

EVIDENCE-BASED CASE STUDY

An Empirical Analysis of Mental State Talk and Affect Regulation in Two Single-Cases of Psychodynamic Child Therapy

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Literature has shown the importance of mentalizing techniques in symptom remission and emotional understanding; however, no study to date has looked at the dynamic relations between mental state talk and affect regulation in the psychotherapy process. From a psychodynamic perspective, the emergence of the child's capacity to regulate affect through the therapist's reflection on the child's mental states is a core aspect of treatment. In an empirical investigation of 2 single cases with *separation anxiety disorder*, who were treated in long-term psychodynamic play therapy informed with mentalization principles, the effect of therapists' and children's use of mental state talk on children's subsequent capacity to regulate affect in play was assessed. One case was a positive outcome case, whereas the other did not show symptomatic improvement at the end of treatment. Children's and therapists' utterances in the sessions were coded using the Coding System for Mental State Talk in Narratives, and children's play was coded by Children's Play Therapy Instrument, which generated an index of children's "affect regulation." Time-series Granger Causality tests showed that even though both therapists' use of mental state talk significantly predicted children's subsequent affect regulation, the association between child's mental state talk and affect regulation was only supported for the child who showed clinically significant symptom reduction. This study provided preliminary support that mental state talk in psychodynamic psychotherapy facilitates emotion regulation in play.

Keywords: psychodynamic play therapy, mentalization, affect regulation, psychotherapy process research

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Mentalization has been defined as the conscious or unconscious attempt to understand mental states in one's self and others, and the ability to accurately—but tentatively—interpret behaviors and interpersonal interactions as motivated by these underlying mental states (Allen, 2006; Fonagy, Steele, & Steele, 1991). One of the important discriminants of mentalization construct from its conceptual cousins, such as empathy and insight, is that mentalization is closely linked with emotion regulation, thus making it an effective component of psychotherapy (Allen, 2006).

In psychodynamic play-based child psychotherapy, mentalizing the thoughts and emotions that were previously deemed unacceptable, unseen, and unheard is central to treatment (Verheugt-Pleiter, Zevalkink, & Schmeets, 2008). The practice of mentalization in therapy facilitates both unconscious and conscious understanding of mental states, labeling them, and connecting them with behaviors, which reinforce the construction of coherent self-narratives and the development of regulatory processes (Ensink & Mayes, 2010; Fonagy & Target, 1996, 2000).

The development of children's symbolic and mentalizing capacities in play is one of the defining change processes in child psychotherapy (Slade, 1994). During the psychotherapy process, children develop the capacity to experience various aspects of their self-experience through imagining the inner lives of play characters, their thoughts, beliefs, intentions, and feelings (Fonagy & Target, 1997). This symbolic mentalization process helps with the development of working models that are facilitative of affect modulation, tolerance of ambiguity, and coping with stress (Tessier, Normandin, Ensink, & Fonagy, 2016; Fonagy & Target, 2000; Target & Fonagy, 1996). However, to the authors' knowledge, no study to date has systematically investigated and demonstrated the use of mentalization in relation to affect regulation with

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children in the therapy process. This study aimed to fill in this gap by examining two young children's, and their therapists', mental state talk in long-term psychodynamic psychotherapy informed with mentalization principles. We have chosen two cases with the same diagnosis of *separation anxiety disorder*; however, even though one case has shown symptomatic improvement over the course of treatment, the other case has not presented significant symptomatic change. We have investigated the effect of therapists' and children's mental state talk on children's subsequent affect regulation capacity in play.

