology and Psychiatry, 28,* 43-60.

Blanchard, E. B., Hickling, E. J., Taylor, A. E., Loos, W. R., & Gerardi, R. J. (1994). The psychophysiology of motor-vehicle accident related posttraumatic stress disorder. *Behavior Therapy*, *25*, 453-467.

Bradley, R., Greene, J., Russ, E., Dutra, L., & Westen, D. (2005). A multidimensional meta-analysis of psychotherapy for PTSD. *American Journal of Psychiatry*, *162*(2), 214-227.

Cassel, J. (1976). The contribution of the social environment to host resistance. *American Journal of Epidemiology, 104*, 107-123.

Cobb, S. (1976). Social support as a moderator of life stress. *Psychosomatic Medicine, 38,* 300-314.

Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, *98*(2), 310-357.

Cusack, K., Jonas, D. E., Forneris, C. A., Wines, C., Sonis, J., Middleton, J. C., ... Weil, A. (2016). Psychological treatments for adults with posttraumatic stress disorder: A systematic review and meta-analysis. *Clinical Psychology Review*, *43*, 128-141.

Chen, Y. R., Hung, K. W., Tsai, J. C., Chu, H., Chung, M. H., Chen, S. R., ... Chou, K. R. (2014). Efficacy of eye-movement desensitization and reprocessing for patients with posttraumatic-stress disorder: A meta-analysis of randomized controlled trials. *PLoS One*, *9*(8), e103676.

Children and War Foundation (1998). *The Children's Impact of Event Scale (13).* Retrieved from http://www.childrenandwar.org/measures/children's-revised-impact-of-event-scale-8-–-cries-8/ies13/

Daemen, I. K. S., Dekker, J. J. M., Khubsing, R. S. I., Hendriks, L., & van Emmerik, A. A. P. (in preparation). Development and preliminary psychometric characteristics of three Hindi self-report questionnaires for posttraumatic stress, depression, and trauma-related cognitions in children.

Diehle, J., Schmitt, K., Daams, J. G., Boer, F., & Lindauer, R. J. (2014). Effects of psychotherapy on trauma-related cognitions in posttraumatic stress disorder: A meta-analysis. *Journal of Traumatic Stress*, *27*(3), 257-264.

Edmond, T., & Rubin, A. (2004). Assessing the long-term effects of EMDR: Results from an 18-month follow-up study with adult female survivors of CSA. *Journal of Child Sexual Abuse*, *13*(1), 69-86.

Enders, C. K. (2011). Missing not at random models for latent growth curve analyses. *Psychological Methods*, *16*, 1-16.

Foa, E. B., Ehlers, A., Clark, D. M., Tolin, D. F., & Orsillo, S. M. (1999). The Posttraumatic Cognitions Inventory (PTCI): Development and validation. *Psychological Assessment, 11,* 303-314.

Harter, S., Marold, D. B., Whitesell, N. R., & Cobbs, G. (1996). A model of the effects of perceived parent and peer support on adolescent false self-behavior. *Child Development*, *67*(2), 360-374.

IBM Corp. (2016). *IBM SPSS Statistics for Windows, Version 24.0.* Armonk, NY: IBM Corp.

Kessler, R. C. (2000). Posttraumatic stress disorder: the burden to the individual and to society. *Journal of Clinical Psychiatry*, *61,* 4-12.

Kimuna, S. R., Djamba, Y. K., Ciciurkaite, G., & Cherukuri, S. (2013). Domestic violence in India: Insights from the 2005-2006 national family health survey. *Journal of Interpersonal Violence*, *28*(4), 773-807.

King, D. W., Taft, C., King, L. A., Hammond, C., & Stone, E. R. (2006). Directionality of the association between social support and posttraumatic stress disorder: A longitudinal investigation. *Journal of Applied Social Psychology*, *36*(12), 2980-2992.

Lecrubier, Y., Sheehan, D. V., Weiller, E., Amorim, P., Bonora, I., Sheehan, K. H., ... Dunbar, G. C. (1997). The Mini International Neuropsychiatric Interview (MINI). A short diagnostic structured interview: reliability and validity according to the CIDI. *European Psychiatry*, *12*(5), 224-231.

Lehnung, M., Shapiro, E., Schreiber, M., & Hofmann, A. (2017). Evaluating the EMDR Group Traumatic Episode Protocol with refugees: A field study. *Journal of EMDR Practice and Research*, *11*(3), 129-138.

Mathur, M., Rathore, P., & Mathur, M. (2009). Incidence, type and intensity of abuse in street children in India. *Child Abuse & Neglect*, *33*(12), 907-913.

Meiser-Stedman, R., Smith, P., Bryant, R., Salmon, K., Yule, W., Dalgleish, T., & Nixon, R. D. (2009). Development and validation of the child post-traumatic cognitions inventory (CPTCI). *Journal of Child Psychology and Psychiatry*, *50*(4), 432-440.

Mollica, R. F., Sarajlić, N., Chernoff, M., Lavelle, J., Vuković, I. S., & Massagli, M. P. (2001). Longitudinal study of psychiatric symptoms, disability, mortality, and emigration among Bosnian refugees. *JAMA*, *286*(5), 546-554.

Rodenburg, R., Benjamin, A., de Roos, C., Meijer, A. M., & Stams, G. J. (2009). Efficacy of EMDR in children: A meta-analysis. *Clinical Psychology Review*, *29*(7), 599-606.

Shapiro, F. (1989). Efficacy of the eye movement desensitization procedure in the treatment of traumatic memories. *Journal of Traumatic Stress*, *2*, 199-223.

Smith, P., Perrin, S., Dyregrov, A., & Yule, W. (2003). Principal components analysis of he impacts of event scale with children in war. *Personality and Individual Differences*, *34*(2), 315-322.

UNICEF (2014). *The state of the world's children 2014 in numbers: Every child counts*. Retrieved from https://www.unicef.org/publications/index_71829.html

Van den Hout, M. A., & Engelhard, I. M. (2012). How does EMDR work? *Journal of Experimental Psychopathology*, *3*(5), 724-738.

Watts, B. V., Schnurr, P. P., Mayo, L., Young-Xu, Y., Weeks, W. B., & Friedman, M. J. (2013). Meta-analysis of the efficacy of treatments for posttraumatic stress disorder. *Journal of Clinical Psychiatry*, *74*(6), e541-e550.

Wilson, S. A., Becker, L. A., & Tinker, R. H. (1995). Eye movement desensitization and reprocessing (EMDR) treatment for psychologically traumatized individuals. *Journal of Consulting and Clinical Psychology*, *63*(6), 928-937.

Yurtsever, A., Konuk, E., Akyüz, T., Zat, Z., Tükel, F., Çetinkaya M., Savran, C., & Shapiro, E. (2018). An Eye Movement Desensitization and Reprocessing (EMDR) group intervention for Syrian refugees with post-traumatic stress symptoms: Results of a randomized controlled trial. *Frontiers in Psychology*, *9*, 493.

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Conflict of Interest

The authors declared no conflict of interest.

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