

The Mind Body Transformation Model (MBTM): An Integrative Clinical Approach to Trauma Treatment with Children

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Children exposed to traumatic events often experience emotional, physical, and psychological disturbances as well as disruption of the normative course of development. Meeting the needs of child survivors requires flexibility and individualized care. The integrative trauma treatment approach presented here, the Mind Body Transformation Model (MBTM), provides practitioners with an innovative framework for organizing trauma treatment for minor clients. The primary aim of this approach is to mitigate the immediate impact of trauma and remediate long-term effects. This integrative trauma treatment model borrows from several evidence-based traditions, selecting those strategies that enhance attunement, attachment, and coregulation between child and caregiver. MBTM is currently in practice at the Trauma Treatment Center and Research Facility in Rio Rancho, NM, with youth at risk for negative health outcomes. This manuscript provides insight regarding the origins, theoretical foundation, and practical application of MBTM.

Keywords: Mind Body Transformation Model (MBTM), Eye Movement Desensitization and Reprocessing (EMDR), Attachment Regulation and Competency (ARC), Theraplay, Triphasic Approach

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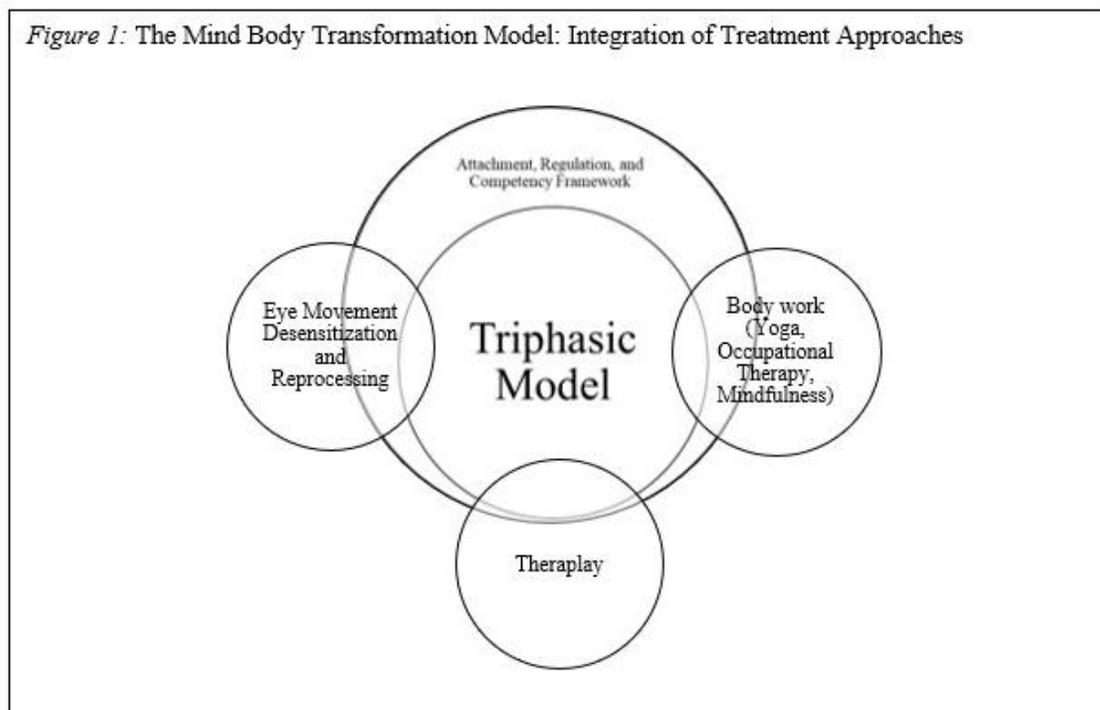
The authors would like to acknowledge the essential contributions of Kate Bunch, Owner and Clinical Director of the Trauma Treatment Center and Research Facility in Rio Rancho, NM. Ms. Bunch developed the Mind Body Transformation Model (MBTM) over the course of her clinical practice, and so graciously allowed these authors to formally introduce this approach to the scholarly world.

Children's responses to trauma and adversity often manifest as a variety of disturbances ranging from maladaptive behaviors and developmental delays to impairment of the child's ability to modulate physical sensations (Racco & Vis, 2015) and coregulate with caregivers (Blaustein & Kinniburgh, 2010). Children's healing from the effects of trauma exposure is influenced by their emotional, cognitive, and linguistic development; lack of consistently defined personality (Prout & Fedewa, 2015); and bonds with a supportive caregiver or other adult (Hughes, Golding, & Hudson, 2015). When working with child survivors of trauma in the counseling environment, clinicians must be creative and flexible in their selection and application of interventions. An integrative or multimodal approach, defined as the combination of more than one theoretical orientation and associated interventions, has been recommended as a means of attending to the many unique needs of the child survivor (Prout & Fedewa, 2015). An integrative approach allows the counselor to intentionally select techniques based on the presentation and needs of the particular child and increases the likelihood that therapeutic goals will be achieved (Prout & Fedewa, 2015).

