Handbook of Research on Child and Adolescent Psychology Practices and Interventions

Sanjeev Kumar Gupta
All India Institute of Speech and Hearing, India

A volume in the Advances in Psychology, Mental Health, and Behavioral Studies (APMHBS) Book Series

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Chapter 16
Eye Movement Desensitization and Reprocessing Therapy in Children Experiencing Mental Health Challenges

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ABSTRACT

This chapter provides a comprehensive overview of eye movement desensitization and reprocessing (EMDR) therapy in the context of childhood mental health issues. It explores the origins, principles, and therapeutic mechanisms of eye movement desensitization and reprocessing therapy. One of the keys focuses of this chapter has been the adaptation of this therapy for children. Finally, this chapter emphasizes the importance of training and supervision for therapists working with EMDR therapy among children, as well as the need for further research and development in this field. This chapter concluded that eye movement desensitization and reprocessing therapy has emerged as a widely accepted and effective treatment approach for addressing mental health problems among children. By incorporating this therapy into their practice, mental health professionals can provide evidence-based interventions to help children overcome mental health challenges and promote their overall well-being.

1. EVIDENCE-BASED PSYCHOTHERAPIES AND CRITICISMS ON THEIR USE AMONG CHILDREN

Evidence-based psychotherapies have emerged as foundations of effective mental healthcare interventions for managing various mental health problems among children. Evidence-based psychotherapies are supported by rigorous research and empirical data, provide systematic frameworks for understanding

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and treating psychological disorders (Connolly Gibbons et al., 2016). With the advent of evidence-based psychotherapies as foundations of therapeutic tactics, the field of children's mental healthcare has seen a paradigm shift. It is because modern evidence-based psychotherapies recognizes the unique psychological needs of children. Thus Evidence-based psychotherapies, which are based on a plethora of rigorous research and empirical data, can provide not just clinically proven treatments, but also comprehensive frameworks for understanding and treating psychological illnesses in children.

While evidence-based psychotherapies have demonstrated efficacy through their clinical evidence and rigorous research approach, some critics argue that the standardized nature of these interventions might not fully accommodate the diverse needs of individual children (Cook, Schwartz, & Kaslow, 2018). It is mostly because the over emphasis of evidence-based psychotherapies on empirical evidence could inadvertently overshadow the importance of factors such as cultural sensitivity, socioeconomic context, and family dynamics that play a pivotal role in shaping a child's mental health experience (Ratnani et al., 2023).

There is an emerging imperative to proactively address gaps at various levels in the successfully implementation of evidence-based psychotherapies in the field of Child Psychology, orchestrating the harmonious interplay of diverse paradigms within the realm of Evidence-Based treatments. The voids that have materialized in the practice of Evidence-Based treatments, owing to the rapid integration of cutting-edge technology, the fusion of data science, and the infusion of Artificial Intelligence into the realm of medicine, are exerting a tangible impact on the educational trajectory of physicians in training. As a result, a domino effect is eroding the foundation of trust in the healthcare ecosystem. However, a promising avenue lies ahead: through the integration of novel scientific frameworks, there are potential to empower the next generation of psychologists by, infusing their learning journey with modern evidence-based treatments.

2. INTRODUCTION TO EYE MOVEMENT DESENSITIZATION AND REPROCESSING THERAPY

2.1 The Origin and Evolution of Eye Movement Desensitization and Reprocessing Therapy

Eye Movement Desensitization and Reprocessing therapy (EMDR) is a modern evidence-based psychotherapy discovered and developed by the famous American psychologist Dr. Francine Shapiro in the late 1980s (Rosen, 2023). This psychotherapy has gained global acceptance as an effective treatment for people who have been through traumatic events as well as those suffering from a variety of other psychiatric problems such as Anxiety & Depressive Disorders (Wajid & Gauhar, 2021), Substance Abuse Disorder (Tcheshmedjiev & Farrell, 2023) and Obsessive-Compulsive Disorder (Scelles & Bulnes, 2021). EMDR therapy combines cognitive therapy, exposure therapy, and bilateral stimulation to assist patients in processing their painful memories and reducing the negative impact of traumatic previous experiences.

EMDR therapy has its roots in the late 1980s, when it was accidentally discovered by Dr. Francine Shapiro. According to Dr. Francine Shapiro she was struggling with personal problems in the year 1987 when she went for an evening walk to a local park to clear her distressful thoughts. During her walk, she noted that as she moved her eyes quickly from one side to the other side, her own unpleasant thoughts and feelings began to vanish. Upon this discovery she began to experiment with deliberately shifting her

eyes while focused on various upsetting memories and discovered that it helped to diminish the intensity of her negative sensations (Shapiro, 1989). Dr. Francine Shapiro subsequently refined her discovery and created a therapeutic strategy based on the link between eye movements and the processing of traumatic memories. She coined the term "Eye Movement Desensitization" and later added "Reprocessing" to indicate the larger purpose of assisting individuals in processing and integrating traumatic experiences (Shapiro, 2001).

Since its discovery, the EMDR therapy has gone through additional research investigations, refinements, and standardization. Numerous research studies have documented its efficacy, and professional organizations such as the American Psychiatric Association and the World Health Organization have acknowledged it as a modern evidence-based psychotherapy for the treatment of trauma-related and other mental health disorders (Tyler, 2023).

