Supplementary Table 1. . Summary of Meta-Analytic Studies Supporting the Effectiveness of EMDR in Treating PTSD.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Authors** | **Year** | **Aims** | **Design** | **Number of Studies** | **Interventions Evaluated** | **Outcomes** |
| Cuijpers, et al | 2020 | To conduct a comprehensive evaluation of EMDR for any mental health problem in all age groups. | Systematic review and meta-analysis | 77 | The use of EMDR aimed at any mental health problem and compared to a control condition or alternative treatment.  All age groups where evaluated.  Risk of bias was also evaluated.  Outcome measures reassessed and small sample sizes corrected for sample bias. Dismantling studies which compared full EMDR with partial EMDR, in which one component was removed. | EMDR had a large effect when compared to control conditions in the short-term for PTSD.  EMDR was found to be significantly more effective than other therapies in the treatment of PTSD; however, there are some limitations as the results included studies that were deemed to have a risk of bias. |
| Lewis, et al | 2020 | To determine the efficacy and effect sizes of manualized therapies for PTSD. | Systematic review and meta-analysis | 114 (RCTs),  8171 participants | Analysis was carried out under the Cochrane Collaboration review manager software.  A risk of bias assessment was done for all included studies.  The interventions were rated for clinical importance using a definition which relied on predefined effect sizes of various arms. | EMDR and CBT-T showed the strongest level of evidence for treating PTSD.  There were many more RCTs of EMDR and CBT-T than of other interventions that did not have a trauma focus. |
| Roberts, et al | 2019 | To establish the current evidence for the effectiveness of multiple session early psychological interventions aimed at preventing or treating traumatic stress symptoms within three months of trauma exposure. | Systematic review and meta-analysis | 57 (meta-analysis) and 61 (systematic review) | Randomized control trials of early multiple sessions of psychological interventions aimed at preventing or reducing traumatic stress symptoms in vulnerable individuals that have experienced trauma. | EMDR and other relevant psychotherapies did significantly better than waitlist/usual care at reducing traumatic stress symptoms for symptomatic individuals.    There was poor evidence that interventions aimed at everyone, irrespective of whether they were symptomatic or not, was effective.    EMDR had the largest effect in 4 small studies.    EMDR and CBT-T offered within 2 to 4 weeks of trauma showed the most significant benefits. |
| Tran, et al | 2016 | To evaluate current research on relative treatment efficacy with regard to methodology and efficacy of treatments for PTSD. | Advanced meta-analysis | 22 | Treatments were categorized into specific types based on the references given and descriptions. These categories were in line with previous meta-analyses done in this area.  Sensitivity analysis and analysis for publication bias was also carried out. | Trauma focused treatments, including EMDR, were slightly more efficacious than other therapies in the treatment of PTSD.  Treatment differences were at most small and far below proposed the thresholds of clinically meaningful differences. |
| Chen, et al | 2014 | To examine the findings of clinical studies reported between 1991-2013, that have investigated the effects of EMDR therapy on the symptoms of PTSD, depression, anxiety, and subjective distress in PTSD patients. | Meta-analysis | 26 | EMDR administered by trained professionals.    Assessment of clinical outcomes included an adequate statistical analysis of the effect size.    Analysis of publication bias was also carried out.    Analysis of pooled effect sizes was carried out using sensitivity analysis. | EMDR group therapy resulted in significant improvement in patients with PTSD.    Overall reduction in PTSD symptoms following EMDR therapy was significant with moderate effect size. The effects of EMDR on depression and anxiety were also moderate. The effect was large for subjective distress.    EMDR improves self-awareness in participants.    Effect sizes determined EMDR as the optimal type of psychotherapy for PTSD patients. |
| Watts, et al | 2013 | To examine the efficacy of all treatments for PTSD. | Meta-analysis | 112 | Comparisons were made between treatment categories (psychotherapy, somatic, or medication) and control.    Publication bias was also evaluated for. | EMDR and CBT were the most studied psychotherapy interventions and were both found to be effective.    There was some possibility of publication bias noted for psychotherapy interventions, particularly when the results were positive. |
| Lee, et al | 2013 | To examine current published studies to test whether eye movements significantly affect the processing of distressing memories. | Meta-analysis | 24 | 14 of the studies, which comprised 15 trials, were treatment studies comparing EMDR that included eye movements with similar treatment without eye movements.    10 of the studies, which comprised 11 trials, were laboratory studies comparing eye movements with no eye movements with a focus on autobiographical memory. | There was an average significant medium effect size advantage for eye movements over no eye movements, which was at odds with the results from a meta-analysis by Davidson & Parker (2001).    In a nontreatment laboratory context, 10 studies showed a significant medium-to-large effect size advantage for eye movement over non-eye movements.    Some of the effect size may depend on the quality of treatment delivery. |
| Rodenburg, et al | 2009 | To analyze studies that have examined the effects of EMDR in children with post traumatic stress symptoms. | Meta-analysis | 7 | There was an analysis of possible variables that could be significant in the impact of results and variance with posttreatment sizes. | Children experienced significant improvements in PTSD symptoms following EMDR, with the overall posttreatment effect size for EMDR being medium and significant.  Results indicate the efficacy of EMDR when effect sizes are based on comparisons between the EMDR and non-established trauma treatment or no-treatment control groups. Efficacy is also incremental when compared with established treatments. |
| Bradley, et al | 2005 | To present a multidimensional meta-analysis from controlled trials of psychotherapy for PTSD. | Meta-analysis | 28 | Number of participants, inclusion rates of participants, exclusion criteria, study completion rates, rate of diagnostic changes, improvement rates, and mean posttreatment symptom level. | A variety of treatments, including EMDR, are highly efficacious in reducing PTSD symptoms.    There is uncertainty as to what extent treatments are effective for polysymptomatic patients with repeated childhood traumas. |
| Seidler, et al | 2006 | To compare the efficacy of EMDR and CBT for individuals with PTSD. | Systematic review and meta-analysis | 8 (7 for meta-analysis) | Individual study effect sizes were weighted and studies with larger sample sizes were more strongly weighted.    All studies also evaluated comorbid depressive symptoms.    Direct pre- and post-treatment effect sizes were compared between the two interventions. | Both EMDR and CBT were found to be effective in the treatment of PTSD.    The study was not able to determine if either of these therapies was more efficacious than the other.    Notably, there was a lack of studies directly comparing EMDR and CBT. |
| Maxfield, et al | 2002 | To examine the relationship between efficacy and methodology in studies investigating EMDR treatment of PTSD. | Meta-analysis | 12 | All studies were reviewed and where information was incomplete or unclear, researchers were contacted to ensure accuracy.    Two of the three raters were blind to the purposes of the study.    Pre- and post-effect sizes with comparison of the effect sizes were analyzed and calculated. Regression analysis was also conducted to determine the significance between outcome and methodology. | Studies with more rigorous methodology showed larger effect sizes, indicating that EMDR is an efficacious treatment for PTSD. |
| Davidson, et al | 2001 | To quantify the size of the effect of EMDR by  combining the results of several studies. | Meta-analysis | 34 | EMDR was compared with a number of different control conditions which were grouped into seven categories (pre-/post-EMDR scores, no treatment/waitlist, cognitive behavioral therapy, exposure imagination by video, EMDR procedure eliminating eye movement, other dismantling design study, and nonspecific treatments, such as applied relaxation biofeedback and active listening). | Individuals receiving interventions are better off with EMDR compared to no treatment and pretreatment status. This result was reproduced across studies.    There is no solid evidence that EMDR is more or less effective in some populations than in others. |