In order to meet the unique needs of child survivors, the Trauma Treatment Center and Research Facility (TTC), a trauma-focused counseling agency in Rio Rancho, NM, developed an integrative treatment approach known as the Mind Body Transformation Model (MBTM). This model utilizes components from multiple empirically supported approaches to meet the unique needs of child survivors. Although MBTM is not widely used and its efficacy has not been formally evaluated, the approach has been in practice at TTC since November 2017 and shows promising results through internal measures used to monitor client outcomes (K. Bunch, personal communication, August 1, 2019).

MBTM intentionally interweaves Judith Herman's (2015) triphasic model of trauma recovery with Blaustein and Kinniburgh's (2010) attachment, regulation, and competency (ARC) approach to create the conceptual framework for an overall approach to treatment. Figure 1 illustrates the relationship between these two foundational approaches and the other three modalities from which MBTM borrows techniques and interventions. Eye Movement Desensitization and Reprocessing (EMDR; Shapiro, 2018)

and Theraplay (Booth & Jernberg, 2010) contribute specific counseling strategies to the conceptual framework. Body-based interventions such as yoga and occupational therapy are also used as a means for processing the impact of trauma on the child's somatic experience. The primary aim of integrating these trauma-focused models is to provide the clinician with a greater repertoire of related and empirically sound techniques and interventions as well as a flexible conceptual framework to support their counseling practice with children who have experienced adverse events. Through the integration of these models, the hope is to remediate the negative health outcomes associated with early exposure to trauma and adversity.



When integrating the Triphasic Model (Herman, 2015), EMDR (Shapiro, 2018), ARC (Blaustein & Kinniburgh, 2010), and Theraplay (Booth & Jernberg, 2010) models of trauma treatment, aspects of each that attend to attunement, attachment, and coregulation are highlighted. The ability to attune to others' experience, develop healthy attachment, and coregulate with safe adults is necessary for developing relationships with others. A child heals from adverse experiences within the context of healthy relationships, thus children must develop these skills in order to achieve positive

outcomes and success in counseling (Blaustein & Kinniburgh, 2010; Heller & LaPierre, 2012). While attending to these core factors, MBTM also addresses the physical, social, emotional, and psychological needs of the child in a developmentally informed manner, with the active participation of the caregiver and caregiving system. This article explores the specific needs of child survivors of trauma, empirically supported treatment modalities for this population, and the practical application of MBTM in the counseling setting as a conceptual framework for an overall approach to treatment.

The Impact of ACEs on Child Development

The term Adverse Childhood Experiences (ACEs) was coined in the 1990s when Felitti et al. (1998) reported a study that determined specific adverse experiences prior to age 18 were correlated with negative health outcomes in adulthood. These events were identified as emotional, physical, and contact sexual abuse; physical and/or emotional neglect; and varying types of household dysfunction. Household dysfunction represented specific difficulties occurring within the home environment, such as violent treatment of a child's mother or having a household member with substance use issues or psychiatric concerns. Felitti and colleagues (Felitti et al., 1998; Felitti & Anda, 2010) determined ACEs have a cumulative effect; the greater the number of ACEs experienced by an individual, the greater the likelihood of experiencing negative health outcomes as an adult. It is noteworthy that the original ACEs study had such a lasting impact on understanding the implications of childhood trauma in adulthood that the 1998 article (Felitti et al., 1998) was reprinted by the same journal over 20 years later (Felitti et al., 2019).

Subsequent studies have supported the relationship between the number of adverse events experienced in childhood and the subsequent negative health outcomes in adulthood (Felitti & Anda, 2010; Hughes et al., 2015). The greater the number of adverse events an individual experiences prior to the age of 18, the greater the likelihood the individual will experience health complications such as substance use issues, chronic depression, suicide attempts, cardiac conditions, and somatization (Felitti & Anda, 2010).

Other adult health outcomes include obesity or being overweight, diabetes, and physical inactivity; higher rates of nicotine, alcohol, and other drug use; and increased risky sexual behaviors (Hughes et al., 2017).

Centers for Disease Control and Prevention (2010) modified the questionnaire from the original Kaiser-CDC ACEs study (Felitti et al., 1998) creating the 11-question version common in current use. Questions are answered concerning experiences prior to age 18. In the United States, 11% of children reported three or more adverse experiences (Sacks, Murphey & Moore, 2014). The most frequently reported ACEs were economic hardship and divorce or separation of a parent or guardian (Sacks et al., 2014). Of the many concerns outlined in ACEs studies, a score of six or more ACEs is correlated with a decrease in life expectancy of about 20 years (Brown et al., 2009).