Defining Mentalization and Mental State Talk

Although the term "mental state talk" is not synonymous with mentalization, it is essential to define the mentalization construct. Mentalizing was described as the act of "ascribing mental states to the actions of others and oneself" (Allen, 2006, p. 7). Therefore, use of mental state words in discourse or thinking in terms of mental states is a sine qua non for the explicit mentalization practice. From a developmental perspective, mothers' use of specific mental state words in their daily lives with children is predictive of children's theory of mind and affect understanding (Dunn, Brown, Slomkowski, Tesla, & Youngblade, 1991; Ruffman, Slade, & Crowe, 2002). Additionally, research constructs tapping into mothers' ability to treat their children as unique mental agents, such as Maternal Insightfulness (Oppenheim & Koren-Karie, 2002), Maternal Mind-Mindedness (Meins, Fernyhough, Fradley, & Tuckey, 2001), and Parental Reflective Functioning (Slade, 2005), first and foremost assess mothers' ability to understand and label the mental states in their children. Therefore, the mentalization construct is strongly intertwined with verbal data, which may benefit from microlevel analyses, that is, the choice and use of words. This is even more relevant in the psychotherapy process, where the therapists are cognizant of word choices and theory-based verbal interactions.

For example, when a therapist says "I think maybe you are upset because you don't want your mother to leave," she attempts to understand the contents of the child's mind, label mental states, and attempts to establish some causal connections between mental states and his observable actions. The use of the phrase "I think maybe" signals that the therapist is assuming a tentative stance while hypothesizing about the child's mind, keeping a representational distance from any type of idealized, absolute—and in fact unknowable—"reality," and providing ample space for corrections and changes, which is also known as the "opaqueness of mental states" (Fonagy, Target, Steele, & Steele, 1998; Sharp, 2008). With continuous attempts, this act of mentalizing should result in a calmer response in the child, and contribute to his self-mentalization skills in the long run (Fonagy & Target, 1997; Steele & Steele, 2008).

Clinical Importance of Mentalization and Symbolic Play in Psychodynamic Play Therapy

Mentalization capacity is a developmental achievement, which is continuously practiced and improved over a life span. In cases where the mentalization progress falters, psychotherapy intends to complete what is left incoherent and fragmentary. Therefore, psychodynamic approaches formulated their interventions around im-

proving children's ability to label and understand mental states in self and others, and connect them with actions to promote self-regulation (Allen, 2006). Symbolic play is a facilitator for mentalization in therapy, providing a safe and holding platform to experience emotions from a representational distance, experiment with several types of tentative mental states, and create resolutions (Bretherton, 1989).

Children enter psychotherapy treatment with varying capacities for symbolic play and mentalization, and these variations are linked to the nature and severity of presenting problems and trauma history, including disorganized patterns of attachment (Ensink, Berthelot, Bernazzani, Normandin, & Fonagy, 2014). Therapeutic goals with children often include reorganizing these experiences within play, and regulating affect through mentalization and symbolization. Fonagy (2000) suggests that the therapist can facilitate mentalizing by commenting on the mental content of the play characters, the child's behavior, or play. The therapist can identify mental states underlying the child's behavior or play, or verbalize the wishes or intentions of the play characters, significant others in the child's life such as parents, or reflect on the uniqueness of the child's mental world. Therapists' use of mental state talk with respect to children's mental states and behaviors, allows children to organize their own experiences so that they have a better understanding of their internal world (Target & Fonagy, 1996), which in turn helps form tentative hypotheses about the link between emotions and behaviors, and therefore develop the ability to communicate and regulate mental states and emotions (Gergely, Fonagy, Jurist, & Target, 2002). This happens by the therapist's empathic ability to tolerate the child's experience, and being ready to enter into the pretend world of play to share the child's experiences, which shows the child that ideas and feelings are not concrete realities, but states in play that can be worked on and transformed (Fonagy & Target, 1998; Slade, 1994).