Dr. Francine Shapiro initially developed the Adaptive Information Processing Model during her study on EMDR therapy as an explanation for the effectiveness of her newly developed therapy (Hase, Balmaceda, Ostacoli, Liebermann, & Hofmann, 2017). According to the Adaptive Information Processing Model, trauma-related symptoms are the outcome of unprocessed memories and thoughts, which emerged after experiencing traumatic events. The traumatic events, according to the model, might overwhelm the brain's natural information processing machinery, resulting in the assimilation and integration of incomplete distressing memories. The Adaptive Information Processing Model further states that the brain has an innate ability for adaptive processing, which entails transforming distressing experiences into more adaptable, integrated, and resolved memories (Leeds, 2016). Based on the Adaptive Information Processing Model model, EMDR therapy seeks to aid the reprocessing of traumatic memories by engaging the brain's natural adaptive processes through bilateral stimulation, such as eye movements.

Over time researchers have studied the neurobiological underpinnings behind EMDR therapy. Neuroimaging studies e.g., (Levin, Lazrove, & van der Kolk, 1999; Lansing, Amen, Hanks, & Rudy, 2005; and Pagani, Högberg, Fernandez, & Siracusano, 2013) have revealed that bilateral stimulation during the therapy activates areas of the brain related with memory processing, such as the prefrontal cortex and the hippocampus. These findings supported the idea that EMDR therapy aids in the reprocessing of traumatic memories.

2.2 Overview of Basic Principles, and Therapeutic Mechanisms of Eye Movement Desensitization and Reprocessing Therapy

Several fundamental principles are involved in the core concepts of EMDR therapy (Shapiro & Solomon, 2018; Hensley, 2020):

a) *Information Processing Model:* EMDR therapy is founded on the premise that unprocessed memories generate psychological disorders. The unprocessed memories get "stuck" or erroneously preserved in the brain, causing emotional and behavioral problems. EMDR therapy seeks to aid in the adaptive processing of these memories, allowing the individual to integrate them into a healthier, more adaptive perspective.
b) *Dual Attention Stimulus*: EMDR therapy employs various bilateral stimulation techniques such as eye movements, auditory tones and tactile stimuli for exciting both hemispheres in brain. Such bilateral stimulations are thought to imitate the brain's normal rapid eye movement sleep period, during which memories are processed and consolidated.

c) *Targeting Disturbing Memories:* EMDR therapy primarily focuses on distressing and traumatic memories or thoughts. Such memories are known as "targets." The therapist assists the patients in identifying these target memories that have contributed to their discomfort and then guides them through the bilateral stimulation method for reprocessing these memories.
d) *Cognitive Interweaves:* During the therapeutic process, the patients sometimes get stuck in processing their memories. The therapists help their patients resolve their blocks by introducing alternative thoughts, and beliefs, which challenge the dysfunctional aspects of their memory. This technique is known as cognitive interweaves. Cognitive interweaves technique allows the therapist to offer alternative suggestions and prompting to their patients to explore various areas of their memories and consider other views. The purpose is to assist patients in gaining fresh perspectives, resolving disputes, and facilitating the adaptive processing of traumatic memories.
e) *Eight-Phase Protocol:* The entire process of EMDR therapy is guided by an eight-phase methodology, that is, history taking, preparation, assessment, desensitization, installation, body scan, closure, and reevaluation. Each step has its own set of objectives and procedures to ensure a thorough and organized treatment approach.

While the exact working mechanisms of EMDR therapy remains unknown, and various research studies have been carried out to explain its ultimate therapeutic effects. Some of the key mechanisms reported to be involved in EMDR therapy are as under (Bergmann, 2012; Landin-Romero, Moreno-Alcazar, Pagani, & Amann, 2018 and Hase, 2021):

a) *Dual Attention and Working Memory*: EMDR therapy employs a dual attention activity, which often involves horizontal eye movements, auditory tones, and tactile stimuli, while focusing on traumatic memories. The load of dual attention and texting of working memory are believed to impede typical traumatic memory processing by enabling adaptive information processing.
b) *Desensitization*: EMDR therapy gradually reduces the distress traumatic memories through repeated participation of bilateral stimulation (such as eye movements). This process is remarkably like the exposure therapy in which the therapist tries to reduce the emotional intensity of traumatic memories.
c) *Reprocessing*: The goal of EMDR is to aid in the reprocessing of traumatic memories, allowing for the integration of fresh information and adaptive beliefs. This process entails connecting the painful memories to more adaptive and good thoughts or memories. The use of bilateral stimulation in EMDR therapy is thought to improve the brain's ability to process information, resulting in the resolution of the traumatic memory.
d) *Memory Reconsolidation*: EMDR therapy may influence the reconsolidation of memories, which is basically a dynamic process by which memories are stored and modified when they are recalled. EMDR therapy may assist memory transformation and reconsolidation by accessing traumatic memories while asking the patients to participate in bilateral stimulation, which can result in the reduction of distressful memories.
e) *Physiological Arousal Regulation:* Through the EMDR therapy, the therapists can teach their patients how to control their physiological arousal in reaction to painful memories. Patients can learn to adjust their emotional and physiological reactions by repeated application of bilateral stimulations, which can help them to regularize their emotions.

f) *Cognitive Restructuring:* EMDR therapy employs cognitive restructuring strategies to question and replace negative cognitions, which are connected to their traumatic memory. EMDR therapy seeks to promote psychological healing by addressing maladaptive thoughts and replacing them with more adaptive thoughts.

3. UNDERSTANDING CHILDHOOD MENTAL HEALTH PROBLEMS

3.1 Overview of Mental Health Issues Among Children

Over the past few years, there has been an increasing awareness about the significance of children's mental health. It is because the emotional well-being and psychological development of children significantly impact their overall growth and success in life. Unfortunately, mental health problems among children are becoming more common, presenting a serious burden for individuals, families, and society as a whole. Children, like adults, can suffer from a variety of mental health problems, however, it is crucial to remember that their symptoms may differ from those of adults, and some mental health problems are more typically recognized in infancy.

