

Psychotherapy

Parental Reflective Function and Children's Attachment-Based Mental State Talk as Predictors of Outcome in Psychodynamic Child Psychotherapy

Sibel Halfon and Burcu Besiroglu

Online First Publication, October 29, 2020. <http://dx.doi.org/10.1037/pst0000347>

CITATION

Halfon, S., & Besiroglu, B. (2020, October 29). Parental Reflective Function and Children's Attachment-Based Mental State Talk as Predictors of Outcome in Psychodynamic Child Psychotherapy. *Psychotherapy*. Advance online publication. <http://dx.doi.org/10.1037/pst0000347>

Parental Reflective Function and Children's Attachment-Based Mental State Talk as Predictors of Outcome in Psychodynamic Child Psychotherapy

Sibel Halfon and Burcu Besiroglu
Istanbul Bilgi University

Mentalization, operationalized as reflective function, is defined as the capacity to understand behavior in terms of mental states. Mentalization can be self-focused (i.e., mentalizing that focuses on one's own thoughts and feelings) or other-focused (i.e., mentalizing that focuses on others' thoughts and feelings). Some studies in adult psychotherapy show the importance of patients' mentalization capacity for treatment outcome; however, this has not yet been investigated in psychodynamic child psychotherapy. This study aimed to investigate whether baseline parental reflective function (PRF) and children's mental state talk (MST) predicted changes in emotional and behavioral problems in psychodynamic child psychotherapy. The sample included 60 Turkish school-age children ($M_{\text{age}} = 7.90$, $SD = 1.35$, 43.3% girls) with internalizing (18.3%), externalizing (5%), and comorbid (56.7%) problems, and 20% of the children were in the nonclinical range. The mothers were interviewed using the Parent Development Interview, which was coded for PRF (self- and child-focused). Children were administered an attachment-based story stem task, coded for MST (self- and other-focused). The Brief Problem Monitor was administered every month over the course of treatment for a total of 366 sessions. Multilevel modeling analyses indicated that mothers' child-focused PRF and children's self-focused MST predicted changes in problem behaviors. Parents' mentalization about their children and children's mentalization about their own internal states could be predictors of treatment response in psychodynamic child psychotherapy.



Clinical Impact Statement

Question: This study investigated whether parents' self- and child-related mentalization, as well as children's capacity to identify mental states, in the attachment context predicted treatment outcome in psychodynamic child psychotherapy. **Findings:** Parents' reflective function about their child and children's ability to identify their own mental states predicted changes in emotional and behavioral problems. **Meaning:** Parents' ability to think about the child's mind and children's capacity to identify their own mental states may help them benefit more from psychodynamic child psychotherapy. **Next Steps:** Future research should investigate why parent and child mentalization relates to outcome in psychodynamic psychotherapy as well as in other types of treatment. It is possible that other mediating factors such as therapeutic alliance and children's affect regulation affect this association. It is also important to investigate whether improvements in mentalization over the course of treatment predict treatment outcome.

Keywords: parental reflective function, mental state talk, psychodynamic child psychotherapy, emotional and behavioral problems

Mentalization is the ability to understand and interpret behaviors and interpersonal interactions as motivated by underlying mental states (i.e., feelings, needs, wishes, beliefs, and/or purposes; Fonagy, Target, Steele, & Steele, 1998). Fonagy, Gergely, Jurist, and

Target (2002) proposed a developmental model in which children's awareness of mental states emerges in the context of a secure attachment relationship through a caregiver's accurate, marked, and timely mirroring of the child's internal experiences.

 Sibel Halfon and  Burcu Besiroglu, Department of Psychology, Istanbul Bilgi University.

This research was partially supported by American Psychoanalytic Association's Fund for Psychoanalytic Research. Moreover, the research was partially supported by the Scientific and Research Council

of Turkey (TUBİTAK) Grant 215 K 180 in the collection of some pretest measures.

Correspondence concerning this article should be addressed to Sibel Halfon, Department of Psychology, Istanbul Bilgi University, Kazım Karabekir Caddesi, No: 2/13, Eyüp, 34060 Istanbul, Turkey. E-mail: sibel.halfon@bilgi.edu.tr

There is evidence showing that parental reflective function (PRF; a parent's capacity to reflect on his or her own mental experiences and those of his or her child; Slade, 2005) predicts attachment security and development of mentalization skills in children (Fonagy, Steele, & Steele, 1991; Oppenheim, 2006; Steele & Steele, 2008). Parental and child mentalization in the specificity of attachment relationship are protective factors against emotional and behavioral problems via helping children to regulate emotions (Benbassat & Priel, 2012; Ha, Sharp, & Goodyer, 2011; Halfon, Bekar, Ababay, & Çöklü-Dorlach, 2017).

As psychodynamic psychotherapy involves reflecting on one's own internal experiences, children who come from families where there is less recognition of their mental states may have worse outcome. However, the predictor effect of mentalization deficits has only been investigated in adult psychotherapy with mixed findings (Müller, Kaufhold, Overbeck, & Grabhorn, 2006; Taubner & Curth, 2013). This study aimed to investigate whether baseline PRF and children's mentalization capacity (operationalized as children's mental state talk [MST]) predicted changes in emotional and behavioral problems in psychodynamic child psychotherapy.

Parental Reflective Function, Emotional and Behavioral Problems

Mentalizing in the context of parenting is defined as a parent's ability to reflect on their own and their child's mental states, and to understand how these mental states impact behaviors as well as make connections with their developmental origins (Luyten, Nijssens, Fonagy & Mayes, 2017; Slade, 2005). Parental mentalization has been examined from the vantage point of different methodological frameworks such as mind-mindedness (i.e., parents use of mental state terms in their interactions with their children; Meins et al., 2003), parental insightfulness (i.e., seeing things from the child's point of view, insight into the child's motives, and openness to new information about the child; Oppenheim & Koren-Karie, 2002), and parent's ability to accurately guess the child's intentions (Sharp, Fonagy, & Goodyer, 2006). Reflective function (RF) coding (Slade, Bernbach, Grienerberger, Levy, & Locker, 2005) of the Parent Development Interview (PDI; Slade, Aber, Berger, Bresgi, & Kaplan, 2003) specifically assesses parents' mentalization (i.e., PRF) as they talk about their relationship with their children.

PRF has generally been assessed with relation to infants; however, for the purposes of this study, we focused on parents' reflection about their school-age children to address a significant gap in literature. PRF functions differently in different stages of the child's development and may have a particular importance in middle childhood (Borelli, St. John, Cho, & Suchman, 2016). Whereas PRF is crucial in supporting parents' ability to attribute meaning to infants' nonverbal behaviors (Luyten, Nijssens, Fonagy, & Mayes, 2017), PRF during middle-childhood may serve to understand children's experiences without direct observation as the time children spend at school and with peers increases (Borelli et al., 2016). The parent also tries to understand children's internal experiences in the context of children's greater ability to mask their emotions. Moreover, as school-age children's attempts for individuality increases, this may create threat and anxiety in the parents, requiring them to more closely monitor their own mental

states (Borelli et al., 2016). Limited research in middle-childhood shows that PRF is associated with children's attachment security (Borelli et al., 2016), MST (Scopesi, Rosso, Viterbori, & Panchieri, 2015), and mentalization regarding themselves (Ensink, Normandin, Plamondon, Berthelot, & Fonagy, 2016) as well as predict children's mentalization beyond maternal attachment security (Rosso, Viterbori, & Scopesi, 2015). Moreover, PRF is related to parenting behaviors such as sensitivity and responsiveness, which in turn affect children's behavioral adjustment (Benbassat & Priel, 2012; Benbassat & Shulman, 2016; Borelli, West, Decoste, & Suchman, 2012). PRF is a protective factor against internalizing and externalizing problems in school-age children (Benbassat & Priel, 2012; Ensink, Bégin, Normandin, & Fonagy, 2016; Taubner & Curth, 2013). Esbjørn et al. (2013) found an inverse association between PRF and child anxiety. In addition, low mentalizing by parents, measured by maternal mind-mindedness comments increases the risk of conduct and oppositional defiant disorders in their children (Centifanti, Meins, & Fernyhough, 2016). There is an inverse association between the ability of mothers to accurately predict their children's responses (used as a measure of PRF) and children's psychopathology (Sharp et al., 2006). Halfon, Bekar, Ababay, et al. (2017) found that mothers' MST through pretend play was linked with fewer internalizing symptoms.

Most studies to date have focused on PRF as a unitary construct; however, PRF may be multidimensional entailing a child-focused (i.e., the capacity to understand mental states underlying the child's behavior and their impact on the parent) and a self-focused dimension (i.e., the capacity to understand the mental states underlying their own parenting behaviors and their impact on the child; Luyten et al., 2017). A two-dimensional structure was identified by Suchman, DeCoste, Leigh, and Borelli (2010) and Borelli et al. (2016), with differential relations to children's attachment, emotional and behavioral function. Child-focused PRF was positively associated with children's attachment security (Borelli et al., 2016), whereas an increase in self-focused PRF was related to more negative emotionality and externalizing problems in the child (Smaling, Huijbregts, van der Heijden, van Goozen, & Swaab, 2016).

Child Mentalization, Emotional and Behavioral Problems

As mentalization overlaps with many concepts such as theory of mind (i.e., infants' perspective taking and false belief understanding) and emotion understanding, there is a wide array of instruments in childhood, each measuring a different aspect of mentalization (see Vrouva, Target, & Ensink, 2013, for a review). RF is particularly relevant among these concepts, measuring one's capacity to recognize mental states as well as links with behaviors and interpersonal processes. The Child Attachment Interview (Shmueli-Goetz, Target, Fonagy, & Datta, 2008) measures Child Reflective Function (CRF); however, such interview-based measures can only be used for children over eight. Another approach for measuring mentalization and its multidimensional structure is looking into various dimensions of children's MST (Bekar, Steele, & Steele, 2014). Mentalizing involves the act of attributing mental states to the actions of others and oneself; therefore, the use of mental state words in discourse is essential for the explicit men-

talization practice. Moreover, research findings show strong associations of MST with children's developing capacities for representing and reasoning with such mental states (for reviews, see Carpendale & Lewis, 2004; Symons, 2004), affect regulation, and internalizing and externalizing problems (Halfon, Bekar, Ababay, et al., 2017; Halfon, Bekar, & Gürleyen, 2017).