In addition to experiencing health and well-being outcomes in adulthood, children who have been exposed to traumatic events also show immediate effects. Trauma impacts children's emotional, psychological, and physical well-being as well as their ability to form and maintain healthy attachment and coregulate with caregivers (Cook et al., 2005). Children may exhibit "anxious clinging," a resurgence of old fears or the development of new fears, developmental regression, or high-risk behavior (Herbert, 1996). Children may also present with symptoms of hyperactivity, distractibility, impulsivity, or somatic complaints such as headaches or stomachaches (Pynoos, Steinberg, & Goenjian, 1996). Frequent exposure to stressful events increases the child's risk of experiencing dysregulation and decreases their ability to cope with stressors. Children who experience dysregulation may be more prone to neurological, endocrinological, and immunological consequences (Boullier & Blair, 2018).

The Fragmentation of Trauma Memory

The influence of trauma on the individual extends beyond physical and mental health. The overwhelming nature of traumatic experience impacts the mind's ability to process and store memories associated with the events (van der Kolk, 2014). Changes in attentional focus due to intense emotional arousal "interfere with hippocampal memory

functions” (van der Kolk & Fislser, 1995, p. 354), resulting in the fragmentation of memories associated with the experience. Fragmented trauma memories include sensory elements (smell, sight, touch, taste, sound) as well as emotional or affective pieces. The task of healing must include the piecing together of fragmented traumatic material in order to create a cohesive trauma narrative (Herman, 2015) that assists with remediating the influences of ACEs.

Remediation of ACEs Through Counseling and Psychotherapy

Multiple forms of child-centered psychotherapy have documented efficacy in reducing symptomology in children exposed to trauma. Examples include child-parent psychotherapy (Ghosh Ippen, Harris, Van Horn, & Lieberman, 2011), trauma-focused cognitive behavioral therapy (Deblinger, Stauffer, & Steer, 2001), and parent-child interaction therapy (Chaffin et al., 2004). A commonality among these approaches is the inclusion of parents or caregivers in the therapeutic process. Other approaches, specifically Theraplay (Booth & Jernberg, 2010) and ARC (Blaustein & Kinniburgh, 2010), utilize members of the child client’s caregiving system in a unique way, working to rebuild the attachment relationship by attending to the relationship and bond between the caregiver and the child. These two distinct treatment modalities offer counselors structure to guide treatment and interventions aimed at enhancing attunement, attachment, and coregulation.

The Mind Body Transformation Model: An Integrative Model

The MBTM integrative trauma treatment model follows an assimilative integration approach (Corey, 2016), as it is grounded in a specific school of psychotherapy (the triphasic model and ARC framework) and incorporates interventions and strategies from other therapeutic approaches. The benefits of integrating these modalities is that it “combines the advantages of a single coherent theoretical system with the flexibility of a variety of interventions from multiple systems” (Corey, 2016, p. 450).

Table 1 provides one example of the application of this model to a 14-session timeframe. Although this example utilizes a set number of sessions, the number of sessions required in order to adequately apply this approach in counseling practice is highly flexible.

Table 1: The Mind Body Transformation Model Application to Practice – Example Timeline

Session Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14		
Theoretical Approach <i>The Mind Body Transformation Model (MBTM)</i> All of the activities/tasks listed are facilitated with both child and parent present <i>Note:</i> This list is not all inclusive and provides only a sample of activities and tasks utilized.	Build rapport, test safety and boundaries, establish expectations and make a plan, introduce Theraplay activities.		Coping skills, review <i>Once I Was Very Very Scared</i> (Ippen & Ippen, 2016), and <i>Talking about the Brain</i> illustrative exercise.		Differentiate between feelings, sensations, and thoughts, assess need for body work (yoga, occupational therapy). Caregiver education using ARC materials.		Build safety net by creating safe place, and listing people who are supportive, and allies; develop co-regulation skills; create container for trauma and “big feelings”. Caregiver education using ARC materials.		Organize targets for trauma process. Begin reprocessing. Follow EMDR protocol and proceed at child’s pace. At beginning and/or end of sessions, or at a separate time, facilitate collaborative check-ins with caregiver alone.		Continue processing and collaborating with caregiver. Initiate and complete EMDR future templates, and test installation of the positive cognition.					
<i>The Triphasic Model of Trauma Recovery (Herman, 2015)</i>	Phase 1: Establishing safety and building resources.						Phase 2: Reprocessing and establishing the trauma narrative.				Phase 3: Mourning, reconnection and deriving meaning.					
<i>Attachment, Regulation, and Competency (ARC) Framework (Blaustein & Kinniburgh, 2010)</i>	Attachment: Caregiver affect management, attunement, consistent response, routines and rituals.						Regulation: Affect identification, modulation, affect expression.				Competency & Trauma Experience Integration: Executive functions, self-development and identity.					
<i>Eye Movement Desensitization and Reprocessing (EMDR) (Shapiro, 2018; Adler-Tapia, 2018)</i>	Initiation		Preparation		Assessment of Targets		Desensitization		Installation		Body Scan		Closure		Reevaluation	
<i>Theraplay (Jernberg & Booth, 2010)</i>	<ul style="list-style-type: none"> • Focus on enhancing attachment between child and caregiver. • Counselor guides activities between caregiver/parent and child, ensuring activities are structured, challenging, engaging (stimulating), nurturing, and playful. • Counselor communicates positive affect, is nurturing, enhances attachment behavior, and uses appropriate touch during play. 															