Empirical Bases of Mentalization and Symbolic Play in Psychotherapy Research

Research shows that child and adolescent psychopathology may be associated with difficulties in mentalizing (Ensink, Bégin, Normandin, & Fonagy, 2016; Sharp, Croudace, & Goodyer, 2007; Taubner & Curth, 2013). Moreover, parental stress and depression as well as a history of maltreatment in parents' backgrounds are known to diminish the mentalization capacity in parent-child dyads (Koren-Karie, Oppenheim, & Getzler-Yosef, 2004). Despite the links between deficits in parental and child mentalization and psychopathology, research on mentalization in psychotherapy research with children and adolescents is lagging behind. In adult psychotherapy research, mentalization has been conceptualized as a moderator and/or predictor of therapeutic outcome, as well as an actual clinical outcome measure in psychodynamic treatments (i.e., Katznelson, 2014; Müller, Kaufhold, Overbeck, & Grabhorn, 2006; Taubner, Kessler, Buchheim, Kächele, & Staun, 2011). Mentalization has also been proposed as a mechanism of change in adult psychotherapy (i.e., Levy et al., 2006; Rudden, Milrod, Target, Ackerman, & Graf, 2006). In the area of child and adolescent research, there has been a steady growth in the development of mentalization-based interventions for children (see Midgley & Vrouva, 2013, for a review). Significant changes in mentalization were reported after psychodynamic psychotherapy

in a single case study with neglect (Ramires, Schwan, & Midgley, 2012) and in a sample of adolescents with depression (Belvederi Murri et al., 2017).

Even though empirical studies of mentalization in psychotherapy research have mostly been conducted in the psychodynamic tradition, Allen, Fonagy, and Bateman (2008) suggest that enhancing mentalizing may be a common process factor inherent to all effective treatments. Further empirical investigation is needed, but there is preliminary evidence promoting mentalizing may be a common feature of both psychodynamic and cognitive-behavioral child treatments (Goodman, Midgley, & Schneider, 2016) as well as in an empirical single-case of play therapy (Goodman, Reed, & Athey-Lloyd, 2015). Goodman et al. (2016) also found that MBT and psychodynamic play therapy approaches share key features. Muñoz-Specht, Ensink, Normandin, and Midgley (2016) used a single-case naturalistic research methodology and identified a wide range of mentalization-based techniques used by two experienced psychodynamic clinicians in psychodynamic child psychotherapy, which they proposed could be features of therapeutic practice across a range of modalities of psychotherapy.

In terms of the relations between mentalization and affect regulation in symbolic play, developmental research shows that play and mental state talk are intertwined with each other in that the more the children engage in pretend play, the more mental state talk they use, which in turn supports emotion regulation (Galyer & Evans, 2001). Engagement in symbolic play predicts performance on theory of mind tasks (Astington & Jenkins, 1995), mental state discourse (Hughes & Dunn, 1997), emotion understanding (Niec & Russ, 2002), and affect regulation (Galyer & Evans, 2001). However, within the field of child psychotherapy research, the dynamic relations between mentalization and affect regulation has not been previously studied. Prior empirical studies on affect regulation in psychodynamic play therapy found that children show gains in pleasurable affect, display less emotional discomfort as well as greater capacity for affect regulation at the end of treatment (Chazan, 2002; Chazan & Wolf, 2002; Halfon et al., 2016; Halfon, Oktay & Salah, 2016).

Aims of the Current Study

The goal of this study was to understand the effects of the therapist's and the child's verbalized, explicit mentalization (Allen, 2006) within therapy sessions, operationalized as the systematic analysis of the therapists' and children's mental state word utterances, on the child's subsequent capacity to regulate affect in play. Affect regulation was operationalized as the child's capacity to express affect in play in an adaptive way, such as being able to emotionally regulate one's self when faced with sources of distress and discomfort in play activity, whereas poor regulation indicates marked outbursts and abrupt interruptions between affect states, and deficits in affective flexibility (Chazan, 2002). We chose the format of an evidence-based case study because despite preliminary evidence on the relations between mentalization and affect regulation, these have not been studied as they occur within the course of ongoing therapy.