Child mentalization deficits could be associated with behavioral and emotional problems. CRF has an inverse association with depression and externalizing disorders (Ensink et al., 2016) as well as somatic and conduct disorders (Bizzi, Ensink, Borelli, Mora, & Cavanna, 2019). Distorted mentalizing, which is misattribution of intentions to others, has been associated with externalizing disorders (Sharp, Croudace, & Goodyer, 2007; Sharp et al., 2006), more specifically with conduct problems (Ha et al., 2011). Pseudomentalization (i.e., mentalization that looks like mind-reading but is used to manipulate or control behavior) is associated with externalizing problems (Sutton, Reeves, & Keogh, 2000) and psychopathy (Sharp, 2008). Similar to the multidimensional nature of PRF, children's mentalization also has separate components regarding mentalizing about the self or others (Ensink et al., 2015), with differential associations with children's psychological function. For example, Bizzi et al. (2019) found that children with internalizing disorders may be impaired in reflecting on their own mental states.

Despite mixed findings, demographic variables like children's age, sex, and maternal education are associated with child (Pears & Moses, 2003) and parental mentalization (Sleed, Slade, & Fonagy, 2018) as well as children's behavioral problems (Wilson, Hurtt, Shaw, Dishion, & Gardner, 2009). Older children have better mentalizing capacities (Hughes & Dunn, 1998; Sleed et al., 2018) and girls mentalize better than boys (Bosacki, 2000; Cutting & Dunn, 1999; Rutherford et al., 2012). Maternal education has positive associations with mothers' RF, negative associations with children's behavioral problems (Carneiro, Meghir, & Parey, 2013; Ensink et al., 2016), and positive relations with children's mentalization (Cutting & Dunn, 1999). Children's linguistic aptitude is positively related to theory of mind (Milligan, Astington, & Dack, 2007) and CRF and negatively related to behavioral problems (Camoirano, 2017). More specifically, there is a strong link between children's linguistic aptitude and mentalization, which requires advanced verbal and symbolic understanding of mental states (Rutherford et al., 2012), which are influenced by the amount and frequency of parents' MST (Taumoepeau & Ruffman, 2006). In addition, parental stress has an adverse effect on parental sensitivity and PRF, negatively affecting children's socioemotional function (Stacks et al., 2014) and increasing externalizing problems (Valiente, Lemery-Chalfant, & Reiser, 2007).

Mentalization as Predictor of Psychotherapy Outcome

Various treatment approaches target mentalization skills in children and their parents to enhance parent-child communication and improve children's psychosocial functioning (Midgley, Ensink, & Lindqvist, 2017; Verheugt-Pleiter, Zevalkink, & Schmeets, 2008). The importance of enhancing PRF is supported by the development of specific reflective parenting programs (Sadler et al., 2013; Sleed, Baradon, & Fonagy, 2013), whose preliminary effectiveness have been demonstrated. Parents' understanding into the child's difficulties and their insightfulness about the child's expe-

rience may play a substantial role in the amelioration of the child's symptoms. For example, improvement in externalizing and internalizing problems was found only among children whose mothers showed increased insightfulness after the intervention in a therapeutic preschool (Oppenheim, Goldsmith, & Koren-Karie, 2004). Zimmer-Gembeck et al. (2019) found that a larger improvement in parents' mentalization was associated with a greater decline in children's internalizing symptoms in parent child interaction therapy. Moretti, Obsuth, Mayseless, and Scharf (2012) found that changes in parenting representations were significantly related to reductions in problem behaviors in their children in an attachment-focused intervention. No study to date has extensively tested whether PRF and children's mental state talk predicted changes in children's emotional and behavior problems in psychodynamic child psychotherapy. In an evidence-based single case study of two cases with anxiety disorder, Halfon, Bekar, and Gürleyen (2017) found that the child who had a more explicit capacity for mentalization before treatment was able to make clinically significant change in internalizing problems as opposed to the child who had more significant mentalization deficits.

In terms of other kinds of therapies where the predictor effect of mentalization have been investigated, most empirical studies come from adult psychodynamic treatments using the Adult Reflective Functioning Scale (Fonagy et al., 1998). Only few studies are available on baseline mentalization as a predictor of treatment outcome with adults (Ekebald, Falkenström, & Holmqvist, 2016; Müller et al., 2006), whereas other studies could not find an association between RF and symptom-level improvement (Rudden, Milrod, Target, Ackerman, & Graf, 2006; Taubner, Kessler, Buchheim, Kächele, & Staun, 2011) but found significant associations with changes in general distress and therapeutic alliance (Taubner et al., 2011). In addition, few studies conducted with adults, comparing only psychodynamic psychotherapy and cognitive-behavioral therapy (CBT) have demonstrated that the predictor effect of baseline RF on therapy outcome does not differ according to treatment type (Ekebald et al., 2016; Katznelson et al., 2020). On the other hand, RF increased more in psychodynamic therapy than CBT and change in RF was associated with therapy outcome in psychodynamic psychotherapy, but not in CBT (Katznelson et al., 2020). Gullestad, Johansen, Høglend, Karterud, and Wilberg (2013) found that patients with low RF benefit more from individual psychodynamic psychotherapy in contrast to step-down treatment (day hospital treatment followed by outpatient treatment), especially within the period of 8 to 36 months. On the other hand, patients with medium and high RF capacities benefit from both treatment modalities, especially for the first 8 months.

Aims

Despite the relations between parental and child mentalization and children's psychological adjustment, and some studies showing that these baseline characteristics could be prognostic for therapy outcome, their associations with emotional and behavioral problems in psychodynamic child psychotherapy have not yet been investigated. In this study, we assessed PRF via RF coding system on the PDI, the gold standard for measuring parental mentalization. As literature shows differential relations of self- and child-focused PRF to children's functioning, these were assessed separately. There is no agreed upon unified measurement tool to

measure child mentalization in middle childhood; however, children's MST has shown significant associations with internalizing and externalizing problems (Halfon, Bekar, Ababay, et al., 2017; Halfon, Bekar, & Gürleyen, 2017). Assessing mentalization in the context of attachment is arguably the best indicator of an individual's mentalization capacities (Ensink et al., 2015); therefore, in this study, an attachment-based story stem task was used to collect verbal data from children and coded for MST. Similar to different dimensions of PRF, the direction of MST (self- and other-focused) has differential relations to children's psychological adjustment; therefore, these were assessed separately. Given the literature that links parental RF with child mentalization, we also included interactions between these variables. We controlled for demographic characteristics that are maternal education, stress, child age, gender and linguistic aptitude, which have associations with mentalization and problem behaviors. We hypothesized as follows:

Hypothesis 1: Parental mentalization (self- and child-focused) would negatively predict children's problem behaviors.

Hypothesis 2: Children's MST (self- and other-focused) would negatively predict their problem behaviors.

Hypothesis 3: Children with more reflective parents (self- and child-focused), who use more MST (self- and child-focused), would show less problem behaviors.

Method

Data

The source of data used for this study came from Istanbul Bilgi University Psychotherapy Research Laboratory, which provides low-cost outpatient psychodynamic psychotherapy. Referrals were made by parents themselves or outside professionals. The parents and the children were screened by a licensed doctoral-level clinical psychologist, with more than 10 years of clinical experience, and trained in developmental psychopathology and psychiatric interviewing techniques, to determine whether the patients fit the study protocol inclusion criteria: ages between 6 and 10 years, no psychotic symptoms, no significant developmental delays, no significant risk of suicide attempts, and no drug abuse. A group of consecutively admitted patients from Fall 2016 to Spring 2018 and who met inclusion criteria were approached for data collection purposes. The patients and their parents were extensively informed before commencing therapy about research procedures, and parents provided written informed consent, and children provided oral assent concerning the use of their data, including questionnaires, videotapes, and transcripts for research purposes. This research was approved by Istanbul Bilgi University Ethics Committee.

The final sample included 60 patients.¹ The children were from Istanbul, the largest metropolitan center in Turkey, from low to middle income backgrounds, and mostly intact families (89%). The demographic characteristics of the sample are presented in Table 1.

Therapists

The therapists were 26 clinical psychology master's level clinicians (93% female) and aged between 23 and 27 years. Each

Table 1
Demographic Characteristics of the Sample (N = 60)

Baseline characteristics	N (%)
Age (years)	
6–7 years old	24 (40.0)
8–10 years old	36 (60.0)
<i>M</i> (<i>SD</i>)	7.90 (1.35)
<i>Mdn</i>	8.00
Sex	
Female	26 (43.3)
Male	34 (56.7)
Referral reason	
Rule-breaking and aggressive acts	23 (39.0)
Anxiety and depressive complaints	22 (37.3)
School problems	12 (20.3)
Social problems	2 (3.4)
Clinical characteristics	
CBCL ^a	
Internalizing	11 (18.3)
Externalizing	3 (5.0)
Comorbid	34 (56.7)
Nonclinical range	12 (20.0)
Monthly gross income ^b	
Less than 500 USD	12 (20.0)
500–680 USD	40 (67.6)
More than 680 USD	8 (13.3)
<i>M</i> (<i>SD</i>)	608.98 (173.78)
<i>Mdn</i>	681.13
Maternal education	
Primary/middle school	19 (31.7)
High school	20 (33.3)
Bachelor's degree or higher	21 (35.0)

Note. CBCL = The Child Behavior Checklist. Sex was dummy coded as (0 = female, 1 = male).

^a Cutoff criteria for CBCL = T score < 60: nonclinical; T score ≥ 60: borderline or clinical range (Achenbach, 1991). ^b Converted to USD.

therapist was educated in the theoretical background of psychodynamic play therapy with mentalization principles (see Verheugt-Pleiter et al., 2008, for details) for 2 years. They had 1 to 2 years of supervised psychotherapy experience. On average, they treated three patients (range: 1–5). Each therapist received 1 hr of individual and 3 hrs of group supervision by licensed psychodynamic supervisors with at least 10 years of experience.

Treatment

The standard treatment applied at Bilgi University Psychological Counseling Center is psychodynamic play therapy. The therapy mainly follows Winnicott's object relations theory (Winnicott,

¹ This data is a subsample of a group of patients admitted consecutively from Fall 2016 to Fall 2019, who were eligible to receive services at our clinic, and who consented to research and video recording of sessions. This database is part of the same research program that was designed to investigate the baseline predictors and effective treatment factors associated with outcome in psychodynamic child psychotherapy. Subsamples of this data, with partial overlaps with the data used in the manuscript, have been used in prior research to investigate baseline mental state talk characteristics of children (Halfon, Coşkun, Bekar & Steele, 2020), ideal session prototypes (Halfon & Goodman, 2020), psychodynamic technique and therapeutic alliance characteristics of the sessions (Halfon, 2020) and psychometric properties of collected measures (Halfon, Çavdar, & Kara, 2020; Halfon, Özsoy, Kara & Cavdar, 2020; Halfon & Besiroglu, 2020).