Engaging in clinical work with child survivors requires the tailoring of approaches to treatment that attend to the particular child’s readiness and ability to process adverse experiences and establish a trusting relationship with safe adults (Lovett, 2015). The integrative approach of MBTM provides the flexibility necessary to achieve positive outcomes when working with this population. Kate Bunch, one of the primary developers of MBTM, founded TTC to help children and their caregiving system heal from adverse experiences. Bunch drew from her clinical experience, recognizing the need for accommodating clients’ unique needs and situations.

TTC employs practitioners from a variety of backgrounds to create a multidisciplinary treatment team including professional counselors, clinical social workers, clinicians with additional training and experience in infant mental health, specialists from occupational therapy, and certified trauma-informed yoga instructors. All team members utilize the fundamental aspects of MBTM, which require reflective practice (Larrieu & Dickson, 2009). The reflective component of MBTM supports practitioners as they examine their experience in session and how it impacts their choice of interventions. As well, attention is given to verbal and nonverbal cues of the children and caregivers. Although not all TTC clinicians have advanced training in Theraplay, ARC, or EMDR, all attend an initial orientation as well as follow-up trainings to ensure they use MBTM as their conceptual lens.

The Five Approaches Underlying MBTM

With the ultimate aim of remediating the ill effects of ACEs, MBTM draws from five treatment approaches: Herman's (2015) triphasic model of trauma recovery, Blaustein and Kinniburgh's (2010) ARC, Shapiro's (2018) EMDR, Booth and Jernberg's (2010) Theraplay, and body work. Each is explored in the following sections.

Herman's Triphasic Model. Judith Herman (2015) described society as blaming and stigmatizing survivors of adversity, which can exacerbate the effects of trauma. Originally formulated as a means of conceptualizing adult response to complex trauma, Herman's (2015) triphasic model of trauma recovery, first published in 1992, has been applied and adapted for use with children (Shepard, Kulig, & Botey, 2017) and adolescents (Myric, Green, & Fazio-Griffith, 2017). Herman's model and its adaptations conceptualize the natural process of healing from a traumatic experience as consisting of three phases: (1) establishing safety and building resources; (2) reprocessing and establishing the trauma narrative; and (3) mourning, reconnection, and deriving meaning. The triphasic model proposed trauma treatment as a "rough congruence [of] formulations" (Herman, 2015, p. 155) derived from the multitude of theoretical

conceptualizations of trauma. Herman (2015) suggested that individuals progress through the stages recursively, attending to aspects of each phase while continuously working toward improved integration of traumatic experiences into their life stories.

Each phase of the triphasic model addresses the core experience of trauma. This experience is characterized by feelings of disempowerment, disconnection, powerlessness, and disrupted capacity for autonomy, trust, competence, identity, and intimacy (Herman, 2015). These phases emphasize healing through the achievement of recovery tasks. Phase 1 consists of establishing a trusting relationship with the helping professional and includes well-stated boundaries and collaborative interaction. The focus is stabilization by creating a sense of safety, engaging in stress and symptom management, and attending to self-care. Upon achieving adequate mastery of these tasks, the client progresses to Phase 2 (Herman, 2015).

Phase 2 focuses on remembrance and mourning, reprocessing and integrating traumatic material, and reconstructing the trauma narrative. Recovery tasks include balancing of the verbal processing of traumatic material with the need to maintain a sense of safety. This is a time for client and counselor to review traumatic material to piece together sensory and affective fragments and create a trauma narrative. Throughout this phase, the counselor supports the client as they engage in active mourning of trauma-related losses (Herman, 2015).

The final phase emphasizes client reconnection with community and the derivation of meaning from negative experiences. Survivors question beliefs that support their taking a submissive role in interactions and work to develop initiative and motivation as well as appreciation for their resiliency. The helping professional assists the client in developing healthy views of self while encouraging respect, compassion, and admiration (Herman, 2015). This approach provides a comprehensive foundation for conceptualizing the healing process; however, it lacks attention to the role of attachment in facilitating healing. To address the role of attachment and the caregiver-child bond in the healing process, MBTM borrows from the ARC framework.