Below is a comprehensive overview of various prevalent mental health challenges frequently encountered by children (Viner, 2013; Ma et al., 2021; Engler, Sarpong, Van Horne, Greeley, & Keefe, 2022; and CDC, 2023):

a) *Anxiety Disorders:* Children can experience different anxiety disorders like generalized anxiety, separation anxiety, social anxiety, and specific phobias. These lead to excessive worry, fear, and avoidance of situations, and causing heightened distress.
b) *Attention-Deficit Hyperactivity Disorder:* Attention-Deficit Hyperactivity Disorder is a neurodevelopmental disorder characterized by persistent patterns of inattention, hyperactivity, and impulsivity among children.
c) *Autism Spectrum Disorder:* Autism Spectrum Disorder is a developmental disorder that affects social interaction, communication, and behavior among children.
d) *Conduct Disorder:* Conduct disorder is a psychiatric condition characterized by persistent patterns of disruptive and aggressive behavior among children.
e) *Eating Disorders*: Eating disorders such as anorexia nervosa, bulimia nervosa, and binge-eating disorder can emerge during childhood or adolescence among children.
f) *Oppositional Defiant Disorder:* Oppositional Defiant Disorder is a behavioral disorder characterized by a persistent pattern of defiance and hostility among children.
g) *Learning Disorders*: Learning disorders refer to conditions that affect a child's ability to acquire and apply certain academic skills.
h) *Post-Traumatic Stress Disorder*: Children who have experienced or witnessed a traumatic event may develop Post-Traumatic Stress Disorder.

Childhood is a critical period for physical growth and mental wellbeing. Children's overall health and wellbeing is critical to their holistic growth and happiness. Mental health problems can have a significant influence on children's emotional, psychological, and social well-being. Furthermore, such issues can contribute to behavioral issues, academic difficulties, and slowed cognitive development, aggravating

children's general well-being. Recognizing and managing mental health issues in children is critical to ensuring optimum development and a happy life trajectory.

It is important to recognize mental health problems in children early on. Identifying and dealing with mental health issues in children at an early stage holds great significance. Prompt actions like therapy, counseling, and suitable interventions can ease symptoms and enhance a child's overall well-being, growth, and daily functioning. Equally crucial is the establishment of a nurturing and empathetic atmosphere, the encouragement of positive mental health habits, and the fostering of open dialogue to provide optimal support for children facing mental health challenges.

There are different impacts of Mental Health Problems on Children's Well-being, Development, Social Relationship, Behavior, Physical Health and Daily Functioning. EMDR therapy can be beneficial and has positive effects on children having mental health issues. EMDR is an psychotherapeutic approach that has been demonstrated to be beneficial in the treatment of trauma, anxiety, and other mental health issues. This type of therapy is a planned procedure in which the therapist helps the child to recall traumatic memories while also participating in bilateral stimulation, which can be accomplished by eye movements, noises, or taps. This bilateral stimulation is supposed to aid in the processing of traumatic memories, lowering their emotional charge and assisting individuals in adapting to them. EMDR has been shown to relieve symptoms associated with trauma, anxiety, and other mental health difficulties in children, suggesting a possible therapeutic intervention (Beer, 2019). It is important to note that each child's experience with mental health issues is unique, and the impact may vary depending on factors such as the type and severity of the condition, available support systems, and access to treatment. Early identification, intervention, and appropriate support are essential in promoting children's well-being, development, and daily functioning.

4. ADAPTING EMDR THERAPY FOR CHILDREN

4.1 Rationale for Exploring EMDR Therapy as a Treatment Approach for Children With Mental Health Problems

The utilization of EMDR therapy as a treatment approach for children with different mental health problems is supported by multiple persuasive reasons and compelling rationales. While it is important to recognize that individual circumstances can vary and not all reasons may be applicable to everyone, the following are several significant justifications for considering EMDR therapy as a viable therapeutic option for children:

a) *Developmentally Appropriate:* EMDR therapy may be customized according to children's developmental requirements. Therapists trained in EMDR therapy may involve children in the counseling process by using age-appropriate terminology, play-based tactics, and creative approaches. This helps children to communicate their ideas and feelings in natural and comfortable ways, which aids in the healing process (Courtney, 2016).
b) *Non-Invasive and Safe:* EMDR therapy does not require the child to extensively recount traumatic events verbally, which can be distressing and retraumatizing. Instead, it stimulates the brain's information processing system by bilateral stimulation techniques such as eye movements, taps, or

noises. These procedures are typically well-tolerated and regarded as child safe (Ghanavatpour, Marofi, Kalhor, & Kalhor, 2023).

c) *Holistic Approach*: EMDR therapy addresses not just the symptoms of traumatic events, but also the underlying negative attitudes and emotions that accompany them. EMDR therapy attempts to promote long-term beneficial changes in a child's self-perception, emotional well-being, and general mental health by focusing on five essential factors (Little, 2023).

d) *Flexibility and Adaptability:* EMDR therapy can be flexibly adapted to suit the individual needs of each child. It can address a wide range of mental health concerns, including anxiety disorders, phobias, grief, and behavioral issues. The versatility of EMDR therapy allows therapists to tailor the therapy to meet the specific goals and challenges of each child, promoting a more personalized and effective treatment approach (Fisher, van Diest, Leoni, & Spain, 2023).