1971), working on children's self-other representations and the accompanying mental states using children's play as a main source of expression (see Verheugt-Pleiter et al., 2008, for details). Parallel parental work takes place with the main goal of increasing PRF (Slade, 2005), helping the parent to think about the child's mind, underscoring links between behavior and mental states, and noting the relations between the parent's and child's mental states. The standard treatment plan at the clinic involves once-weekly therapy sessions of 50 min with the child, along with once-a-month parent sessions. The treatments are open-ended in length and determined based on progress toward goals, life changes, and patients' families' decisions. On average, patients received 30 sessions over a 10-month period. The treatment lengths varied among the patients in the current study ($M = 32.83$, $SD = 16.64$, range = 15–65 sessions).

Even though the treatments are not manualized, the supervisors and therapists follow similar procedures for each case, and treatment adherence is checked in supervision sessions using therapist reports, videotapes, and audiotapes. The following treatment principles are used as guidelines to check adherence in child psychotherapy sessions conducted individually with the child: (a) The therapist draws attention to the play process by listening actively and inviting the child to communicate in play, encouraging the child to express and reflect on his perceptions, feelings, and thoughts. (b) The therapist clearly identifies the boundaries of the play situation where disruptive and potentially harmful actions are differentiated from symbolic aggression with a mentalizing stance. For example, when the child starts to actually harm the toys, the intentions and feelings behind this behavior are verbalized with the aim of helping the child regulate disruptive affect. (c) The therapist mentalizes the play context by asking questions about the play setting, temporal ordering, and the details of the characters, their thoughts, feelings, and behaviors in terms of mental states. (d) The therapist cautiously interprets the play context with a wondering stance to help the child see the links between conflicting needs and emotions about self and others that find reflection in play behaviors and in the therapeutic relationship, with the purpose of bringing feelings, attitudes, assumptions, and beliefs into consciousness. (e) The therapist identifies specific play content that has been repetitive in treatment and suggests possible links with what the child could be experiencing in real life, as a way of helping the child explore mental states regarding difficult life experiences using his or her play as a starting point.

The parent sessions are conducted individually with the parents. Both parents are encouraged to attend and in case the fathers cannot attend, the sessions are conducted individually with the mothers. The core principles in the parent sessions can be summarized as follows: (a) The therapist tries to create an environment of collaboration, where instead of the therapist being the expert and giving advice or suggestions to "fix" the child's problems, the parent and the therapist reflect on the parents' and child's issues. (b) The therapist holds the parents and their perspectives in mind, creating an empathic bond that helps them feel understood. (c) The therapist shows an interest in the mind, not just behaviors to help the parent see himself/herself and the child as a "mentalizing being" with thoughts and feelings behind behaviors. (d) The therapist models a reflective stance, showing curiosity and openness about mental states, talking about feelings and making links with

behaviors especially at times of conflict, as well as comments on the nature of mental states.

Measures

Background information. Demographic information such as age, education, socioeconomic and marital status were obtained using a standard intake form and from information obtained in the initial intake interview. Maternal education was assessed based on the level of formal education ranging from 0 as being illiterate to 6 having graduate or professional degree.

Expressive language. Turkish Expressive and Receptive Language Test (TIFALDI; Berument & Güven, 2010), the Turkish equivalent of Peabody Picture Vocabulary Test, was used to measure expressive language skills of children. Cards with a black-and-white picture were shown one-by-one and the child was asked to name the picture on the card. The test was administered adaptively, progression depending on performance. The vocabulary knowledge scores were calculated with three-parameter item response theory, which yields latent language ability scores by taking into account the relative difficulty of each question, the probability of giving a correct response just by guessing, and the discrimination of each item in determining the rate of success on the test.

Parenting stress. The Parental Distress (PD) subscale of the Parenting Stress Index-Short Form (PSI-SF; Abidin, 1995) was used to measure parenting stress. The PD subscale yields a score that denotes level of distress from factors such as depression or discord with a partner and from life restrictions because of the demands of child rearing. The subscale consists of 12 items (e.g., "feel that I cannot handle things," "never able to do things that I like to do"), rated on a 5-point Likert-type scale (from 1 = *strongly agree* to 5 = *strongly disagree*). The scale has shown high internal consistency (α s ranging from .80 and .91) and good test-retest reliability (r s ranging from .68 to .85). The scale has been adapted to Turkish with good internal consistency ($\alpha = .71$) and test-retest reliability (r s ranging from .88 to 0.95; Mert, Halhoğlu, & Ankaralı-Çamdeviren, 2008). In the current study, the PD subscale showed high internal consistency ($\alpha = .89$).

Problem behavior measure. The Child Behavior Checklist (CBCL; Achenbach, 1991) was used to assess children's baseline problem levels completed by the mothers. CBCL is a widely used method of identifying problematic behaviors in children. It indicates how true a series of 112 problem behavior items are on a 3-point scale (0 = *not true*, 1 = *somewhat true*, and 2 = *very true or often true*). Outcomes can be determined for significant problems for internalizing (e.g., depression and anxiety), externalizing (e.g., aggression and violence), or total problems. This scale has high levels of internal consistency ($\alpha = .97$) and 1-week test-retest reliability ($r = .94$). The scale has been adapted to Turkish with good internal consistency and test-retest reliability for total problems scales ($\alpha = .94$, $r = .93$; Erol & Şimşek, 2000). In the current study, CBCL Total Problem subscale showed high internal consistency ($\alpha = .92$).

Brief Problem Monitor (BPM; Achenbach, McConaughy, Ivanova, & Rescorla, 2011) is a 19-item subset developed from items included on the comprehensive CBCL (Achenbach, 1991) through item response theory and factor analysis, using the same 3-point scale and is applicable to children within the same age-

range. Mothers rate their children's problematic behaviors, specifically internalizing (e.g., "self-conscious or easily-embarrassed," "feels too guilty"), externalizing (e.g., "argues a lot," "stubborn, sullen, or irritable"), and attention problems (e.g., "fails to finish tasks s/he starts," "impulsive or acts without thinking"). The scale showed satisfactory internal consistency ($\alpha = .74$), test-retest reliability in an 8- to 16-day interval ($r = .77$), and criterion-related validity (Achenbach et al., 2011). In the current study, BPM Total Problem subscale showed good internal consistency ($\alpha = .87$).

Child mentalization measure. An adapted version of the Attachment Doll Story Completion Task (ASCT; Bretherton, Oppenheim, Buchsbaum, Emde, & the MacArthur Narrative Group, 1990) was used to collect verbal data. For the purposes of this study, ASCTs were not used to classify attachment patterns but to evaluate MST in the context of attachment. ASCT was originally designed for 3-year-olds and later adapted to school-age children by Granot and Mayseless (2001). ASCT comprises five story stems that aim to elicit stories from children on attachment-related day-to-day issues. A set of family figure dolls and related props are used to prime children and invite them to complete unfinished stories. The attachment stories are as follows: (a) Spilled juice: While the family is seated at dinner table, the child accidentally spills juice on the floor. (b) Hurt knee: The child falls off a high rock and hurts his or her knee. (c) Monster in the bedroom: The child is sent to bed and cries out that there is a monster in his or her bedroom. (d) Departure story: The mother and father leave for a 1-week trip and a babysitter stays with the child. (e) Reunion story: The babysitter sees the parents as they return the following morning and announces their return to the child.

The Coding System for Mental State Talk in Narratives (CS-MST; see Bekar et al., 2014, for details) was used to assess the frequency (total number of mental state words) and direction of mental state words used in ASCT narratives. The scale has shown good convergent and divergent validity in predicting children's sociobehavioral functioning (Bekar, Steele, Shahmoon-Shanok, & Steele, 2018), play styles (Halfon, Bekar, Ababay, et al., 2017), and psychotherapy progress (Halfon, Bekar, & Gürleyen, 2017). The CS-MST was adapted to the Turkish language first by Bekar and Corapçı (2016) through narratives of Turkish mothers and their preschool children and later adapted to ASCT narratives by Dr. Özlem Bekar. During the adaptation phase, 25 play segments were coded by Dr. Bekar and a group of four master's level research assistants following a 1-day training workshop. An average intraclass correlation coefficient (ICC) of 0.92 was reached on all coding variables. In all, 25% of the randomly selected data was then coded by two independent raters on each of the CS-MST categories, and ICC was between 0.83 and 0.99, suggesting good reliability. In case of a difference of three or more counts in any of the mental state word categories, the raters revised their coding and came to an agreement. The remaining transcripts were coded by one of the reliable raters. In this study, we used emotion (e.g., happy and sad) and cognition (e.g., think and believe) categories, which are most frequently associated mental states with children's adaptation (Bekar et al., 2018). The working mechanism of projective measures relies on the assumption that children project their own mental states onto the main child character in the stories and indirectly talk about their psychic reality. Thus, we operationalized children's attributions to the main child characters' mental

states as self-focused MST. Children's representations of the others, such as their narratives about family members' mental states, comprised the other-focused MST.

Parent mentalization measure. PRF was measured via the Parent Development Interview-Revised (PDI-R; Slade et al., 2003) coded according to the Addendum to the Reflective Functioning Scoring Manual (Slade et al., 2005). The PDI-R is a 17-item interview that assesses the parents' representations of their relationships with their child, their own internal experience of parenting, and the child's reactions to normal separations, and routine upsets. An overall PRF score as well individual scores to demand questions (ranging from -1 to 9 ; 5 indicating the presence of a basic mentalizing capacity; a rudimentary understanding of how mental states work together and influence behavior) were assigned using the manualized guidelines. Although lower PRF scores tap refusal, distortions, naivety, and hyperactivity in the usage of RF, higher PRF scores indicate explicit effort in recognition, awareness, and acknowledgment of nature and developmental aspects of mental states, including the interviewers' (see Slade et al., 2005, for details).