Attachment, Regulation, and Competency. Blaustein and Kinniburgh's (2010) ARC framework is a trauma-informed model that emphasizes three central domains of intervention: attachment, regulation, and competency. Within these three domains exist nine "building blocks of intervention" that attend to specific developmental skills and tasks for children who have experienced complex trauma. Although these core areas of focus are presented linearly, Blaustein and Kinniburgh (2010) stated each child's healing process is unique and therefore the order and emphasis of the core areas and related tasks may be adjusted.

The ARC framework recognizes that the attachment bond between child and caregiver is critical to the child's healing process. Interventions include (a) nurturing a safe and healthy relationship between the child and the caregiving system (i.e., parents or guardians, school, social services) and (b) investing in the caregivers' abilities to self-monitor their affect states, attune to the child's emotional experience, and coregulate with the child. Once an adequate sense of safety has been established for the child and caregiving system, the focus shifts to self-regulation by both child and caregiver (Blaustein & Kinniburgh, 2010).

Early experiences of trauma impact the development of the child's regulatory system, particularly those events that include a failure in the caregiving system (i.e., basic needs and/or protection are not attended). Children in such situations struggle to regulate their cognitive, physical, emotional, behavioral, and somatic experiences. The building blocks of intervention in the ARC domain of self-regulation include affect identification, skills for modulation of arousal, and methods of emotional expression.

The final domain in the ARC framework addresses the child's sense of competency by cultivating a positive self-identity and developing skills necessary for effective executive functioning. Counselor and caregiver help the child accurately evaluate situations, consider possible responses and outcomes, and engage in intentional and thoughtful decision-making. The counselor focuses on the child's development of a positive sense of self by promoting healthy social connections, involvement within their community, and academic engagement (Blaustein & Kinniburgh, 2010). Children who have attended to these building blocks successfully hold "a coherent and integrated

understanding of the self and the capacity to engage in present life” (Blaustein & Kinniburgh, 2010, p. 41), which sets the stage for the integration of traumatic experiences. During this phase, the child may reprocess traumatic memories, relying upon coping skills and a secure bond with their caregiver(s) to manage distress. EMDR provides specific methods of intervention that enable dyadic reprocessing of traumatic experiences with a trusted caregiver.

Eye Movement, Desensitization, and Reprocessing. A modality with documented efficacy in the treatment of trauma-related distress in children, EMDR was originally developed as an individual counseling approach for adults experiencing posttraumatic stress (Adler-Tapia & Settle, 2009). According to this approach, the identified source of distress includes the individual’s inability to integrate the fragmented memories associated with traumatic experiences. An adult participating in EMDR treatment follows a specific course of care, progressing through eight phases of treatment, with the counselor utilizing bilateral stimulation (BLS) to process traumatic memories identified through the target planning process (Shapiro, 2018). EMDR with children follows the same structure and course, with the counselor utilizing puppets or toy wands as a point of focus during BLS (whether visual or through tapping) and engaging in more creative methods to develop the trauma targeting plan (Adler-Tapia & Settle, 2018). MBTM borrows EMDR’s eight phases of treatment and the use of BLS in order to target, reprocess, and integrate children’s adverse experiences.

When used as part of MBTM, EMDR becomes a dyadic process between the child and the caregiver, with the counselor acting as a guide attending to attunement, attachment, and coregulation. During dyadic processing, the child and the caregiver are seated facing one another, knees almost touching. The child rests their hands on their knees, palms up and hands open. A Neurotek pulser, a small device with two pulsers connected to a control box that vibrate episodically, is used for BLS. A pulsar is placed in the center of each of the child’s palms. With the child’s permission, the caregiver then places their hands over the child’s, with the hands resting palm to palm with the pulser in between. This arrangement allows both caregiver and child to experience tactile BLS as

well as proximity in a safe environment. Interventions coupled with dyadic BLS attend to attunement and attachment and include (a) establishing accurate empathic communication, (b) resourcing techniques from EMDR protocol (i.e., safe place, container, cue word), and (c) processing of targets per EMDR protocol (Adler-Tapia & Settle, 2018).

While the child and caregiver are sitting in this arrangement, the counselor asks them to provide verbal reflections regarding the nonverbal cues and emotions of the other. This intervention enhances each party's ability to attune to the experience of the other and avoid "miscuing," a phenomenon where an insecurely attached child miscues the parent or caregiver "away from their basic attachment needs because cueing about their needs directly evokes distressful emotional states in their parents" (Powell, Cooper, Hoffman, & Marvin, 2007, p. 173). When parent or child experiences distressing emotions in session, the experience is verbally named and ARC coregulation strategies are employed (Blaustein & Kinniburgh, 2010).