e) *Parent-Child Attachment and Support:* EMDR therapy often involves parental involvement and support, which can strengthen the parent-child relationship. By engaging parents in the therapy process, EMDR therapy can enhance the child's sense of safety and security, as well as promote family understanding and communication. This collaborative approach can also facilitate the generalization of therapeutic gains to the child's daily life and environment (van der Hoeven, Plukaard, Schlattmann, Lindauer, & Hein, 2023).

f) *Culturally Sensitive Approach:* EMDR therapy is a very culturally sensitive treatment approach. Therapists can incorporate culturally relevant practices, stories, symbols, and rituals into the therapy process, honoring the child's cultural background and beliefs. EMDR therapy recognizes the importance of cultural context in understanding and addressing mental health concerns, thus making it a potentially suitable treatment option for children from diverse cultural backgrounds (Mbazzi et al., 2021).

g) *Complementary to Other Psychotherapies:* EMDR therapy can be used as standalone therapy or in conjunction with other psychotherapies, such as, Cognitive Behavioral Therapy. EMDR therapy can be integrated into a comprehensive treatment plan tailored to the specific needs of the child, potentially enhancing the effectiveness of existing interventions (Lin, Lv, Xu, Jiang, & Chen, 2022).

h) Efficacy and Research: In the past, numerous studies, e.g., Karadag, Gokcen, & Sarp, (2020) and Bayhan, Tarquinio, Rydberg, & Korkmazlar (2022) have demonstrated the effectiveness of EMDR therapy in treating different mental health problems among children. In recent research there is growing evidence supporting the use of EMDR therapy with children. Systematic reviews and meta-analyses such as Rodenburg, Benjamin, & de Roos (2011) and Beer (2019) have shown positive outcomes in treating different mental health problems among children. Furthermore child related EMDR research has been also supported by Randomized Controlled Trials such as Perilli et al., (2020) and Velu et al (2022).

4.2 Modifications and Unique Considerations in Eye Movement Desensitization and Reprocessing Therapy for Use in Children

EMDR therapy has gained recognition as a highly regarded and successful treatment method for individuals, including children, who have endured traumatic events or distressing life experiences, leading to the development of various mental health problems (Civilotti et al., 2021). When employing EMDR therapy for children, it is crucial to consider several distinct factors and implement specific modifications to ensure optimal outcomes. Research studies in the existing literature, e.g., Carolyn Settle & Adler-

Tapia, (2008), Adler-Tapia & Settle (2012) and Civilotti et al (2021) have identified various factors and modifications to be considered when using EMDR therapy with children:

a) *Child Developmental Stage:* Children's cognitive and emotional capacities evolve as they grow. Therapists should consider the child's age and developmental stage when applying EMDR therapy. Younger children may have limited language skills, shorter attention spans, and difficulty understanding abstract concepts. Adjustments in the therapy process, such as using play-based approaches or simplified language, may be necessary to accommodate their developmental needs.
b) *Parental Involvement:* Involvement of parents is typically essential when using EMDR therapy among children. Parents can provide valuable information about the child's history, symptoms, and triggers. Collaborating with parents helps therapists develop appropriate treatment plans and ensures continuity of care. Parents can also support their child's emotional well-being outside of therapy sessions by reinforcing coping strategies and providing a nurturing environment.
c) *Safety and Trust:* Establishing a sense of safety and trust is crucial in any therapeutic approach, but it is especially important when working with children. The therapists should prioritize building a strong therapeutic alliance with the child, ensuring they feel secure, understood, and supported throughout the process. Creating a safe environment enables children to explore and process their traumatic experiences effectively.
d) *Resource Development:* In EMDR therapy, resource development involves identifying and strengthening internal and external resources that can support the child's healing process. For children, these resources can include positive memories, nurturing relationships, hobbies, or interests. Building and reinforcing such resources can provide children with a sense of resilience and empowerment, promoting positive outcomes in therapy.
e) *Language and Communication*: Children may struggle to articulate their emotions and experiences verbally, especially if they are very young or have limited language skills. Therapists should be skilled in using age-appropriate language and employing creative techniques to facilitate communication. Play therapy, drawing, or other expressive modalities can be effective in helping children express themselves when words are challenging.
f) *Play-based Techniques:* Incorporate play-based activities and tools into the therapy process. Play therapy techniques, such as drawing, storytelling, puppets, or sand tray therapy, can help children express themselves and engage with the therapeutic process in a more natural and comfortable way.
g) *Visual aids:* Use visual aids to explain the therapy process. Visual representations, such as drawings or diagrams, can help children grasp the concept of bilateral stimulation and understand what is happening during the therapy session.
h) Session Timings: Children's attention spans may be shorter than those of adults. Consider shorter therapy sessions that align with their ability to focus and engage. Multiple shorter sessions may be more effective than fewer longer sessions.
i) *Interactive Techniques:* Incorporate interactive techniques during the therapy sessions. For example, instead of just asking children to imagine a distressing event, use props or role-playing to make it more engaging and interactive.
j) *Therapeutic Games:* Integrate therapeutic games or activities that involve eye movement or bilateral stimulation. This can help children feel more at ease and make the therapy process feel like a game rather than a daunting task.

k) *Collaborative Treatment Process*: Involve children in the entire therapy process by allowing them to make choices and decisions within appropriate boundaries. This promotes a sense of autonomy and engagement, making them active participants in their own healing.
l) *Provide Emotional Support*: Ensure a supportive and empathetic environment throughout the therapy process. Children may have difficulty verbalizing their emotions, so create a safe space where they feel comfortable expressing themselves without judgment.