Studies testing the validity of this measure have linked it to adult attachment, child attachment, and parental behavior both in normal and drug-using samples (Borelli et al., 2016; Slade, Belsky, Aber, & Phelps, 1999; Stacks et al., 2014; Suchman et al., 2010). In a validation study of the PDI, Sleet et al. (2018) reported high interrater reliability (ICC = 0.87), internal consistency for the total RF score ($\alpha = .90$), and criterion validity. In the current study, all protocols were coded by two master's level research assistants, who were trained and received reliability on coding the PDI. Interrater reliability for the total RF score was excellent (ICC = 0.91). We created self- and child-focused PRF via taking mean scores of questions tapping into these dimensions. Self-focused PRF measured parent's emotional experiences as a parent (i.e., feelings of joy and pain/difficulty, being needy, angry, and guilty, feelings about losing the child, and feelings toward separation) and their own parents' influences on their parenting. Child-focused PRF measured parent's capacity to reflect on child's upsets, rejections and his or her feelings toward separation. Internal consistencies of self-focused ($\alpha = .82$) and child-focused PRF ($\alpha = .76$) were good.

Procedure

The mothers and children were invited for a meeting to administer the research protocol by one of the four master's level research assistants. The mothers were administered the PDI-R, which lasted about 90 min. Then, they filled out the standard intake form, the Parenting Stress Index-Short Form, and the CBCL. The children were separately administered the ASCT and Expressive Language subscale of TIFALDI in a silent room, in which only the child and research assistant were present. Assessment of the ASCT lasted about 20 min, and TIFALDI took approximately 10 min for each child. All the assessments were videotaped, transcribed, and coded for PRF and MST by trained coders. Care was taken so that the assistants who conducted the administration of a particular family did not also complete their coding. The BPMs were filled out by the mothers every five sessions in treatment.

Data Analytic Strategy

In our data, psychotherapy sessions ($N = 366$) were nested within patients ($N = 60$) who were nested within therapists ($N = 26$). Therefore, we used a multilevel modeling approach using MLWIN Version 3 (Rasbash, Steele, Browne, & Goldstein, 2019). As multiple clients were treated by the same therapists, we investigated the degree of interdependency. We used two-level (sessions nested within patients) and three-level (sessions nested within patients nested within therapists) “empty” multilevel models, where BPM Total Problems was entered as the dependent variable with no predictor variables. The therapist level ICC was 0.00, *ns*, which showed that therapists accounted for 0% of the variance in BPM Total Problems, suggesting that the variance in the session measures was not attributable to the differences between therapists. In contrast, the between patient ICC was 0.58, $p < .01$, accounting for 26% of the variance in BPM Total Problems, which suggested that a two-level model was appropriate, because not all variance was attributable to session-level variables. Therefore, we used only two-level models. Due to the high number of variables, multilevel modeling (MLM) analyses were ran in three steps. First, we ran a simple model to examine the main effects of time. Then, we included our main effect variables. Next, we ran the models including the interaction variables.

Next, we tested mixed-effects multilevel models with maximum likelihood estimation to analyze the change in BPM Total Problem scores that nested change in time within the patients. To capture change over time, a time variable was created to model the linear change of BPM Total Problems over the course of treatment. Phase was used in this study because session numbers were not uniform. We did not expect a major difference between the sessions within the same phase; therefore, we divided the therapies into uniform units to control for the variance in session numbers. Session numbers were converted into phases such that a session was coded in Phase 1 if it was within Sessions 1–5, in Phase 2 for Sessions 6–10, in Phase 3 for Sessions 11–15 and so forth. The phase variable was entered at Level 1. Thus, the MLM equation in which the BPM Total Problem score of patient j in phase i was the outcome was as follows:

$$\text{Level 1: BPM Total Problems}_{ij} = \beta_{0ij} + \beta_{1j} * \text{phase}_{ij} + e_{ij}$$

$$\text{Level 2: } \beta_{0ij} = \beta_0 + u_{0j}$$

$$\beta_{1j} = \beta_{10}$$

In this equation i denotes a phase point, j denotes a person, and BPM Total Problems $_{ij}$ is the value of problems for observation i in group j . Furthermore, β_{0ij} is the intercept of the regression equation for person j , β_{1j} is the main effect of Phase $_{ij}$ representing the rate of change in problem behaviors. Phase- and individual-specific residuals are represented by u_{0j} and e_{ij} , respectively. To assess effect size for change scores in BPM over time, we calculated pseudo- R^2 as the proportion of total within-person variance from a completely unconditional or base model that is accounted for when time is added to the model (Singer & Willett, 2003).

Next, we included our Level 2 (patient level) variables. Maternal education, parental distress, child’s sex, age, expressive language (age scaled) measured via TIFALDI, and CBCL Total Problem were entered as control variables. To investigate Hypotheses 1 and 2, PRF (self- and child-focused) and MST (self- and

other-focused) were added as Level 2 predictors into the MLM model, which were all grand-mean centered. These variables predicted the grand mean intercept of BPM Total Problems. Thus, the equation described earlier was as follows:

$$\text{Level 1: BPM Total Problems}_{ij} = \beta_{0j} + \beta_{1j} \text{phase}_{ij} + e_{ij}$$

$$\begin{aligned} \text{Level 2: } \beta_{0j} = & \beta_{00} + \beta_{01} \text{Maternal Education}_j \\ & + \beta_{02} \text{Parental Distress}_j + \beta_{03} \text{Age}_j + \beta_{04} \text{Sex}_j \\ & + \beta_{05} \text{Expressive Language}_j \\ & + \beta_{06} \text{CBCL Total Problem}_j \\ & + \beta_{07} \text{Self-focused PRF}_j + \beta_{08} \text{Child-focused PRF}_j \\ & + \beta_{09} \text{Self-focused MST}_j \\ & + \beta_{10} \text{Other-focused MST}_j + u_{0j} \end{aligned}$$

$$\beta_{1j} = \beta_{10}$$

Finally, we included interactions between PRF (self- and child-focused) and MST (self- and other-focused) variables to address Hypothesis 3. Thus, the equation tested was as follows:

$$\text{Level 1: BPM Total Problems}_{ij} = \beta_{0j} + \beta_{1j} \text{phase}_{ij} + e_{ij}$$

$$\begin{aligned} \text{Level 2: } \beta_{0j} = & \beta_{00} + \beta_{01} \text{Maternal Education}_j \\ & + \beta_{02} \text{Parental Distress}_j + \beta_{03} \text{Age}_j + \beta_{04} \text{Sex}_j \\ & + \beta_{05} \text{Expressive Language}_j \\ & + \beta_{06} \text{CBCL Total Problem}_j \\ & + \beta_{07} \text{Self-focused PRF}_j + \beta_{08} \text{Child-focused PRF}_j \\ & + \beta_{09} \text{Self-focused MST}_j \\ & + \beta_{10} \text{Other-focused MST} \\ & + \beta_{79} \text{Self-focused PRF} * \text{Self-focused MST}_j \\ & + \beta_{710} \text{Self-focused PRF} * \text{Other-focused MST}_j \\ & + \beta_{89} \text{Child-focused PRF} * \text{Self-focused MST}_j \\ & + \beta_{810} \text{Child-focused PRF} * \text{Other-focused MST}_j \\ & + u_{0j} \end{aligned}$$

$$\beta_{1j} = \beta_{10}$$

Results

Descriptive statistics and the intercorrelations between aggregated BPM Total Problem scores, demographic variables, parental distress, CBCL Total Problems, PRF, and MST variables are presented in Table 2. Age and maternal education were associated with self-focused MST ($r = .29$ and 0.26 ; $p < .05$). Moreover, maternal education was associated with both self-focused and child-focused PRF ($r = .34$ and 0.28 ; $p < .01$ and 0.05 , respectively). Expressive language was associated with baseline problem behaviors ($r = -0.28$; $p < .05$). PD was associated with problem behavior levels expressed over the course of treatment ($r = 0.38$; $p < .01$). Because we found associations between problem behaviors, mentalization and some demographics such as children’s age, expressive language, maternal education and distress, these were controlled for in the equation. Sex was not significantly associated with any of the main variables. However, because of previous

Table 2

The Intercorrelations Between Demographic and Total Problem Characteristics, Parental Distress, PRF, and MST (N = 60)

Variables	M	SD	1	2	3	4	5	6	7	8	9	10
(1) Child age	7.90	1.35	—									
(2) Child sex	0.57	0.50	0.16	—								
(3) Expressive language	112.48	18.91	0.10	0.30*	—							
(4) Maternal education	3.23	1.50	-0.01	0.26*	0.09	—						
(5) Parental distress	28.95	9.24	-0.32*	0.05	-0.15	-0.24	—					
(6) CBCL Total Problem	64.72	8.82	-0.13	-0.12	-0.28*	-0.23	0.43***	—				
(7) Self-focused MST	13.82	9.60	0.29*	-0.04	0.19	0.26*	-0.14	-0.17	—			
(8) Other-focused MST	3.48	3.98	0.13	-0.17	0.21	0.12	-0.11	-0.33*	0.53***	—		
(9) Self-focused PRF	2.97	0.90	0.06	0.19	0.14	0.34**	0.22	0.08	0.01	-0.09	—	
(10) Child-focused PRF	2.67	1.05	-0.03	0.15	0.12	0.28*	0.19	0.02	0.02	-0.03	0.63***	—
(11) BPM Total Problem (aggregated)	62.5	7.24	-0.14	-0.20	-0.16	-0.15	0.38**	0.74***	-0.28*	-0.29*	0.11	-0.07

Note. PRF = parental reflective function; MST = mental state talk; CBCL = Child Behavior Checklist; BPM = Brief Problem Monitor. Sex was dummy coded as (0 = female, 1 = male). BPM scores represent aggregate scores across sessions per each child.

* $p < .05$. ** $p < .01$. *** $p < .001$.

literature that has shown significant differences in favor of girls mentalizing better than boys (Bosacki, 2000; Cutting & Dunn, 1999; Rutherford et al., 2012), sex was kept in the equation.

Moreover, for the purposes of Hypothesis 3 pertaining to the interactions between PRF and MST scores, we wanted to have more interpretable estimates of the proportion of subjects in the higher PRF (a score of 3 or higher indicating a baseline capacity to recognize mental states; Fonagy et al., 1998) and higher MST categories (above sample mean) versus lower PRF and MST categories. A total of 38.3% of the patients were in low MST, low PRF; 31.7% in low MST, high PRF; 21.7% in high MST and low PRF; and 8.3% in high MST and PRF categories. Correlation analyses and chi-square tests of independence, $\chi^2(1, N = 60) = 1.60, p = .21$, indicated that PRF and MST categories were not associated.

The main effect of time (i.e., phase) on BPM Total Problems indicated significant linear decrease. In all, 2% of within patient variance in BPM Total problems was explained by time, indicating a small effect. Child-focused PRF negatively predicted BPM Total

Problems. This partially supported the first hypothesis. Self-focused MST negatively predicted BPM Total Problems. This partially supported the second hypothesis. However, self-focused PRF and other-focused MST were not significant predictors. Moreover, maternal education, parental distress, child's age, sex, and expressive language scores were not significant (see Table 3). None of the interactions were significant (see Table 4).