Theraplay. Theraplay is a modality that contributes structure and therapeutic activities to MBTM. Play is a normative part of development (Brazelton & Sparrow, 2001) and one of the methods by which mastery of developmental tasks of increasing cognitive complexity are achieved (Gaskill & Perry, 2014). Trauma interrupts normative development by initiating a neurobiological stress response, which adversely impacts the functionality of multiple bodily systems and impairs the child's ability to experience safety (Perry, 2008; Boullier & Blair, 2018). Theraplay is a somatic interactive method that guides the child and the caregiver as they engage in playful activities that include touch and positive emotional interaction (Wettig, Franke, & Fjordbak, 2006). Theraplay utilizes a bottom-up approach, whereby activities promote self-regulation by engaging the child's somatosensory system (Gaskill and Perry, 2014).

When the child and the caregiver engage in Theraplay, activities mimic normative play and reactivate early bonding in a nurturing atmosphere that provides experiences of loving soothing touch (Booth & Jernberg, 2010). Theraplay aims to repair the disrupted bond between the child and the attachment figure and "focuses on building the

attachment relationship” (Booth & Jernberg, 2010, p. 359). All Theraplay interventions provide structure, nurturing, and engagement as well as challenging both the child and the adult to step outside of their comfort zone. MBTM utilizes such Theraplay activities as “caring for hurts” (Booth & Jernberg, 2010) to provide the child with experiences in which their caregiver is able to hold their emotions and offer soothing touch. When implemented with MBTM, Theraplay activities are offered early in the treatment process and at the beginning of each session as a means of investing in the attachment bond between child and caregiver and to heal the damaging effects of trauma.

Body Work. The final element of MBTM is body work, which continues the bottom-up approach of Theraplay. Every aspect of the self, from social and emotional health to physical well-being, is attended to as the child learns to regulate bodily sensations and emotions. Trauma disrupts a child’s physical, emotional, social, and cognitive development to the extent that achievement of developmental milestones may be delayed (Gaskill and Perry, 2014). To support the healing process, MBTM utilizes trauma-informed yoga instructors and occupational therapists to provide clients with body-based interventions. With parent/caregiver consent, the counselor, yoga instructor, and occupational therapist communicate regarding the client’s needs, treatment planning, and progress. These practitioners work together to coordinate one-on-one sessions in addition to weekly or biweekly counseling sessions to promote the overall health and well-being of the child.

MBTM Phases

MBTM’s integration of the triphasic model, the ARC framework, EMDR, and Theraplay along with body-based interventions provides an approach for treatment of child survivors of trauma that is flexible and attentive to the needs of this population. The application of MBTM is described here in three phases. Clients must attend to establishing a sense of safety (Phase 1) prior to moving on to reprocessing. Clients may,

however, continue work on safety or return to it while working on a subsequent phase. This is an aspect of the flexibility that is at the core of MBTM.

Phase 1: Assessment, Establishing Safety, Developing Resources, and Normalizing Responses

As with the triphasic model (Herman, 2015), the initial sessions of MBTM focus on establishing the safety of the counseling environment and building rapport with the child and the caregiver. The initiation of treatment includes obtaining informed consent, completing necessary releases of information for coordination of care, review of history, and assessment of the presenting concerns. Assessment includes completion of multiple steps and instruments. The caregiver provides information concerning the child's history for a biopsychosocial assessment as well as completing an ACEs questionnaire, the Life Stressors Checklist (Wolfe, Kimerling, Brown, Chrestman, & Levin, 1997), and the Traumatic Events Screening Inventory—Parent Report (Ghosh Ippen et al., 2002). The Children's Impact of Event Scale—13 (Horowitz, Wilner, & Alvarez, 1979) is completed by the counselor with the child and caregiver. The child and caregiver complete the Marschak Interaction Method (Munns, 2000) together while the counselor observes through a one-way mirror or audio/video equipment and the process is video recorded.

Phase 1 therapeutic interventions include EMDR resources such as square-breathing (deep breathing with self-administered visual BLS) with cue word and providing ARC psychoeducation resources for the caregiver to promote understanding of the child's experience of fight, flight, and freeze (e.g., "Understanding the Body's Alarm System," Blaustein & Kinniburgh, 2010). The counselor also uses psychoeducation with the child and caregiver by reviewing Ippen and Ippen's (2016) children's book, *Once I Was Very Very Scared*, regarding the multitude of potential responses to adversity. This text introduces animal characters who speak in group counseling style about their feelings in response to scary experiences. When reading this text in the counseling session, the counselor asks the child and caregiver to indicate which animal they most relate to and why. This helps both the child and the caregiver better understand how trauma impacts

emotive and somatic experience and to identify ways to engage when difficult feelings arise.