5. PHASES OF EYE MOVEMENT DESENSITIZATION AND REPROCESSING THERAPY FOR CHILDREN

Over the last few years, there has been a growing interest in applying EMDR Therapy with children. This interest has emerged due to the recent published research and clinical evidence on the efficacy of EMDR therapy among children. Recent reviews, such as Beer (2019) and Civilotti et al (2021) along with recent empirical studies, for example, Teke & Avşaroğlu (2022) and Williamson & Rayner-Smith (2023) indicate that EMDR therapy can be effectively used for treating trauma and related disorders in children. The major goal of modification is to tailor the eight stages of EMDR therapy to the child's age and ability. Changes to the EMDR treatment stages may help in the construction of an age-appropriate and participatory therapeutic environment for children, allowing them to effectively process and heal from traumatic situations.

The eight stages of EMDR therapy for children have been proposed by various researchers. However, significant modifications to these stages have been made by recent researchers such as Robbie Adler-Tapia & Settle (2016), Beckley-Forest & Monaco (2020), and Adler-Tapia & Settle (2023). The following are the details of these eight stages:

5.1 Client History and Treatment Planning (Phase One)

Client History and Treatment Planning as first phase marks the beginning of the therapeutic process, where the therapist collects vital information from both the child and accompanying parents. These details encompass the child's background, ongoing development, and present mental health concerns. By undertaking this initial phase, the therapist gains insight into the child's specific requirements, enabling therapist to create an appropriate treatment plan. The following steps are encompassed within this phase:

a) *Introductory Meeting*: During the initial intake and introductory session, the child and their accompanying parents or guardians meet the therapist so that therapist acquire basic information such as the child's age, gender, school and family background. It is critical to create a pleasant and secure atmosphere for the child in the first meeting so that the child feel confident during whole treatment.
b) *Child's Initial Evaluation, and Screening:* During the initial assessment, it is crucial to identify the specific issues or challenges that prompted the referral, such as behavioral problems, emotional difficulties, academic struggles, social skills deficits, or any other areas of concern. Gathering specific examples and observations is essential to better understand the nature and severity of these issues. Administering appropriate assessments and screenings is necessary to gain further insight into the child's cognitive, emotional, and social functioning. This may involve using standardized

measures, interviews, or questionnaires designed for children, including intelligence tests, behavioral checklists, and measures of emotional well-being. These assessments help provide a comprehensive understanding of the child's overall well-being and areas requiring support.

c) *Explaining Eye Movement Desensitization and Reprocessing therapy to Parents and Child:* Therapists should communicate the concepts and components of EMDR therapy in a way that is easily understood by children and accompanying parents. This is a critical moment for therapists to demonstrate their expertise, as there are distinct variations between adult and child patients, and children may require additional explanations to grasp the concepts of EMDR therapy. Providing a clear explanation of EMDR therapy to both parents and the child is of utmost importance. Once the treatment process is explained, the therapist obtains permission from the child and accompanying parents to start treatment.

d) *Case Conceptualization:* When treating children with EMDR therapy, the therapist's approach to case conceptualization involves incorporating the perspectives of both the parents and the child. This entails gathering information about the client's history and developing a psychotherapy treatment plan. Observation suggests that there can be differences between the issues identified by parents and those identified by children.

e) *Treatment Planning:* At this point, the therapist might design a treatment goal based on the child's specific requirements, strengths, areas for growth, age, developmental level, and preferences. A complete treatment plan is also created, detailing strategies, treatments, and modalities such individual therapy, family therapy, group therapy, psychoeducation, and professional collaboration. The treatment plan stays adaptable to allow for changes based on the child's progress and changing requirements.

5.2 The Preparation (Phase Two)

The preparation phase for a child is critical in making him or her feel comfortable and fully prepared for therapy. This phase focuses on building a secure and supportive atmosphere for the child. During the Preparation Phase, it is important to help the child develop the skill of regulating or managing the impact of intense emotions. The child especially needs to feel powerful and competent in therapy to actively participate in the healing process. It is a common experience that when children are feeling overwhelmed by their intense emotions, they are much more likely to be reluctant to participate in therapy. Here are some key factors during the preparation phase:

a) *Building Relationship:* For a successful therapeutic relationship, it is critical to establish a favorable rapport with the child. Engage in activities or talks that will help the child and the therapist to connect and develop trust. To establish a warm and appealing environment, use age-appropriate approaches such as play, painting, or storytelling.

b) *Resolving Concerns:* If the child reveals any worries, anxieties, or misconceptions regarding therapy, address them directly and honestly. Reassure the child's fear and clear up any misconceptions he or she may have. Remind him or her that psychotherapy is a collaborative process in which they have control over what they share.

c) *Clarifying Confidentiality:* In an age-appropriate manner, discuss the notion of Confidentiality with the child. Explain that is discussed in therapy is normally kept private and confidential unless permitted by the patient to disclose. This promotes free communication and fosters a sense of trust.

d) *Setting Session Expectations:* Make a clear format and duration of treatment sessions. Inform the child of the length of each session, the frequency with which he or she will occur, and any pauses or transitions within the session. Creating predictable habits and routines that are regular can help alleviate anxiety and improve involvement.
e) *Guide about Stop Signal, Bilateral Stimulations and Other Important Things:* In the preparation stage, guide the child about essential elements such as the Stop Signal, which allows the therapy process to pause. Teach them about bilateral stimulations, explaining their role in processing emotions. Additionally, help them create a Safe and Calm Place where child can find comfort and security during sessions.
f) *Allow Child to Question:* Encourage the child to ask questions and speak about any worries he or she may have. Make an open and nonjudgmental environment for the child to express his or her thoughts and feelings. Validate their experiences and offer age-appropriate responses to their queries.