Discussion

The aims of this study were to investigate whether PRF and MST negatively predicted children's emotional and behavioral problems. Specifically, we expected that parental mentalization (self- and child-focused) and children's MST (self- and other-focused) would negatively predict children's problem behaviors. Moreover, children with more reflective parents (self- and child-focused), who use more MST (self- and child-focused), would show less problem behaviors. Our findings showed that child-focused PRF and self-focused MST were significantly negatively

Table 3

Summary of Multilevel Model Predicting BPM Total Problem Behaviors, Parental and Children's Mentalization

Intercept and predictors	BPM Total Problems			
	β	SE	t ratio	95% CI
Intercept (β_{00})	14.922	0.479	31.152***	[13.983, 15.861]
Phase (β_{10})	-0.211	0.087	-2.425*	[-0.382, -0.040]
Maternal education (β_{01})	0.352	0.385	0.914	[-0.403, 1.106]
Parental distress (β_{02})	0.052	0.068	0.764	[-0.080, 0.185]
Child age (β_{03})	-0.028	0.416	-0.067	[-0.844, 0.788]
Child sex (β_{04})	-1.086	1.065	-1.019	[-3.173, 1.001]
Expressive language (β_{05})	0.035	0.027	1.296	[-0.018, 0.088]
CBCL Total Problem (β_{06})	0.151	0.023	6.565**	[0.107, 0.196]
Self-focused PRF (β_{07})	1.136	0.733	1.549	[-0.301, 2.572]
Child-focused PRF (β_{08})	-1.159	0.586	-1.977*	[-2.308, -0.010]
Self-focused MST (β_{09})	-0.124	0.063	-1.968*	[-0.247, -0.001]
Other-focused MST (β_{10})	-0.007	0.149	-0.047	[-0.299, 0.286]

Note. BPM = Brief Problem Monitor; CI = confidence interval; CBCL = Child Behavior Checklist; PRF = parental reflective function; MST = mental state talk. Sex was dummy coded as (0 = female, 1 = male).

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 4
Summary of Multilevel Model Predicting Children’s BPM Total Problem Behaviors, Parental and Child Mentalization and Their Interactions

Intercept and predictors	BPM Total Problems			
	β	SE	t ratio	95% CI
Intercept (β_{00})	14.880	0.490	30.367***	[13.920, 15.840]
Phase (β_{10})	-0.210	0.087	-2.414*	[-0.380, -0.039]
Maternal education (β_{01})	0.301	0.388	0.776	[-0.460, 1.062]
Parental distress (β_{02})	0.045	0.068	0.662	[-0.088, 0.178]
Child age (β_{03})	-0.056	0.418	-0.067	[-0.875, 0.764]
Child sex (β_{04})	-0.951	1.186	-0.134	[-3.275, 1.373]
Expressive language (β_{05})	0.034	0.028	1.214	[-0.020, 0.088]
CBCL Total Problem (β_{06})	0.158	0.024	6.583***	[0.111, 0.204]
Self-focused PRF (β_{07})	1.032	0.864	1.194	[-0.661, 2.725]
Child-focused PRF (β_{08})	-1.002	0.622	-1.610	[-2.222, 0.218]
Self-focused MST (β_{09})	-0.131	0.062	-2.112*	[-0.254, -0.009]
Other-focused MST (β_{10})	-0.004	0.163	-0.025	[-0.323, 0.315]
Self-Focused PRF \times Self-Focused MST (β_{79})	-0.043	0.087	-0.494	[-0.214, 0.128]
Self-Focused PRF \times Other-Focused MST (β_{710})	-0.265	0.385	-0.688	[-1.020, 0.489]
Child-Focused PRF \times Self-Focused MST (β_{89})	0.004	0.084	0.048	[-0.161, 0.168]
Child-Focused PRF \times Other-Focused MST (β_{810})	0.254	0.267	0.951	[-0.270, 0.777]

Note. BPM = Brief Problem Monitor; CI = confidence interval; CBCL = Child Behavior Checklist; PRF = parental reflective function; MST = mental state talk. Sex was dummy coded as (0 = female, 1 = male).
 * $p < .05$. *** $p < .001$.

associated with children’s problem behaviors after controlling for demographic characteristics and baseline problem levels. Self-focused PRF and other-focused MST were not associated with problem behaviors. Moreover, none of the interactions between PRF and MST were significant.

The effect of mentalization on treatment outcome has mostly been studied in adult psychodynamic psychotherapy. Some studies found evidence that RF is a predictor of both alliance and outcome (Ekeblad et al., 2016; Müller et al., 2006; Taubner et al., 2011), and others have shown that RF may be a moderator of therapy outcome (Antonsen, Johansen, Rø, Kvarstein, & Wilberg, 2016; Gullestad et al., 2013). Our findings were the first to find associations with outcome in psychodynamic child psychotherapy and to suggest that it may be necessary to assess more specific dimensions of parental and child mentalization in prediction of outcome. Children’s mentalization about their own mental states predicted treatment outcome. The self-focused MST on the story-stem task requires the child to think about his or her own internal states in face of attachment-related scenarios that evoke fear, hurt, upset, and separations. Children who have a better ability to think about such states may adhere better to the therapeutic tasks demanded in psychodynamic psychotherapy, which requires a capacity to reflect on difficult emotions. Moreover, being able to think about certain mental states, such as upsets, rejections and separations in the attachment context, may be more prognostic than others. Negative emotional experiences in the attachment context are highly correlated with emotional and behavioral difficulties (see Groh, Fearon, van IJzendoorn, Bakermans-Kranenburg, & Roisman, 2017, for a review). Limited research shows that symptom-specific RF measures a different capacity from general RF in patients with a number of different disorders (obsessive-compulsive disorder, depression, and panic disorder) in that some patients who have average RF scores show impaired capacities to reflect about their symptoms (Kullgard, Persson, Möller, Falkenström, & Holmqvist,

2013; Rudden et al., 2006). Future research can develop a developmentally appropriate symptom-specific interview for children to assess relations with treatment outcome.

Other-focused MST did not predict outcome. There may be several reasons behind this finding. Compared with other understanding, self-understanding is a more complex developmental achievement (Bodgan, 2003) that forms through attunement of caregivers to the child’s mental states, which paves the way for the child to learn to label and understand his or her own internal states (self-focus and understanding; Fonagy et al., 2002). Moreover, these two dimensions of mentalization are associated with different kinds of deficits. Bizzi et al. (2019) found that children with internalizing problems had specific deficits with respect to understanding their own mental states but not that of others. Therefore self-focused child MST may be more prognostic in psychodynamic child psychotherapy.

Our findings also supported the multidimensional nature of PRF. We found higher internal consistency scores for self- and child-focused PRF compared with previous studies (i.e., Borelli et al., 2016; Suchman et al., 2010) supporting the reliability of these dimensions as well as the importance of child-focused PRF for treatment outcome. However, self-focused PRF was not associated with changes in problem behaviors. This may be related to the characteristics of our sample, which was composed of school-age children. Borelli et al. (2016) found that child-focused but not self-focused PRF was associated with child attachment security with school-age children. It is possible that as child individuates and has more experience in other contexts outside the parent-child relationship, parents’ efforts to understand child-specific experiences may be more central to the child’s functioning during middle childhood. Other studies suggested that self-focused PRF may also risk a self-absorbent component and is associated with maternal depression, making it more difficult to attend to the child’s needs and soothe the child in times of distress (Borelli et al., 2012;

Suchman et al., 2010). Smaling et al. (2016) found that self-focused PRF is associated with more negative emotionality and externalizing problems suggesting that children with behavioral problems may have a harder time when the mother gets absorbed in her own mental states and may try to regain mother's attention via acting-out. Given that most children in our sample were in the externalizing and comorbid range of problems, they may benefit more from child-focused PRF. Future research should examine the differential effect of self and child-focused PRF on different levels of development and on externalizing and internalizing problems.

The interactions between PRF and MST were not significant. Upon closer analysis, we saw that only a small percentage of children who had parents with higher PRF also had high levels of MST, which may account for the lack of significant associations comparing different groups. Though limited, previous research also did not find significant associations between parental and child mentalization in middle childhood (Ensink et al., 2016), suggesting that with developing mentalizing capacities, children may be less dependent on their parents' RF. However, future research with larger sample sizes is needed to compare the treatment outcome of children and parents in the high mentalization versus low mentalization groups, to decide whether the low mentalization group would benefit more from a different type of treatment. Moreover, studies show indirect effect of PRF on child mentalization and emotional and behavioral problems through attachment (Ha et al., 2011), abuse (Ensink et al., 2015), and parenting behaviors (Suchman et al., 2010). The effect of these mediating factors on treatment outcome should be assessed in future research.

Clinical Implications

Our preliminary findings suggest that the PDI and attachment-based story stems can be used as assessment tools to create a "mentalizing profile" (Midgley et al., 2017) of the child and the parents particularly focusing on child-focused PRF and self-focused MST characteristics. The PDI can be used to make more global assessments regarding parents' mentalization deficits, as was done in the current study; however, future research and clinical work can also focus on the parents' responses to each child focused PDI question. For example, the clinician can assess whether the parents show global deficits on all child-related questions on the PDI, which would either imply that the parents have an underdeveloped capacity thinking about the child's mental states or makes negative improbable attributions to the child's behaviors. However, in certain cases, a parent may have a harder time on certain child-related PDI questions, such as having difficulty reflecting about either about rejections, upsets or separations. This would imply that the parent may lose his or her capacity for mentalization under certain stressful contexts. Although we have not been able to assess whether improvements over the course of treatment relate to outcome, given that our findings indicate the importance of baseline mentalization for outcome, working to strengthen mentalization at the initial stages of treatment may help children with treatment prognosis. In case of global mentalization deficits on the part of the parents, it may be important to first help develop a reflective stance (Slade, 2007). The therapists can model reflectiveness by representing the child to the parent in terms of mental states. The therapists can gently try to give voice to the

child's internal experience that begins to reframe emphasis on negative behavioral interpretations in light of the child's mental states. Parents may also have an easier time thinking about their own mental states, which may help them feel more validated and understood, after which they can start to think about the child. Exploration of their own experiences of being parented as a child may increase their curiosity and help them empathize with their own child. Working on specific events (i.e., rejections, upsets or separations) that trigger heightened emotional states could also be useful. One technique commonly used in MBT-C is "stop and rewind" (Midgley et al., 2017, p. 154–155) where the therapist slows down the parent and asks in detail the specifics of the interaction with the child to find the moments within which the parent may have lost the capacity to mentalize and the associated strong emotions, which may help the parents regain mentalization capacity in times of stress.