The talking about the brain exercise, created by one of the primary developers of MBTM, Kate Bunch, may also be used during this initial phase of treatment. Facilitated by the therapist, both the child and the caregiver answer questions and apply aspects of the discussion to a fictitious situation where a T-rex (or other unrealistic animal) threatens the child and caregiver. The exercise begins with the counselor drawing an oval on a white board or paper, informing the child and caregiver that the oval represents the brain. The counselor divides the oval into three parts and labels them (a) the thinking brain, (b) the feeling brain, and (c) the survival brain. The counselor then asks the child the following: “If we lived a long long time ago, and you and your caregiver were on a walk, and a big T-rex jumped out at you, what would you do?” The counselor writes the child’s response next to the survival brain on the diagram. The counselor then asks, “How would you feel?” The response is written near the feeling label. The counselor follows with “Now when you saw the big T-rex, did you have to stop and think about what to do or did your body act for you?” Children typically answer, “My body just did it.” Counselor, caregiver, and child discuss how the survival brain reacts to threatening situations without first consulting the feeling and thinking brains, thus protecting us from harm.

Counselor, caregiver, and child process the child’s response about what they would do if they saw a T-rex. The counselor indicates that these responses are normal and healthy, as they are the survival brain’s way of keeping us safe. Discussion about the child’s feelings when confronted with a threatening T-rex allows the child to view their feelings as valid and normal given the situation. The counselor then asks the child and caregiver to walk through a recent experience where the child felt “big feelings” (e.g., sad, scared, lonely, angry). Specifically, the counselor asks the child what triggered the feelings (the modern T-rex). The child is then asked which part of the brain was “on” after the trigger or when they were experiencing big feelings. Throughout this process the counselor guides the child and the caregiver to explore how modern-day triggers, often related to a traumatic or anxiety-provoking experiences, cause the survival brain to react

and the feeling brain to take over before the thinking brain can respond in a rational way. Methods of helping the thinking brain “come back online” are discussed, including coregulation strategies such as butterfly hugs, a tactile EMDR BLS technique (Adler-Tapia & Settle, 2018), or talking through an experience while providing space for processing big feelings.

During this initial phase of treatment, Theraplay activities may be introduced as a means of enhancing the attachment bond between the child and the caregiver. These play-based activities provide the structure and boundaries necessary to ensure safety in the relationship and in the therapeutic space. Inclusion of Theraplay also allows for corrective emotional experiences (Hughes et al., 2015), as the child engages in safe and soothing therapeutic touch, structured communication, and play with caregiving figures. Prior to moving on to Phase 2, the child may be assessed for the appropriateness of introducing body-based interventions, including trauma-informed yoga and occupational therapy.

Phase 2: Maintaining Safety, Containing Distress, Reprocessing, and Collaborating

Phase 2 of treatment builds on the resources developed during Phase 1, but with an emphasis on building a safety net for the child that enables them to coregulate and cope when confronted with stressors. This includes identifying safe members of the caregiving system to whom the child can go when in need of support. Coregulation skills are further developed and may include the caregiver verbally acknowledging when the child seems to be struggling with emotions and prompting a body-based coregulation strategy such as stretching, engaging in deep breathing, or shaking it off (Blaustein & Kinniburgh, 2010). The coregulation strategies and caregiver safety net create the foundation for processing adverse experiences and provide the child and the caregiver with tools to cope with the difficult emotions and body sensations that accompany trauma processing.

In preparation for processing traumatic material, the counselor assists the child in creating a “trauma container” (Adler-Tapia & Settle, 2018). During this activity, a

physical representation of the trauma container is constructed from craft materials provided by the counselor including sturdy recycled containers, paper, paints, and markers. When the container is completed, the counselor asks the child to imagine putting all of their distressing feelings, thoughts, and body sensations into the container. The counselor then asks whether the child was able to place all of the feelings, thoughts, and sensations into the container and if the container is strong enough and large enough to hold everything. If the child was unable to place everything in the container, the counselor engages in trouble shooting, helping the child to reinforce their container or create a specific container for a particularly troubling feeling, thought, or sensation.

The child is encouraged to use the trauma container between sessions, placing any overwhelming feelings, thoughts, or sensations in the container, with their caregiver's help if needed. They are informed that they can keep these difficult feelings in their container until their next session. Some children write or draw on paper their worries and feelings and place these in the container over the course of the week; the notes are then reviewed in session. At the end of each processing session, the child is asked to put any remaining distress or big feelings into their container so that they may leave session with all memories and distress contained.

Phase 2 includes the bulk of trauma processing, organized through the use of a targeting plan. One method of organizing targets includes the use of nesting dolls to create a timeline of the child's life. The counselor provides a long sheet of paper, then invites the child to un-nest the dolls, placing them in a line from left to right along the paper. The counselor asks the child to draw a line from left to right on the paper to represent their life from birth to present. The child and caregiver are then asked to draw and/or write significant events in the child's life on their timeline. The nesting dolls serve as anchors, with each doll representing a specific age in the child's life (as determined by the child). After all significant life events have been recorded, the child is asked to rate each life event on a scale of 1 to 10, with 10 being very difficult or distressing, and 1 being no distress at all. The counselor then takes the most distressing life events and organizes a targeting plan for EMDR processing (Shapiro, 2018; Adler-Tapia & Settle, 2018).

