The Mediational Intervention for Sensitizing Caregivers: Building Resilience and Preventing Mental Health Problems

**Theoretical Background**

What is the difference between a child learning alone and a child learning together with an adult who *mediates* the environment for them? Imagine a child drawing a picture alone compared to a child drawing a picture with an adult who slows down to meet the child’s cognitive and emotional level and focuses and guides them, perhaps asking about how the colors remind them of nature. Similarly, what is the difference between an adolescent crying alone and an adolescent crying while their parent responds and scaffolds them through their experience of distress? These questions illustrate the guiding concept behind the Mediational Intervention for Sensitizing Caregivers (MISC; Klein, 1996), a caregiving intervention that focuses on enhancing the serve and return between caregivers and children. The theoretical model behind MISC assumes that almost all caregivers have the same “deep objective” – they want the best for their child emotionally, socially, and cognitively. However, families may face a myriad of factors and experiences that impede their ability to form secure attachments with children and foster optimal development – separation, trauma, poverty, occupational stress, mental health problems, personality differences, and more. While genetics, trauma, and life circumstances may be immutable, MISC focuses on the immediate caregiving environment – the here and now *–* to strengthen the attachment relationship and enhance child development.

MISC was originally developed by Dr. Pnina Klein (1996) for low-resource and high-risk environments in which attachment disruption has occurred. “MISC” is a dual acronym describing both the process (Mediational Intervention for Sensitizing Caregivers) and the objective (More Intelligent and Sensitive – or Socially competent – Children). The theoretical underpinnings of the intervention are drawn from attachment theory (Bowlby, 1973) and Feuerstein’s (1979) theory of cognitive modifiability and mediated learning experiences (MLEs). The intervention aims to “sensitize” caregivers to the “literacy of interaction” – to be able to “read” and respond to the child’s emotional and learning needs. This is done by promoting a set of components or criteria within parent-child interactions that create learning moments (i.e., mediated learning experiences) and enhance the child’s cognitive, social, and emotional development. By engaging in these components, the caregiver slows down the interaction so that the child feels understood and supported and begins to *learn to learn.*

The conceptual model underlying MISC (the MISC “tree”) is shown in Figure 1. The “roots” of the tree are attachment-based emotional components (e.g., touch, smiles, eye contact) that communicate messages of “it’s worthwhile to act,” “I’m with you,” and “I love you” to the child. However, Klein argues that “attachment is not enough” for learning to take place; “the affectionate bond between a child and caregiver opens the gate to the child’s mental development, but does not, in itself, determine what will pass through the gate” (Klein, 1995, p. 5). Thus, MISC also defines behaviorally anchored mediational components (the tree’s trunk): focusing (i.e., gaining the child’s attention and directing them to the learning), affecting (i.e., communicating meaning or excitement), expanding (i.e., extending the child’s awareness beyond the present situation), rewarding (i.e., expressing satisfaction with the child’s behavior), and regulating (i.e., helping the child to shape cognitive and behavioral steps toward goals). Together, the emotional and mediational components affect the child’s need system and approach to future experiences (tree’s leaves), building trust, mental flexibility, resilience, and a capacity for learning from adults.

**Structure of MISC**

MISC is a semi-structured, manualized video feedback intervention. Work with the caregiver is referred to as “training,” as it does not use an instructional, explicit teaching format. Training occurs in three basic modes. The first mode is individual video feedback sessions, during which the MISC “trainer” and caregiver reflect together on a video recording of an interaction between the caregiver and child, emphasizing behaviors and concepts related to the MISC components. The second mode is “in-service training,” for which the trainer is present during interactions between the caregiver and child and helps the caregiver implement MISC concepts in real time. The final mode consists of group meetings during which caregivers share their experiences with each other, fostering support as well as consolidation and expansion of caregiving skills. The standard structure is a yearlong with biweekly individual training sessions (24 sessions total). The intervention is lengthy because the aim is for the parent to internalize and generalize the core principles of caregiving. Additionally, MISC trainers do not require an advanced degree and no special tools or materials are required beyond the video clips, balancing the cost-effectiveness of the intervention.

**Evidence Base**

The MISC components were defined based on theoretical and empirical support suggesting that specific characteristics of interactions between adults and children contribute to secure attachment relationships or affect children’s predisposition to learn. Specifically, the emotional components of MISC were defined to capture the fundamental affective and behavioral elements of a secure attachment relationship that are used in a variety of other psychodynamic and attachment-based interventions (Sharp, et al., 2020). In the 1980’s, the presence of mediational caregiver behaviors were found to predict cognitive outcomes in children better than the children’s own initial test scores and other relevant variables such as maternal education level (Klein et al., 1987). Other studies also demonstrated support for the importance of mediational behavior in the quality of both children’s cognitive (Klein, 1984; Klein et al., 1987) and socio-emotional development (Shuper Engelhard, Klein, & Yablon, 2013). The caregiver behaviors investigated by Klein and colleagues (1984, 1987) were later formally defined as the MISC mediational components.

Research on MISC utilizes the Observing Mediational Interaction (OMI; Klein, 2014) coding scheme to quantify both the emotional and mediational components. The mediational components are coded and tallied as they occur throughout video-recorded interactions, aligning with the video-feedback nature of the intervention itself. The OMI can be used to track changes in caregiving behaviors during and following MISC, providing a useful measure of both intervention processes and outcomes. While the OMI mediational components have demonstrated reliability and validity (e.g., Klein & Alony, 1993; Boivin et al., 2013a; Boivin et al., 2013b; Sharp et al., 2021), there is ongoing work to further validate the emotional components and to expand the measure for novel contexts, settings, and populations (Kerr et al., under review).