The attachment-based story stems could be used to assess mentalization deficits, and in case of identified mentalization problems, it would be important to support the child's capacity to mentalize at the initial stages of treatment. The clinician can evaluate whether the child can speak about the child figure in the story stems in mental state terms. Moreover, it would be important to assess whether the child is able to enter play via the story stem play technique, as the capacity to play is the building block of mentalization (Fonagy et al., 2002). Global deficits in mentalizing would be indicated if the child cannot enter pretend mode or has difficulty attributing mental states to characters. In this case, it may be helpful to supplement the story stem assessment with other techniques, to assess the child's capacity for basic attention control and self-regulation, which may make it harder to attend to internal mental states and create a play space. In case of such deficits, the therapist can work to enhance attention control and regulation, particularly at the initial stages of treatment. The therapist can also clarify and start to name mental states. It is also possible that some children may have harder time on certain story stems, be it stems about of separation anxiety, hurt, or fears of punishment. In that case, the triggers that make it hard to mentalize in certain contexts need to be further explored, perhaps with the help of the parents who can also provide more information. These can then be addressed early in treatment. It may be helpful in treatment to "stimulate the play narrative" (Midgley et al., 2017, p. 135) by inquiring and asking for more details about the play characters who may encounter similar stressful situations in the play narrative that the child creates, particularly making references to the play characters' own internal states.

Limitations and Directions for Future Research

The strengths of the study include its longitudinal design, and use of interview-based and observational measures of mentalization from both parents and their children. We were able to tap into different dimensions of mentalization (self and other focus) showing their use for treatment prognosis in psychodynamic child psychotherapy. However, several limitations of this study should be noted. The sample size was relatively small. An improved methodology would be based on a larger sample. This study was designed as a naturalistic study of patients in psychodynamic therapy without a control group. Although this type of design is inherently limited in its internal validity, it benefits from substan-

tial external validity, as it more accurately reflects the reality of clinical work with children in clinics. However, causal statements between mentalization and outcome cannot be made. The reliance on novice therapists limits the generalizability of the findings. Adequate follow-up is necessary to determine whether treatment benefits are sustained over time, and if they are, how these changes are related to mentalization characteristics.

We have assessed child mentalization using a play-based attachment task. Previous studies show that structured versus unstructured contexts provide different opportunities for use of mental state language (Beeghly, Bretherton, & Mervis, 1986; Kuersten-Hogan & McHale, 2000). Moreover the play-based task provides more opportunities to reflect on the child character rather than other figures, creating limited variance in other-focused MST. Children may show different characteristics on an interview-based assessment of RF, which should be assessed in future research. Similarly, we used an interview-based RF coding to assess parental mentalization, which allows for the assessment of only explicit mentalizing capacity from verbal statements. Several authors suggest that implicit or nondeclarative forms of mentalizing in parents might also be related to child's behavioral and emotional functioning (Fogel, 2011; Shai & Belsky, 2011). We also relied on parent-reported data to assess emotional and behavioral functioning. Future studies should draw on reports from a range of informants (i.e., therapist, child, and teachers). Moreover, due to the small sample size, we were not able to divide the data to investigate different mentalization characteristics of children with internalizing and externalizing disorders, which can be studied in future research.

Future research should investigate whether other mediating factors such as therapeutic alliance and children's affect regulation between mentalization and outcome. Ekebald et al. (2016) and Taubner et al. (2011) found that adult patients with low RF in psychodynamic psychotherapy had difficulties establishing therapeutic alliance with their therapists because of their difficulty in complying with a general task of therapy, that is, reflecting on thoughts and feelings. In addition, because lower RF is associated with insecure attachment (Fonagy et al., 1991), patients with lower RF may have a harder time forming a stronger bond with their therapist and get dysregulated easily in face of strong attachment-related emotions. It is also important to test whether gains in mentalization made during treatment are associated with outcome. Oppenheim et al. (2004) and Zimmer-Gembeck et al. (2019) found that gains in parental mentalization were associated with reductions in child problem behaviors over the course of treatment. Katznelson et al. (2020) found that change in RF is associated with therapy outcome in psychodynamic psychotherapy but not in CBT. In two previous studies, Halfon and Bulut (2019) and Halfon et al. (2019) found that an increase in mentalization practices in treatment, such as affect attunement and making links between child's experience and feelings, supported children's affect regulation, created a safe context for tolerating negative emotions, and was associated with good outcome. Future research should also look into whether parental and child mentalization predict outcome in different modalities.

Future research can also investigate how mentalization may relate to outcome at different phases of treatment. We did not have enough data to study different phases; however, this would be important to investigate in future research. In short-term dynamic

therapies, time restraints may evoke particular emotional reactions that create different mentalization demands particularly related to the phase of treatment. For example, the middle phase of therapy may bring up difficult emotions as the therapy challenges existing problematic patterns, which may create temporary mentalization breakdowns. Alternatively, termination may be a difficult time to mentalize as the impending separation from the therapist may heighten attachment related anxiety.

This study was the first study to investigate parental and child mentalization in the context of psychodynamic child psychotherapy and assess associations with outcome. Our findings suggest the utility of using multifaceted tools to assess different dimensions of mentalization with parents and children at the beginning of psychodynamic child psychotherapy. This could help determine patient characteristics associated with outcome and also help clinicians tailor specific interventions according the patients' mentalization deficits.

References

- Abidin, R. R. (1995). *Parenting stress index* (3rd ed.). Odessa, FL: Psychological Assessment Resources.
- Achenbach, T. M. (1991). *Manual for the Child Behavior Checklist: 4–18 and 1991 profile*. Burlington: University of Vermont.
- Achenbach, T. M., McConaughy, S. H., Ivanova, M. Y., & Rescorla, L. A. (2011). *Manual for the ASEBA Brief Problem Monitor (BPM)*. Burlington: University of Vermont.
- Antonsen, B. T., Johansen, M. S., Rø, F. G., Kvarstein, E. H., & Wilberg, T. (2016). Is reflective functioning associated with clinical symptoms and long-term course in patients with personality disorders? *Comprehensive Psychiatry*, *64*, 46–58. <http://dx.doi.org/10.1016/j.comppsy.2015.05.016>
- Beeghly, M., Bretherton, I., & Mervis, C. B. (1986). Mothers' internal state language to toddlers. *British Journal of Developmental Psychology*, *4*, 247–261. <http://dx.doi.org/10.1111/j.2044-835X.1986.tb01016.x>
- Bekar, O., & Corapçı, F. (2016). *Anlatıldakı Zihin Durumlarını Kodlama Sistemi* [Mental State Talk in Narratives]. Unpublished manuscript, Department of Psychology, Ozyegin University, Bogazici University, Turkey.
- Bekar, O., Steele, H., & Steele, M. (2014). *Coding manual for mental state talk in narratives*. Unpublished manuscript, Department of Clinical Psychology, The New School, New York.
- Bekar, O., Steele, M., Shahmoon-Shanok, R., & Steele, H. (2018). Mothers' mental state talk and preschool children's social-behavioral functioning: A multidimensional account. *Journal of Infant, Child, and Adolescent Psychotherapy*, *17*, 119–133. <http://dx.doi.org/10.1080/15289168.2018.1456890>
- Benbassat, N., & Priel, B. (2012). Parenting and adolescent adjustment: The role of parental reflective function. *Journal of Adolescence*, *35*, 163–174. <http://dx.doi.org/10.1016/j.adolescence.2011.03.004>
- Benbassat, N., & Shulman, S. (2016). The significance of parental reflective function in the adjustment of young adults. *Journal of Child and Family Studies*, *25*, 2843–2852. <http://dx.doi.org/10.1007/s10826-016-0450-5>
- Berument, S. K., & Güven, A. G. (2010). *Turkish Expressive and Receptive Language Test: Expressive and Receptive Vocabulary sub-scale*. Ankara, Turkey: Turkish Psychological Association.
- Bizzi, F., Ensink, K., Borelli, J. L., Mora, S. C., & Cavanna, D. (2019). Attachment and reflective functioning in children with somatic symptom disorders and disruptive behavior disorders. *European Child and Adolescent Psychiatry*, *28*, 705–717. <http://dx.doi.org/10.1007/s00787-018-1238-5>
- Bodgan, R. J. (2003). *Interpreting minds*. Cambridge, MA: MIT Press.