5.3 Assessment (Phase Three)

The assessment phase of EMDR therapy for children entails collecting information about the nature of trauma or stressful events that a child has experienced. Once information are collected then the treatment process can be adjusted accordingly. Here are some key factors to consider during the assessment phase of EMDR therapy for Children:

a) *Examine Present Symptoms*: Assess the child's present symptoms and functioning in relation to the trauma. Assessing the intensity and frequency of symptoms such as intrusive thoughts, nightmares, flashbacks, avoidance behaviors, hyperarousal, and emotional dysregulation may be part of this.
b) *Assess Resources:* Assess the child's internal and external resources, such as supportive connections, coping skills, and good experiences. Assessing the child's resilience factors can assist guide therapy and encourage positive results.
c) *Assess Readiness for Therapy*: Assess the child's readiness therapy. This includes considering their cognitive and emotional development, ability to tolerate distress, and their capacity to engage in the therapeutic process. Ensure that the child has a basic understanding of therapy and obtain their informed consent to participate.
d) *Other Information Gathering*: Gather ancillary information from other relevant people in the child's life, such as teachers, carers, or family members, if appropriate and with parental approval. Their feedback can give vital insights regarding the child's functioning in various circumstances.
e) *Decide and Identify Other Important Factors*: The therapist should assess and identify other key factors such as:
    i) *Identify Targets:* When dealing with children, imaginative methods have been created to identify targets. After identifying the target, the child is asked to identify the worst portion of his or her memory. Methods such as drawing images, working in the sand tray, using puppets, and a variety of other art and play therapy can help children to identify the worst portion of their memory.
    j) *Selecting Image:* For therapists learning EMDR therapy, distinguishing between the target and image might be difficult. A target in this sense refers to an issue, incident, experience,

or memory from the client's life. An image, on the other hand, is a visual depiction of the target's most difficult component.

k) *Negative and Positive Cognitions*: Once the target image is identified, the Assessment Phase begins by extracting the child's basic negative thoughts by using tolerance, ingenuity, and a thorough knowledge of the child. After identifying a negative cognition, the therapist connects it to the child's memory network and therapist moves on to locate the appropriate good cognition in the child's memory network. Here positive cognition expresses the child's desirable belief that he or she wants to have about himself or herself.

l) *Validity of Cognition:* The therapist next assesses the validity of positive cognition. This assessment employs a seven-point Likert type scale ranging from 01 (complete falsehood) to 07 (representing absolute truth). The goal of this measurement is to determine the degree of validity in positive cognition.

m) *Subjective Units of Distress and Body Sensations:* Subjective Units of Distress and Body Sensation are used to assess and monitor the emotional and physical reactions of the child Subjective Units of Distress assesses the child's degree of distress on a scale of 00 to 10, allowing therapist to track improvement in child emotions as his or her distress diminishes. Body Sensation focuses on the physical feelings associated with traumatic experiences, helping children to integrate their minds and bodies. Children get insight into the impact of trauma by paying attention to body feelings such as tension or discomfort.

5.4 Desensitization (Phase Four)

The desensitization phase of EMDR therapy employs bilateral stimulations (including optical, auditory and tactile) to assist children in processing their traumatic memories. The therapist prepares the child by establishing a trusting relationship, teaching coping techniques, and defining a target memory. During this phase, the therapist keeps track of the child's distress and encourage the incorporation of more positive thoughts. Each session concludes with closure and stability, ensuring that the kid feels grounded and at ease.

In the desensitization phase, proper closure and stabilization are important. Following each session, the therapist assures that the child is feeling stable, steady and grounded. To assist the child return to a peaceful condition, grounding exercises, relaxation methods, and contemplation on the event are used. Regular monitoring and evaluation of progress is done in such a way that preparation for future sessions enables the therapists to give their continued support to the child, according to his or her specific requirements and developmental level.

5.5 Installation (Phase Five)

During this phase, the therapist helps the child establish and strengthen positive beliefs that counter the negative thoughts or emotions associated with the target memory. The therapist guides the child to focus on a positive belief or statement that feels true and empowering. Using bilateral stimulation, such as eye movements or tapping, the child engages in the reprocessing of the memory while simultaneously reinforcing the positive belief. When the level of distress on the Subjective Units of Distress scale hits zero, the therapist begins the Installation Phase by combining the first incident with the positive cogni-

tion and assessing its appropriateness. If the positive cognition is in synchronized, the therapist can start the installation procedure.

Throughout the installation phase, the therapist regularly assesses the child's distress levels, monitors the strength of the positive belief, and adjusts the bilateral stimulation as needed. The goal is to facilitate the installation of positive associations and emotions connected to the target memory, empowering the child to move forward with a renewed sense of self-worth and confidence.

5.6 Body Scan (Phase Six)

During the body scan phase therapist help the child identify and address any physical sensations or discomfort related to the target memory or distressing experience. The child is encouraged to notice any tension, discomfort, or other bodily sensations that arise during the reprocessing of the memory. Using bilateral stimulation, such as eye movements or tapping, the therapist helps the child process the physical sensations while simultaneously engaging in the reprocessing of the memory. The child is encouraged to observe the sensations without judgment or attempting to change them.