To enhance the case studies' scientific rigor, a number of strategies and guidelines for evidence-based case reports have been developed (Stiles, 2007). Following these guidelines, extended descriptions of the cases were provided and the parent,

teacher and clinician-rated standardized symptom questionnaires regarding the child's functioning at prepost treatment and summaries from pretreatment interviews were presented. To understand mothers' and children's baseline mental state talk and emotion expression/regulation capacities, dyadic mother-child free play sessions were conducted at the beginning of treatment. This is a commonly used procedure to evaluate mental state talk and emotional availability, and has been found to correlate with maternal sensitivity, children's attachment status, and level of psychopathology (i.e., Biringen, Robinson, & Emde, 1993; Meins et al., 2001). To assess the therapy process, systematic quantitative coding of each session of psychotherapy was presented to assure representativeness, and time series analyses were conducted to assess the dynamic relations between mental state talk and affect regulation. Vignettes from the sessions were provided to facilitate understanding of results. In this way, this systematic case study utilized both quantitative and qualitative data. We have chosen two cases presenting with separation anxiety disorder, a positive outcome case, where there was clinically significant symptomatic improvement, and another case where the child's symptomatic functioning remained the same from pre- to posttreatment. The negative-outcome case involved a history of physical abuse in the former generation, and a high level of concurrent stress, whereas these were not reported in the other case. We investigated whether therapists' and children's use of mental state words would predict children's subsequent affect regulation in play in these two cases.

Method

Participant Selection and Description

Patient data. The patient data came from the Istanbul Bilgi University Psychotherapy Research Center, which provides low-cost outpatient psychodynamic psychotherapy services and professional training for master's level students in the Clinical Psychology Graduate Program.

A group of 84 consecutively admitted patients from Fall, 2014 to Spring, 2016 were screened in the initial meeting by a licensed psychologist, and those who met inclusion criteria (ages between 4 and 10 years old, no psychotic symptoms, no significant developmental delays, no significant risk of suicide attempts, no drug abuse) were approached for data collection purposes. Fifty-seven of these patients met inclusion criteria and consented to research. At the time of sample selection for the current study, 22 of these patients had completed their treatment. Two patients with similar demographic characteristics (age and gender), and presenting problems were selected from this sample. Only five patients fulfilled these criteria, and two were selected from these patients. The children, named Cansu¹ and Rana, were 6-year-old Turkish females, who were brought to therapy because of separation anxiety with functional impairment in school attendance. Both families were from a middle socioeconomic status composed of married biological parents with university education. Both children had at least one sibling.

The patients and their parents were extensively informed before commencing therapy about research procedures, and parents pro-

¹ Pseudonyms.

vided written informed consent and the children provided oral assent concerning use of their data, including questionnaires, videotapes and transcripts of sessions, and therapists' process notes for research purposes. The parents also gave consent for publishing the verbatim clinical process. This research was approved by Istanbul Bilgi University Ethics Committee. To protect confidentiality, patients' names were altered in the manuscript.

Patient characteristics.

History of the problems. At the initial interview, Cansu's parents reported that she had significant anxiety associated with attending school and presented with enuresis at school and at night. The mother also reported Cansu had "fears of losing her parents, the dark and robbers as well as difficulty sleeping alone and tantrums at night." History of Cansu's presenting problems dates back to two years of age, when her parents reported severe marital conflict. The mother also reported "Cansu had a negative experience at school, when her school teacher lost her at a school trip after which her anxiety intensified." Mother explained that she was transferred to another school in which her teacher was physically abusive. Moreover, the parents reported that the continuing marital conflict at home worsened Cansu's symptoms. The parents and Cansu denied any sexual or physical abuse.

Rana's parents reported that Rana had difficulty attending school, and refused to separate from her mother. The mother reported that "[Rana had] fears of the dark, losing [her] parents, being abandoned [by her mother] and dying". Rana's father reported he had a chronic disease and an intestinal surgery, which, according to the parents, intensified Rana's anxiety. The mother explained that Rana's separation anxiety was pervasive throughout her history and became more severe when she started kindergarten, and she was put on an antianxiety medication for 6 months, which was stopped due to side effects. Subsequently, the mother reported that Rana accepted going to school only with her mother waiting for her in the building. The parents and Rana denied any history of physical or sexual abuse.