- Borelli, J. L., St John, H. K., Cho, E., & Suchman, N. E. (2016). Reflective functioning in parents of school-aged children. *American Journal of Orthopsychiatry*, *86*, 24–36. <http://dx.doi.org/10.1037/ort0000141>
- Borelli, J. L., West, J. L., Decoste, C., & Suchman, N. E. (2012). Emotionally avoidant language in the parenting interviews of substance-dependent mothers: Associations with reflective functioning, recent substance use, and parenting behavior. *Infant Mental Health Journal*, *33*, 506–519. <http://dx.doi.org/10.1002/imhj.21340>
- Bosacki, S. L. (2000). Theory of mind and self-concept in preadolescents: Links with gender and language. *Journal of Educational Psychology*, *92*, 709–717. <http://dx.doi.org/10.1037/0022-0663.92.4.709>
- Bretherton, I., Oppenheim, D., Buchsbaum, H., Emde, R. N., & the MacArthur Narrative Group. (1990). *The MacArthur story stem battery*. Unpublished manual, University of Wisconsin-Madison, Madison, Wisconsin.
- Camoirano, A. (2017). Mentalizing makes parenting work: A review about parental reflective functioning and clinical interventions to improve it. *Frontiers in Psychology*, *8*, 14–26. <http://dx.doi.org/10.3389/fpsyg.2017.00014>
- Carneiro, P., Meghir, C., & Parey, M. (2013). Maternal education, home environments, and the development of children and adolescents. *Journal of the European Economic Association*, *11*, 123–160. <http://dx.doi.org/10.1111/j.1542-4774.2012.01096.x>
- Carpendale, J. I., & Lewis, C. (2004). Constructing an understanding of mind: The development of children's social understanding within social interaction. *Behavioral and Brain Sciences*, *27*, 79–96. <http://dx.doi.org/10.1017/S0140525X04000032>
- Centifanti, L. C. M., Meins, E., & Fernyhough, C. (2016). Callous-unemotional traits and impulsivity: Distinct longitudinal relations with mind-mindedness and understanding of others. *Journal of Child Psychology and Psychiatry*, *57*, 84–92. <http://dx.doi.org/10.1111/jcpp.12445>
- Cutting, A. L., & Dunn, J. (1999). Theory of mind, emotion understanding, language, and family background: Individual differences and interrelations. *Child Development*, *70*, 853–865. <http://dx.doi.org/10.1111/1467-8624.00061>
- Ekeblad, A., Falkenström, F., & Holmqvist, R. (2016). Reflective functioning as predictor of working alliance and outcome in the treatment of depression. *Journal of Consulting and Clinical Psychology*, *84*, 67–78. <http://dx.doi.org/10.1037/ccp0000055>
- Ensink, K., Bégin, M., Normandin, L., & Fonagy, P. (2016). Maternal and child reflective functioning in the context of child sexual abuse: Pathways to depression and externalizing difficulties. *European Journal of Psychotraumatology*, *7*, 30611. <http://dx.doi.org/10.3402/ejpt.v7.30611>
- Ensink, K., Normandin, L., Plamondon, A., Berthelot, N., & Fonagy, P. (2016). Intergenerational pathways from reflective functioning to infant attachment through parenting. *Canadian Journal of Behavioural Science/Revue Canadienne Des Sciences Du Comportement*, *48*, 9–18. <http://dx.doi.org/10.1037/cbs0000030>
- Ensink, K., Normandin, L., Target, M., Fonagy, P., Sabourin, S., & Berthelot, N. (2015). Mentalization in children and mothers in the context of trauma: An initial study of the validity of the Child Reflective Functioning Scale. *British Journal of Developmental Psychology*, *33*, 203–217. <http://dx.doi.org/10.1111/bjdp.12074>
- Erol, N., & Şimşek, Z. T. (2000). Mental health of Turkish children: Behavioral and emotional problems reported by parents, teachers, and adolescents. *International Perspectives on Child and Adolescent Mental Health*, *1*, 223–247. [http://dx.doi.org/10.1016/S1874-5911\(00\)80014-7](http://dx.doi.org/10.1016/S1874-5911(00)80014-7)
- Esbjörn, B. H., Pedersen, S. H., Daniel, S. I. F., Hald, H. H., Holm, J. M., & Steele, H. (2013). Anxiety levels in clinically referred children and their parents: Examining the unique influence of self-reported attachment styles and interview-based reflective functioning in mothers and fathers. *British Journal of Clinical Psychology*, *52*, 394–407. <http://dx.doi.org/10.1111/bjc.12024>
- Fogel, A. (2011). Embodied awareness: Neither implicit nor explicit, and not necessarily nonverbal. *Child Development Perspectives*, *5*, 183–186. <http://dx.doi.org/10.1111/j.1750-8606.2011.00177.x>
- Fonagy, P., Gergely, G., Jurist, E. L., & Target, M. (2002). *Affect regulation, mentalization, and the development of the self*. New York, NY: Other Press.
- Fonagy, P., Steele, H., & Steele, M. (1991). Maternal representations of attachment during pregnancy predict the organization of infant-mother attachment at one year of age. *Child Development*, *62*, 891–905. <http://dx.doi.org/10.2307/1131141>
- Fonagy, P., Target, M., Steele, H., & Steele, M. (1998). *Reflective-functioning manual, Version 5.0, for application to adult attachment interviews*. London, UK: University College London.
- Granot, D., & Maysel, O. (2001). Attachment security and adjustment to school in middle childhood. *International Journal of Behavioral Development*, *25*, 530–541. <http://dx.doi.org/10.1080/01650250042000366>
- Groh, A. M., Fearon, R. M. P., van IJzendoorn, M. H., Bakermans-Kranenburg, M. J., & Roisman, G. I. (2017). Attachment in the early life course: Meta-analytic evidence for its role in socioemotional development. *Child Development Perspectives*, *11*, 70–76. <http://dx.doi.org/10.1111/cdep.12213>
- Gullestad, F. S., Johansen, M. S., Høglend, P., Karterud, S., & Wilberg, T. (2013). Mentalization as a moderator of treatment effects: Findings from a randomized clinical trial for personality disorders. *Psychotherapy Research*, *23*, 674–689. <http://dx.doi.org/10.1080/10503307.2012.684103>
- Ha, C., Sharp, C., & Goodyer, I. (2011). The role of child and parental mentalizing for the development of conduct problems over time. *European Child and Adolescent Psychiatry*, *20*, 291. <http://dx.doi.org/10.1007/s00787-011-0174-4>
- Halfon, S. (2020). *Psychodynamic technique and therapeutic alliance in prediction of outcome in psychodynamic child psychotherapy*. Manuscript submitted for publication.
- Halfon, S., Bekar, O., Ababay, S., & Çöklü-Dorlach, G. Ç. (2017). Dyadic mental state talk and sophistication of symbolic play between parents and children with behavioral problems. *Journal of Infant, Child and Adolescent Psychotherapy*, *16*, 291–307. <http://dx.doi.org/10.1080/15289168.2017.1370952>
- Halfon, S., Bekar, O., & Gürleyen, B. (2017). An empirical analysis of mental state talk and affect regulation in two single-cases of psychodynamic child therapy. *Psychotherapy*, *54*, 207–219. <http://dx.doi.org/10.1037/pst0000113>
- Halfon, S., & Besiroglu, B. (2020). *Ebeveyn Gelişim Görüşmesi üzerinden yapılan Yansıtıcı İşleyiş Kodlama Sistemi'nin psikometrik özellikleri* [Psychometric properties of the Reflective Function Coding System on the Parent Development Interview]. Manuscript submitted for publication.
- Halfon, S., & Bulut, P. (2019). Mentalization and the growth of symbolic play and affect regulation in psychodynamic therapy for children with behavioral problems. *Psychotherapy Research*, *29*, 666–678. <http://dx.doi.org/10.1080/10503307.2017.1393577>
- Halfon, S., Çavdar, A., & Kara, D. (2020). Çocuk ve Ergen Ruh Sağlığı ve Hastalıkları Alanında Bir Klinik Gidiş Değerlendirme Ölçeği Türkçe Formu'nun (HoNOSCA-TR) psikometrik özellikleri [The psychometric properties of the Turkish adaptation of the Health of the Nation Outcome Scales for Children and Adolescents (HoNOSCA)]. *Klinik Psikoloji Dergisi* [Clinical Psychology Journal], *4*, 1–11.
- Halfon, S., Coşkun, A., Bekar, Ö., & Steele, H. (2020). Imbalances and impairments in mental state talk of children with internalizing and externalizing problems. *Journal of Infant, Child, and Adolescent Psychotherapy*, *19*, 1–20.
- Halfon, S., & Goodman, G. (2020). *Session adherence to prototypical psychotherapy process as a correlate of outcome in a naturalistic study*