Since the development and introduction of MISC, several studies have been conducted that support its effectiveness. The first found that MISC led to increased maternal use of the MISC components and improved child outcomes, including scores on tasks of receptive vocabulary and verbal abstract reasoning, in 48 mother-infant dyads compared to 20 control dyads in a low-SES community in Israel (Klein & Alony, 1993). Similar results were found in randomized controlled trials (RCTs) in rural Uganda with 120 dyads with preschool-aged children with HIV/AIDS (Boivin et al., 2013a) and 119 dyads with uninfected HIV-exposed preschool-aged children (Boivin et al., 2013b). These results were then replicated in larger RCTs in Uganda with 221 HIV-exposed but uninfected 2 – 3-year-old children (Boivin, et al., 2017) and 120 HIV/AIDS-affected 2 – 5-year-old children (Bass, et al., 2017). Recently, a quasi-experimental feasibility trial conducted MISC with community-based organization careworkers, and orphans and vulnerable children ages 7-11, in South Africa and found that MISC increased the careworker’s use of emotional and mediational components, as well as improved youth mental health (Sharp et al., 2021).

**Potential and Future Directions**

The semi-structured nature of MISC allows for cultural adaptability and developmental transportability, carrying diverse potential beyond the limitations of setting, context, or dyad. MISC does not impose cultural values or a certain parenting style; instead, the video-feedback method works within the caregiver’s social and cultural context (Sharp, 2020). Therefore, MISC is likely to be experienced as more respectful and less intrusive than highly structured, instructional interventions, making it particularly well-suited for marginalized communities. Additionally, unlike some existing attachment-based and cognitive-behavioral parenting interventions, MISC is not restricted to a developmental stage. This is because MISC instills a set of basic principles that can be applied across ages, relationships, and settings. In research studies, the “caregiver” role has included parents, educators, and older siblings, and the “child” role has included infants (Klein, 1988; Klein & Feldman, 2007), preschool children (Boivin et al., 2013a, 2013b), school-aged children (Klein et al., 2000, 2002; Korat & Or, 2010; Korat & Segal-Drori, 2016; Shany & Yablon, 2021; Tzuriel & Caspi, 2017), and adults with developmental disabilities (Lifshitz et al., 2010). Additionally, caregivers can extend the MISC principles to their other relationships, including romantic relationships, other family relations, or friends. Another strength of MISC is that it is highly scalable. While MISC is a relatively lengthy intervention (one year), it remains resource-efficient: MISC “trainers” do not require an advanced degree, and the intervention does not require specialized tools or materials (Klein, 1996).

Compared to other existing parenting interventions, MISC is unique in how it simultaneously addresses the attachment relationship and promotes empirically defined positive parenting behaviors. There is clear overlap between the concepts of mediation in MISC and mentalizing in Mentalization-Based Therapy (MBT), but MISC extends the concepts in MBT by describing behaviorally operationalized components (i.e., the mediational components) that help the caregiver to “read” or mentalize the child (Sharp et al., 2020). Additionally, while the emotional components in MISC can be found in other attachment-based interventions, the mediational components offer concrete behaviors that help rebuild the attachment relationship in mothers who may struggle to engage in the emotional components due to their experiences or circumstances. For these mothers, MISC offers a behavioral pathway toward the emotional components and the attachment relationship over time.

The potential for MISC has been recognized by researchers around the world, with ongoing studies adapting MISC for a variety of settings and populations (see the recently published book on the empirical basis for MISC and ongoing studies - Sharp & Marais, 2021). Given that MISC is theoretically grounded in education, some ongoing studies focus on educators (e.g., early childhood education settings; Kraft, 2021) and educational outcomes (e.g., MISC with parents during book reading to support child literacy; Segal-Drori & Korat, 2021). Additionally, researchers have begun to adapt and apply MISC to families with psychopathology or related risk factors, including mothers with depression (Familiar, 2021), mothers of toddlers with sensory processing and self-regulation disorders (Jaegermann & Freudenstein, 2021), mothers with borderline personality disorder (Wall et al., 2021, families who experienced migration-related separation (Venta et al., 2021), mothers and children exposed to intimate partner violence (Brashear et al., 2021), and mothers who have been incarcerated. It is also important to note that MISC principles and methodology can be applied beyond using the full, standard intervention. The MISC components can be integrated and employed in psychotherapy contexts, as illustrated by a recent case report (Sharp, 2021). Relatedly, Sharp (2020) argues that the MISC components could be incorporated into existing mentalization-based therapies to offer a pragmatic framework for building mentalizing capacities. Additionally, researchers suggest that MISC can be used in therapist training and supervision, both to help the supervisor enhance learning in the therapist supervisee, and to model how the therapist supervisee can mentalize or “read” their clients (Sharp et al., 2020). While traditionally a “caregiver” intervention, MISC distills the basic ingredients that enhance closeness and learning and therefore could be translated into a variety of future contexts and settings – caregivers, romantic relationships, educators, peer-based programs, mental health professionals or other service providers, organizations, and more.

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Figure 1.

*The MISC Model*