Predisposing developmental histories. Cansu's mother reported that the pregnancy was stressful due to medical problems

regarding the child's development. Cansu's parents reported separations and marital conflict without domestic violence throughout Cansu's toddlerhood, although they remained together. Cansu's mother also reported a traumatic developmental history, including significant financial problems in the family and physical abuse from her father, who was also reported to have had substance abuse problems, and having died at an early age.

Rana's mother reported that her pregnancy was not planned. The mother was 43 years old at the time of conception and she spoke of fears of losing the child due to her late pregnancy. The mother explained that Rana has had sleep problems since birth. She has had allergic asthma since she was one year old and recently stopped treatment with no relapse. While Rana was growing up, parents both reported significant fears of losing her due to the late pregnancy, as well as the child's fragile constitution (i.e., asthma). Moreover, both parents reported significant losses in their own families, that is, losing their siblings to terminal illnesses. They both expressed worry about what might happen to Rana when they die after these familial losses.

Pretreatment functioning. All pretreatment scores from Child Behavior Checklist (CBCL; Achenbach, 1991), Teacher Rating Form (TRF; Achenbach, 1991), Screen for Child Anxiety Related Emotional Disorders (SCARED; Birmaher et al., 1997), Children's Global Assessment Scale (CGAS; Shaffer et al., 1983), and Emotion Regulation Checklist (ERC; Shields & Cicchetti, 1997) are presented in Table 1.

At initial assessment, each child's scores on CBCL and TRF were at the borderline or clinical level for "internalizing disorders" and "anxiety problems" on CBCL's and TRF's DSM oriented scales. The children's scores on SCARED were at clinical levels for separation anxiety. Both Cansu's and Rana's Adaptive Functioning scores on TRF were in the clinical range. The classroom teachers rated both girls as less happy compared with typical students of the same age. On the CGAS, both therapists reported moderate degree of interference in functioning in most social areas, or severe impairment of functioning in one area, such as school refusal and other forms of anxiety. On the ERC, Cansu's

Table 1
Reliable Change Indices

Outcome scales	Patient 1 (Cansu)			Patient 2 (Rana)		
	Assessment	Termination	RCI > 1.96	Assessment	Termination	RCI > 1.96
CBCL (parent report)						
Internalizing problems	67	68	-0.25	63	46	4.30 ^a
Anxiety problems	66	68	-1.17	65	50	8.82 ^a
SCARED (parent report)						
Anxiety disorder	66	60	1.09	60	23	6.75 ^a
Separation anxiety disorder	9	7	1.58	8	3	3.96 ^a
TRF (teacher report)						
Internalizing problems	62	60	0.51	60	41	4.81 ^a
Anxiety problems	64	63	0.59	62	44	10.59 ^a
Adaptive functioning	35	45	4.42 ^a	40	55	6.63 ^a
CGAS (therapist report)	51	65	2.71 ^a	56	78	4.26 ^a
ERC (parent report)						
Emotional lability	4.75	4	1.53	1.81	1.25	1.14
Emotion regulation	1.88	2.25	0.75	2.25	3.25	2.04 ^a

Note. Bolded scores indicate borderline (on CBCL and TRF) and clinically significant scores (on all scales). CBCL = Child Behavior Checklist; SCARED = Screen for Childhood Anxiety Related Emotional Disorders; TRF = Teacher Rating Form; CGAS = Children's Global Assessment Scale; ERC = Emotion Regulation Checklist; RCI = Reliable Change Index.

^a RCI significant.

and Rana's emotion regulation scores were comparable; however, Cansu scored higher than Rana on emotional lability and negativity.

Treatment outcome. "Reliable and Clinically Significant Improvement" was used as a measure of change over the two time-points using the method outlined in Jacobson, Roberts, Berns, and McGlinchey (1999). To calculate RCI, pretest score is subtracted from posttest score and divided by standard error of the instrument. If $RCI \geq 1.96$, then the change was reliable ($p < .05$). RCI indicated clinically significant change from pre- to posttreatment symptoms, psychosocial functioning, and emotion regulation for Rana but not for Cansu (please see Table 1). Given that Rana crossed the limit from clinical to normal population, and this change is not attributable to measurement error, we concluded that changes in her scores are clinically significant. However, Cansu only improved on TRF Adaptive Functioning and CGAS.