- of child mentalization-informed psychodynamic play therapy. Manuscript submitted for publication.
- Halfon, S., Özsoy, D., Kara, D., & Cavdar, A. (2020). *Gözleme Dayalı Terapötik İttifak Ölçeği Türkçe Formu'nun Psikometrik Özellikleri* [Psychometric properties of the Therapy Process Observational Coding System-Alliance Scale (TPOCS-A)]. Manuscript submitted for publication.
- Halfon, S., Yılmaz, M., & Çavdar, A. (2019). Mentalization, session-to-session negative emotion expression, symbolic play, and affect regulation in psychodynamic child psychotherapy. *Psychotherapy, 56*, 555–567. <http://dx.doi.org/10.1037/pst0000201>
- Hughes, C., & Dunn, J. (1998). Understanding mind and emotion: Longitudinal associations with mental-state talk between young friends. *Developmental Psychology, 34*, 1026–1037. <http://dx.doi.org/10.1037/0012-1649.34.5.1026>
- Katznelson, H., Falkenström, F., Daniel, S. I. F., Lunn, S., Folke, S., Pedersen, S. H., & Poulsen, S. (2020). Reflective functioning, psychotherapeutic alliance, and outcome in two psychotherapies for bulimia nervosa. *Psychotherapy, 57*, 129–140. <http://dx.doi.org/10.1037/pst0000245>
- Kuersten-hogan, R., & McHale, J. P. (2000). Stability of emotion talk in families from the toddler to the preschool years. *The Journal of Genetic Psychology: Research and Theory on Human Development, 161*, 115–121. <http://dx.doi.org/10.1080/00221320009596698>
- Kullgard, N., Persson, P., Möller, C., Falkenström, F., & Holmqvist, R. (2013). Reflective functioning in patients with obsessive-compulsive disorder (OCD)—preliminary findings of a comparison between reflective functioning (RF) in general and OCD-specific reflective functioning. *Psychoanalytic Psychotherapy, 27*, 154–169. <http://dx.doi.org/10.1080/02668734.2013.795909>
- Luyten, P., Nijssens, L., Fonagy, P., & Mayes, L. C. (2017). Parental reflective functioning: Theory, research, and clinical applications. *The Psychoanalytic Study of the Child, 70*, 174–199. <http://dx.doi.org/10.1080/00797308.2016.1277901>
- Meins, E., Fernyhough, C., Wainwright, R., Clark-Carter, D., Das Gupta, M., Fradley, E., & Tuckey, M. (2003). Pathways to understanding mind: Construct validity and predictive validity of maternal mind-mindedness. *Child Development, 74*, 1194–1211. <http://dx.doi.org/10.1111/1467-8624.00601>
- Mert, E., Hallıoğlu, O., & Ankaralı-Çamdeviren, H. (2008). Ebeveyn Stres İndeks Kısa Formun Türkçe uyarlaması: Bir psikometrik çalışma [Turkish version of the Parenting Stress Index Short Form: A psychometric study]. *Türkiye Klinikleri, 28*, 291–296.
- Midgley, N., Ensink, K., & Lindqvist, K. (2017). *Mentalization-based treatment for children: A time-limited approach*. Washington, DC: American Psychological Association. <http://dx.doi.org/10.1037/0000028-000>
- Milligan, K., Astington, J. W., & Dack, L. A. (2007). Language and theory of mind: Meta-analysis of the relation between language ability and false-belief understanding. *Child Development, 78*, 622–646. <http://dx.doi.org/10.1111/j.1467-8624.2007.01018.x>
- Moretti, M. M., Obsuth, I., Maysel, O., & Scharf, M. (2012). Shifting internal parent-child representations among caregivers of teens with serious behavior problems: An attachment-based approach. *Journal of Child and Adolescent Trauma, 5*, 191–204. <http://dx.doi.org/10.1080/19361521.2012.697104>
- Müller, C., Kaufhold, J., Overbeck, G., & Grabhorn, R. (2006). The importance of reflective functioning to the diagnosis of psychic structure. *Psychology and Psychotherapy, 79*, 485–494. <http://dx.doi.org/10.1348/147608305X68048>
- Oppenheim, D. (2006). Child, parent, and parent-child emotion narratives: Implications for developmental psychopathology. *Development and Psychopathology, 18*, 771–790. <http://dx.doi.org/10.1017/S095457940606038X>
- Oppenheim, D., Goldsmith, D., & Koren-Karie, N. (2004). Maternal insightfulness and preschoolers' emotion and behavior problems: Reciprocal influences in a therapeutic preschool program. *Infant Mental Health Journal, 25*, 352–367. <http://dx.doi.org/10.1002/imhj.20010>
- Oppenheim, D., & Koren-Karie, N. (2002). Mothers' insightfulness regarding their children's internal worlds: The capacity underlying secure child-mother relationships. *Infant Mental Health Journal, 23*, 593–605. <http://dx.doi.org/10.1002/imhj.10035>
- Pears, K. C., & Moses, L. J. (2003). Demographics, parenting, and theory of mind in preschool children. *Social Development, 12*, 1–20. <http://dx.doi.org/10.1111/1467-9507.00219>
- Rasbash, J., Steele, F., Browne, W. J., & Goldstein, H. (2019). *A user's guide to MLwiN, v3.03*. Bristol, UK: Centre for Multilevel Modelling, University of Bristol.
- Rosso, A. M., Viterbori, P., & Scopesi, A. M. (2015). Are maternal reflective functioning and attachment security associated with preadolescent mentalization? *Frontiers in Psychology, 6*, 1134–1146. <http://dx.doi.org/10.3389/fpsyg.2015.01134>
- Rudden, M., Milrod, B., Target, M., Ackerman, S., & Graf, E. (2006). Reflective functioning in panic disorder patients: A pilot study. *Journal of the American Psychoanalytic Association, 54*, 1339–1343. <http://dx.doi.org/10.1177/00030651060540040109>
- Rutherford, H. J., Wareham, J. D., Vrouva, I., Mayes, L. C., Fonagy, P., & Potenza, M. N. (2012). Sex differences moderate the relationship between adolescent language and mentalization. *Personality Disorders, Theory, Research, and Treatment, 3*, 393–405. <http://dx.doi.org/10.1037/a0028938>
- Sadler, L. S., Slade, A., Close, N., Webb, D. L., Simpson, T., Fennie, K., & Mayes, L. C. (2013). Minding the baby: Enhancing reflectiveness to improve early health and relationship outcomes in an interdisciplinary home visiting program. *Infant Mental Health Journal, 34*, 391–405. <http://dx.doi.org/10.1002/imhj.21406>
- Scopesi, A. M., Rosso, A. M., Viterbori, P., & Panchieri, E. (2015). Mentalizing abilities in preadolescents' and their mothers' autobiographical narratives. *The Journal of Early Adolescence, 35*, 467–483. <http://dx.doi.org/10.1177/0272431614535091>
- Shai, D., & Belsky, J. (2011). When words just won't do: Introducing parental embodied mentalizing. *Child Development Perspectives, 5*, 173–180. <http://dx.doi.org/10.1111/j.1750-8606.2011.00181.x>
- Sharp, C. (2008). Theory of mind and conduct problems in children: Deficits in reading the "emotions of the eyes". *Cognition and Emotion, 22*, 1149–1158. <http://dx.doi.org/10.1080/0269930701667586>
- Sharp, C., Croudace, T. J., & Goodyer, I. M. (2007). Biased mentalizing in children aged seven to 11: Latent class confirmation of response styles to social scenarios and associations with psychopathology. *Social Development, 16*, 181–202. <http://dx.doi.org/10.1111/j.1467-9507.2007.00378.x>
- Sharp, C., Fonagy, P., & Goodyer, I. M. (2006). Imagining your child's mind: Psychosocial adjustment and mothers' ability to predict their children's attributional response styles. *British Journal of Developmental Psychology, 24*, 197–214. <http://dx.doi.org/10.1348/026151005X82569>
- Shmueli-Goetz, Y., Target, M., Fonagy, P., & Datta, A. (2008). The Child Attachment Interview: A psychometric study of reliability and discriminant validity. *Developmental Psychology, 44*, 939–956. <http://dx.doi.org/10.1037/0012-1649.44.4.939>
- Singer, J. D., & Willett, J. B. (2003). *Applied longitudinal data analysis: Modeling change and event occurrence*. New York, NY: Oxford University Press. <http://dx.doi.org/10.1093/acprof:oso/9780195152968.001.0001>
- Slade, A. (2005). Parental reflective functioning: An introduction. *Attachment and Human Development, 7*, 269–281. <http://dx.doi.org/10.1080/14616730500245906>

- Slade, A. (2007). Reflective parenting programs: Theory and development. *Psychoanalytic Inquiry, 26*, 640–657. <http://dx.doi.org/10.1080/07351690701310698>
- Slade, A., Aber, J. L., Berger, B., Bresgi, I., & Kaplan, M. (2003). *The Parent Development Interview-Revised*. New York: The City University of New York.
- Slade, A., Belsky, J., Aber, J. L., & Phelps, J. L. (1999). Mothers' representations of their relationships with their toddlers: Links to adult attachment and observed mothering. *Developmental Psychology, 35*, 611–619. <http://dx.doi.org/10.1037/0012-1649.35.3.611>
- Slade, A., Bernbach, E., Grienenberger, J., Levy, D., & Locker, A. (2005). *Manual for scoring reflective functioning on the Parent Development Interview*. New York: The City University of New York.
- Sleed, M., Baradon, T., & Fonagy, P. (2013). New Beginnings for mothers and babies in prison: A cluster randomized controlled trial. *Attachment and Human Development, 15*, 349–367. <http://dx.doi.org/10.1080/14616734.2013.782651>
- Sleed, M., Slade, A., & Fonagy, P. (2018). Reflective functioning on the Parent Development Interview: Validity and reliability in relation to socio-demographic factors. *Attachment and Human Development, 22*, 310–331. <http://dx.doi.org/10.1080/14616734.2018.1555603>
- Smaling, H. J. A., Huijbregts, S. C. J., van der Heijden, K. B., van Goozen, S. H. M., & Swaab, H. (2016). Maternal reflective functioning as a multidimensional construct: Differential associations with children's temperament and externalizing behavior. *Infant Behavior and Development, 44*, 263–274. <http://dx.doi.org/10.1016/j.infbeh.2016.06.007>
- Stacks, A. M., Muzik, M., Wong, K., Beeghly, M., Huth-Bocks, A., Irwin, J. L., & Rosenblum, K. L. (2014). Maternal reflective functioning among mothers with childhood maltreatment histories: Links to sensitive parenting and infant attachment security. *Attachment and Human Development, 16*, 515–533. <http://dx.doi.org/10.1080/14616734.2014.935452>
- Steele, H., & Steele, M. (2008). On the origins of reflective functioning. In F. Busch (Ed.), *Mentalization: Theoretical considerations, research findings, and clinical implications* (pp. 133–158). New York, NY: Taylor & Francis.
- Suchman, N. E., DeCoste, C., Leigh, D., & Borelli, J. (2010). Reflective functioning in mothers with drug use disorders: Implications for dyadic interactions with infants and toddlers. *Attachment and Human Development, 12*, 567–585. <http://dx.doi.org/10.1080/14616734.2010.501988>
- Sutton, J., Reeves, M., & Keogh, E. (2000). Disruptive behaviour, avoidance of responsibility and theory of mind. *British Journal of Developmental Psychology, 18*, 1–11. <http://dx.doi.org/10.1348/026151000165517>
- Symons, D. K. (2004). Mental state discourse, theory of mind, and the internalization of self–other understanding. *Developmental Review, 24*, 159–188. <http://dx.doi.org/10.1016/j.dr.2004.03.001>
- Taubner, S., & Curth, C. (2013). Mentalization mediates the relation between early traumatic experiences and aggressive behavior in adolescence. *Psihologija, 46*, 177–192. <http://dx.doi.org/10.2298/PSI1302177T>
- Taubner, S., Kessler, H., Buchheim, A., Kächele, H., & Staun, L. (2011). The role of mentalization in the psychoanalytic treatment of chronic depression. *Psychiatry: Interpersonal and Biological Processes, 74*, 49–57. <http://dx.doi.org/10.1521/psyc.2011.74.1.49>
- Taumoepeau, M., & Ruffman, T. (2006). Mother and infant talk about mental states relates to desire language and emotion understanding. *Child Development, 77*, 465–481. <http://dx.doi.org/10.1111/j.1467-8624.2006.00882.x>
- Valiente, C., Lemery-Chalfant, K., & Reiser, M. (2007). Pathways to problem behaviors: Chaotic homes, parent and child effortful control, and parenting. *Social Development, 16*, 249–267. <http://dx.doi.org/10.1111/j.1467-9507.2007.00383.x>
- Verheugt-Pleiter, A. J., Zevalkink, J. E., & Schmeets, M. G. (2008). *Mentalizing in child therapy: Guidelines for clinical practitioners*. New York, NY: Routledge.
- Vrouva, I., Target, M., & Ensink, K. (2012). Measuring mentalization in children and young people. In N. Midgley & I. Vrouva (Eds.), *Minding the child: Mentalization-based interventions with children, young people and their families* (pp. 54–76). New York, NY: Taylor & Francis.
- Wilson, M. N., Hurtt, C. L., Shaw, D. S., Dishion, T. J., & Gardner, F. (2009). Analysis and influence of demographic and risk factors on difficult child behaviors. *Prevention Science, 10*, 353–365. <http://dx.doi.org/10.1007/s1121-009-0137-x>
- Winnicott, D. W. (1971). *Playing and reality*. London, UK: Tavistock Publications.
- Zimmer-Gembeck, M. J., Kerin, J. L., Webb, H. J., Gardner, A. A., Campbell, S. M., Swan, K., & Timmer, S. G. (2019). Improved perceptions of emotion regulation and reflective functioning in parents: Two additional positive outcomes of parent-child interaction therapy. *Behavior Therapy, 50*, 340–352. <http://dx.doi.org/10.1016/j.beth.2018.07.002>

Received December 23, 2019

Revision received July 9, 2020

Accepted August 22, 2020 ■