Phase 3: Reconnection, Future Templating, and Identity Development

The final phase of the MBTM includes processing the remaining distressing experiences from the EMDR targeting plan (Shapiro, 2018; Adler-Tapia & Settle, 2018), followed by testing the validity of the positive cognition. The positive cognition is identified with the support of the counselor and counters the negative appraisal self-developed as a result of a traumatic experience. One of the aims of the end stages of EMDR is to ensure that the client believes their positive cognition with certainty (Adler-Tapia & Settle, 2018). Once the child identifies the validity of their positive cognition as a 7 on a scale of 1 (being completely false) to 7 (being completely true), future templating may begin.

During the creation of future templates the child and caregiver are asked to consider future situations when the child might be confronted with reminders of the traumas that were processed using EMDR. The counselor asks the child how they would like to manage the experience differently now that they believe their positive cognition. The child then engages in BLS (tactile or visual) while imagining utilizing the tools and skills in the future. This activity, like all EMDR processing protocols, ends with the counselor verbally walking the child through a body-scan exercise. This structured exercise supports the child's exploring where in their body any remaining trauma-related distress is held (Adler-Tapia & Settle, 2018).

Collaboration with the caregiver regarding the child's experience during this phase is essential, as the caregiver has the opportunity to share the experience with the child in and out of session. During Phase 3, the child and the caregiver process feelings of grief and loss, working to derive meaning from the adverse experiences that motivated them to seek treatment. Yoga and/or occupational therapy may co-occur with the therapeutic process or begin during this phase. The transition to body-focused work enables the child to reconnect with aspects of the physical self that may have been dissociated during the fight, flight, or freeze response (Levine, 1997; Levine, 2010).

One of the final focus areas of MBTM is the child's development of identity. From infancy to adolescence, children form a basic awareness of self as an individual with their particular multitude of identities and how this evolving self-concept is understood by family, peers, and community. The counselor supports the child and the caregiver as they explore how trauma has impacted the child's sense of self, from the internalization of negative beliefs associated with the trauma to the fragmentation of self and dissociative coping strategies. Interventions may include providing the caregiver with psychoeducation about child development and encouraging the continuation of therapeutic activities in the home environment. Theraplay activities remain a staple both in session and as homework. The continued practice of these activities increases the frequency of nurturing attachment-enhancing interaction (Booth & Jernberg, 2010).

Discussion

The aim of MBTM is to provide clinicians working with children an integrative trauma treatment model that includes a structured protocol of strategies and interventions. It is a flexible approach to assist in the remediation of the effects of trauma including the childhood effects of ACEs as well as the risk of negative health outcomes in adulthood. The MBTM is both comprehensive and holistic in conceptualizing the ill effects of trauma. Further, it draws from existing evidence-based strategies creating a new, intentional, and combined overall model.

The MBTM is an intervention developed specifically for use at TTC to treat trauma survivors and is currently applied through the center's Intensive Out Patient (IOP) program for at-risk adolescents. Multiple counselors at TTC also utilize this approach. IOP clients' behavioral and physiological changes are monitored and evaluated regularly. Fluctuations in symptomology are assessed at designated intervals during the 16-week IOP with clinicians adjusting aspects of the phases as needed.

Although the TTC application of MBTM shows promise, evidence of its efficacy is not established as formal studies have not yet been completed. Therefore, MBTM is not currently empirically supported. TTC received institutional review board approval in

July 2019 to begin utilizing assessment data to evaluate client outcomes. Anecdotal reports from the 16 master's-level clinicians who have had MBTM training and provided direct services at TTC support MBTM as a valuable approach to trauma treatment.

Clinicians attempting to utilize MBTM elsewhere may experience a number of barriers when establishing the necessary multidisciplinary team. Recruiting clinicians and body-based providers including team members with experience in EMDR, Theraplay, ARC, and trauma-informed interventions may be difficult due to the specialized nature and costs of completing such trainings. Use of MBTM may be further limited by challenges associated with implementing an integrative counseling approach. These challenges include clinicians' difficulties resisting the impulse to return to previous methods of addressing client distress, reframing their beliefs about the mechanism of change in counseling, and defining success in treatment (Byrne, Salmon & Fisher, 2018).

Implications for future MBTM research are broad. Initially, the MBTM combination of accepted methods must be empirically establishing as an evidence-based approach in its own right. Additionally, findings are needed for a multitude of populations and specific situations. These include but are not limited to regional locations as well as client factors such as age, gender, socioeconomic status, ethnicity and other cultural elements, and type of trauma. Caregiver involvement and their role as attachment figures may also affect MBTM outcomes. Hopefully research on this promising model will take place establishing MBTM as an intervention widely available for trauma remediation.

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