It is important that the therapist supports the child in noticing any shifts or changes in the physical sensations as the reprocessing continues. This phase aims to help the child become more aware of the mind-body connection and to process any residual physical distress related to the target memory. Throughout the body scan phase, the therapist ensures the child's comfort and safety. If the child becomes overwhelmed or experiences increased distress during the process, the therapist can adjust the intensity or duration of the bilateral stimulation or utilize grounding techniques to help the child regulate their emotions.

5.7 Closure (Phase Seven)

The closure phase in EMDR therapy for children involves bringing each session to a close in a structured and supportive manner. During the closure phase, the therapist helps the child transition from the intense processing of the session back to a state of stability and calm. The therapist may guide the child through grounding exercises, relaxation techniques, or other soothing activities to help them return to a balanced state. The therapist ensures that the child feels supported and validated, addressing any emotions or concerns that may have arisen during the session. They provide reassurance and emphasize the child's resilience and progress made during the session.

The closure phase is an opportunity for the child to reflect on their experience and share any insights or observations. The therapist may also offer feedback and encouragement, highlighting the child's strengths and progress in working towards their treatment goals.

The therapist establishes a sense of closure by summarizing the session and discussing any homework assignments or self-care activities for the child to engage in between sessions. They may also schedule the next session and address any logistical or administrative matters. The closure phase helps the child feel grounded and supported, ensuring a smooth transition from the therapy session back to their daily life. By providing closure and a sense of completion, it contributes to the overall therapeutic process and the child's ongoing healing journey.

5.8 Reevaluation (Phase Eight)

The Reevaluation Phase is the final stage of EMDR therapy. Within this phase, reevaluation is necessary at two stages, that is, before the start of the next session and during the treatment process assessment to help in discharge planning. During the last phase, the therapist helps the child return to a state of stability and peace following the vigorous therapy sessions. The therapist may take the child through grounding exercises, relaxation approaches, or other relaxing activities to help them return to a balanced state.

The closing phase helps the kid feel grounded and supported, allowing for a smooth transition from the psychotherapy sessions to regular life. It adds to the whole therapeutic process and the child's continuous healing journey by offering closure and a sense of completeness. In the last phase, the therapist collaborates with the child and their parents, prioritizing their needs and ensuring ongoing support and progress.

6. SUPERVISING AND TRAINING THERAPISTS IN EYE MOVEMENT DESENSITIZATION AND REPROCESSING THERAPY FOR CHILDREN

6.1 Training Requirements for EMDR Therapists Working With Children

According to the United Kingdom EMDR Association a licensed psychotherapist or clinical psychologist must first complete specialized EMDR training, should have the relevant educational qualifications and practical experience to become an accredited EMDR therapist. Working with children necessitates additional skills and knowledge regarding EMDR therapy (EMDR-UK, 2023). Some psychotherapists prefer to pursue their EMDR certification through the internationally accredited organizations such as EMDR International Association, which requires them to complete extra criteria such as supervised treatment sessions, case studies, and a passing test at the end of training (EMDRIA, 2023b).

To ensure that therapists who work with children are well-informed and competent to provide successful treatment, they may attend EMDR-specific seminars, conferences, or advanced training courses. These training opportunities help therapists to broaden their knowledge, acquire innovative ideas, and improve their therapeutic approaches. Finally, it is important to note that the particular standards and rules for continuing professional development may differ based on the therapist's region or country of residence. Different countries may have their own additional recommendations for practicing the EMDR therapy. To guarantee compliance and the highest level of practice, EMDR therapists should get familiar with the standards of their different jurisdictions.

6.2 Necessary Skills, and Competencies for EMDR Therapists Working With Children

Since EMDR therapy has primarily been used with adults, EMDR therapists who specialize in child therapy are required to have additional training and practical experience in order to have an in-depth understanding of child development process, trauma-related issues particular to children, and specialized methods to ensure a secure and efficient therapeutic process. Additional skills and training are essential because it can enable the newly trained EMDR therapists to practice the EMDR therapy successfully.

Becoming an EMDR certified psychotherapist entails careful consideration of several crucial training requirements. The following are a few of the most important ones that must be considered (EMDRIA, 2023a):

a) *Basic EMDR Certification:* It is important that the psychotherapists acquire fundamental EMDR training and certification before focusing on using it to treat children. This foundational training provides psychotherapists with the necessary expertise and abilities to effectively employ EMDR therapy related techniques tailored to children.
b) *Knowledge about Child Development:* Psychotherapists need to have a solid understanding of child development, including cognitive, emotional, and social aspects. This knowledge helps them to tailor their approach, adapt interventions, and assess appropriate targets while applying EMDR therapy among children.
c) *Play Therapy Skills:* Children often communicate and process their experiences through play. The EMDR therapy practitioners while working with children should be trained in play therapy techniques, which will enable them to integrate play-based interventions with EMDR therapy protocols effectively. This includes utilizing toys, art, and other expressive mediums to facilitate the child's engagement and expression during therapy sessions.
d) *Knowledge of Child-Friendly Techniques*: The EMDR therapy practitioners should have specialized knowledge of child-friendly EMDR techniques and adaptations. These may include the use of storytelling, guided imagery, puppets, or modified versions of the standard EMDR therapy protocol to make it more accessible and engaging for children.
e) *Adaptation for Non-Verbal Children*: For children with limited verbal skills or communication challenges, the therapists should be skilled in adapting EMDR therapy techniques to accommodate their needs. This may involve utilizing alternative forms of communication, such as visual supports, sign language, or augmentative and alternative communication devices.
f) *Collaboration with Parents:* In working with children, therapists must involve parents or caregivers in the therapeutic process. They should have skills in engaging and collaborating with parents, providing psychoeducation about EMDR therapy, teaching coping strategies for supporting their child's processing, and addressing any concerns or questions they may have.
g) *Cultural Competence:* There should be a strive for cultural competence and awareness when working with children from diverse backgrounds. This includes understanding and respecting cultural beliefs, values, and norms that may influence a child's experiences and responses to trauma.

