

Change in posttraumatic cognitions following trauma-focused treatment in youth: secondary analysis of the MARS randomised controlled trial

Objectives

Posttraumatic stress disorder (PTSD) in youth leads to significant impairment in school, family, and peer functioning. Cognitive models suggest that persistent PTSD symptoms are maintained by negative posttraumatic beliefs, such as negative views of oneself, the world, and self-blame. While trauma-focused treatments effectively reduce posttraumatic stress symptoms, little is known about how these treatments affect posttraumatic cognitions. Furthermore, initial levels of negative cognition may predict poorer treatment outcomes and help identify those who need additional support. This study used secondary data from the MARS randomised controlled trial (RCT) to investigate cognitive changes during trauma-focused therapy in youth with PTSD. It aims to assess (1) changes in trauma-related cognitions pre- to post-treatment and (2) which cognitive domains exhibit the most significant changes.

Methods

This secondary analysis drew on data from the MARS RCT, including 76 participants (aged 12–18 years) diagnosed with PTSD following multiple interpersonal traumas. Participants received either 12 sessions of EMDR therapy or 12 sessions of skills training (STAIR-A) followed by 12 sessions of EMDR therapy. Posttraumatic cognitions were assessed pre- and post-treatment using the Child Post-Traumatic Cognitions Inventory (CPTCI), providing a total score and subscale scores for permanent and disturbing change (CPTCI-PC), and the subscale fragile person in a scary world (CPTCI-SW). Analyses included linear mixed-effects models to assess changes in posttraumatic cognitions and comparisons of effect sizes across domains.

Results

Posttraumatic cognitions significantly decreased from pre- to post-treatment across both trauma-focused conditions, supporting the hypothesis that treatment is associated with a reduction in maladaptive trauma-related beliefs. For post-traumatic cognition in total, there was a significant main effect of time, $F(1, 47.576) = 78.754$, $p < .001$. Similar effects were found for the CPTCI-PC subscale, $F(1, 48.431) = 81.479$, $p < .001$, and CPTCI-SW subscales, $F(1, 48.026) = 57.232$, $p < .001$. No significant condition $\times$ time interactions were observed ($ps = .175-.332$), and no main effects of the treatment condition emerged ($ps = .187-.456$), indicating comparable improvements in both groups. Overall, the results indicate robust pre-post reductions in posttraumatic cognitions, with no evidence of differential change between treatment conditions.

Conclusion

Findings indicate that posttraumatic cognitions significantly decrease following trauma-focused treatment in youth with PTSD, with improvements observed across self-related and world-related domains. These cognitive changes were not significantly different between the treatment conditions, suggesting that both STAIR+EMDR and EMDR alone are similarly effective in reducing maladaptive trauma-related beliefs. Domain-specific insights support more tailored interventions, particularly in the case of negative self-appraisals. These findings underscore the clinical relevance of targeting trauma-related cognitions in youth PTSD treatment and support their role as meaningful process markers of recovery.