7. FUTURE DIRECTIONS AND RESEARCH IMPLICATIONS

EMDR therapy is predominantly employed by clinicians to address various mental health issues in adults. Since few years this therapy has been used with children, however, the available research specific to its effectiveness in pediatric populations is relatively limited. The review of existing literature reveals that different research studies, e.g., (Moreno-Alcázar et al., 2017; Karadag, Gokcen, & Sarp, 2020; van der Hoeven, Plukaard, Schlattmann, Lindauer, & Hein, 2023) have documented the effectiveness of EMDR therapy conditions, including Post-traumatic Stress Disorder, and other trauma-related symptom such as depressive disorders and burnout (Caille et al., 2023) . Still empirical research on the efficacy of EMDR therapy in children in its developing stages and more rigorous research is required to establish

the ultimate effectiveness of this therapy. Considering the constraints and future research directions from existing published research studies, several key areas have been identified for further exploration and advancement regarding the efficacy of EMDR therapy in children:

a) *Examining Effectiveness of EMDR Therapy in Various Disorders*: The effectiveness of EMDR therapy has primarily been demonstrated in children with mental health conditions such as Post-traumatic Stress Disorder, anxiety and phobias (Karadag et al., 2020). However, future research can explore the efficacy of EMDR therapy in treating a wider range of mental health disorders, including neurodevelopmental disorders and personality disorders, among children.
b) *Explore Age-related Variations:* The age range of children spans from early childhood (five to seven years), mid-childhood (eight to eleven years), to late childhood (twelve to fourteen years). To gain a better understanding of the effectiveness of EMDR therapy, future research could investigate whether its efficacy is consistent across these distinct age groups among children.
c) *Examine Mechanism of Change:* The investigation of underlying mechanisms of change in EMDR therapy has predominantly focused on adults. However, future researchers can examine these underlying mechanisms of change among children to see how the bilateral stimulation employed in EMDR therapy contribute to the reduction of symptoms and the processing of traumatic experiences in children.
d) *Work on Modes of Delivery:* Future researchers can investigate the optimal delivery modes for EMDR therapy in children. Examine the effectiveness of different formats, such as individual therapy, group therapy, or integrated approaches within school or community settings.
e) *Develop Child-friendly Therapy Resources:* Future researchers can work on developing age-appropriate materials, manuals, and resources to support the effective implementation of EMDR therapy in children. This may include creating child-friendly explanations of the therapy process, engaging therapeutic activities, and tools to assess treatment progress.
f) *Conduct More Randomized controlled Trials*: Conducting more *Randomized controlled Trials* to compare EMDR therapy with other evidence-based treatments, using larger samples and diverse populations of children.

8. CONCLUSION

This chapter provides a comprehensive overview of the application of EMDR therapy in the context of childhood mental health issues. Throughout the chapter, various aspects of EMDR therapy have been explored, including its origins, underlying theories, and therapeutic mechanisms. One of the keys focuses of this chapter has been the adaptation of EMDR therapy for children. Finally, this chapter emphasizes the importance of training and supervision for therapists working with EMDR therapy among children, as well as the need for further research and development in this field. Overall, this chapter serves as a valuable resource for mental health professionals seeking to understand and implement EMDR therapy in their work with children. By integrating the principles and techniques of EMDR therapy into their practice, therapists can provide effective and evidence-based interventions to help children overcome their mental health challenges and promote their overall well-being and resilience.

Based on the comprehensive information provided in the conclusion of previous research studies, it can be concluded that EMDR therapy has emerged as a widely accepted and effective treatment approach

for addressing mental health problems among children. The research and clinical evidence supporting the use of EMDR therapy in this population have significantly grown, demonstrating its positive impact on children's well-being and overall mental health. By integrating EMDR therapy into clinical practice and ensuring adequate training and supervision, mental health professionals can provide children with a powerful tool for healing, resilience, and long-term well-being.

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KEY TERMS AND DEFINITIONS

Childhood Mental Health: Mental health during childhood includes meeting all necessary emotional and developmental targets, as well as gaining appropriate social skills and problem-solving techniques.

Childhood Psychological Problems: A broad class of mental health problems, which includes common psychological issues in children, such as depression, anxiety disorders, and phobias, and other specific issues like Attention Deficit and Hyperactivity Disorder. All these psychological issues can have a major impact on the child's mental wellbeing, and social functioning.

EMDR Therapy for Children: The procedure of adapting and personalizing EMDR therapy for children aims to make this therapy suitable and captivating for children with mental health difficulties, while taking into account the special considerations that come with dealing with this age group.

EMDR Training: It is the process of acquiring knowledge and expertise in the EMDR therapy. This training is required for mental health professionals like psychotherapists, clinical psychologists and counselors which are interested in employing this type of therapy to help patients suffering from trauma and emotional distress.

Eye Movement Desensitization and Reprocessing: Eye Movement Desensitization and Reprocessing is an evidence-based psychotherapy that is primarily used to treat post-traumatic stress disorder and other similar disorders such as depression and anxiety. Patients in this treatment concentrate on upsetting memories while a therapist directs them through a sequence of bilateral (left and right) sensory stimulation with the purpose of assisting patients in processing traumatic memories.