Therapist and Treatment Characteristics

The therapists, therapists' training, and supervision. Patients had different therapists, who were female master's level clinicians with two years of professional experience. Formal training included theoretical background of psychodynamic play therapy with mentalization principles and its various applications. Both therapists were supervised by experienced psychodynamic play therapists, receiving once a week individual supervision for each case.

Treatment. The standard treatment applied at Bilgi University Psychological Counseling Center is psychodynamic play therapy informed with mentalization principles (Verheugt-Pleiter et al., 2008). The standard treatment plan involves once a week therapy sessions of 50 min with the child, along with once a month parent sessions. The treatment is time-limited due to the internship structure of the therapists' training and can last up to a year. On average patients receive 40 sessions. Cansu received 41, and Rana 42 sessions.

The treatment process includes a standard assessment phase during which the therapist meets with the parents in the first session and conducts a clinical interview to learn about the history of the presenting problem, the child's developmental history, and family background. At the end of this session, the parents fill out the relevant symptom assessment measures, and the teacher forms are sent to school. In the second session, the therapist meets with the mother and the child together, and asks them to play as they would at home for 20 min.

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 core treatment principles can be summarized under five headings. (1) The therapist draws attention to the play process by listening actively and inviting the child to communicate in play. (2) The therapist clearly identifies the boundaries of the play situation with the aim of setting limits when necessary. In these kinds of situations, 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, or hits the therapist, the intentions and feelings behind these behaviors are verbalized with the aim of helping the child regulate disruptive affect. (3) The therapist men-

talizes 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. (4) 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. (5) The therapist identifies specific play content that has been repetitive in treatment, and suggests possible links with what the child could be feeling, thinking, or experiencing in real life. Parallel parental work takes place once a month with the goal of increasing Parental Reflective Function (Slade, 2005), that is, helping the parent to think about the child's mind, and noting the relations between the parent's and child's mental states.

Instruments

Parent measures. The Child Behavior Checklist (CBCL; Achenbach, 1991) is a widely used method of identifying problematic behaviors in children. It indicates how true a series of 112 problem behavior items are for the child on a 3-point scale (0 = "not true," 1 = "somewhat or sometimes true," and 2 = "very true or often true"). Outcomes can be determined for significant problems with internalizing behavior (e.g., depression, anxiety), externalizing behavior (e.g., aggression, violence) or total problems. The Turkish form has good reliability and validity (Erol, Arslan, & Akcakin, 1995). In the current study, the internalizing scale had an alpha of .82, and the anxiety scale had an alpha of .86.

Screen for Child Anxiety Related Emotional Disorders (SCARED; Birmaher et al., 1997) is a 41-item parent report instrument used in screening children with anxiety disorders that parallel the DSM classification including general anxiety disorder, separation anxiety disorder, panic disorder, and social phobia. Items of the SCARED are rated on a 3-point scale ranging from 0 (*not true or hardly ever true*) to 2 (*true or often true*). Scores of 25 or higher are indicative of anxiety disorders. The validity and reliability study of the Turkish version carried out by Karaceylan, Agaoglu, Karakaya, and Coskun (2005) was good. In the current study, the anxiety scale had an alpha of .83 and separation anxiety scale had an alpha of .88.

Emotion Regulation Checklist (ERC; Shields & Cicchetti, 1997) involves 24-items rated on a 5-point scale (1 = "never" to 5 = "always") that tap two factors one of which is emotional lability and negativity defined as arousal, anger dysregulation, and mood changes; and the second is emotion regulation defined as socially appropriate emotional displays, empathy, and emotional self-awareness. The Turkish version has been shown to have high internal consistency and discriminant validity (Batum & Yagmurlu, 2007). In the current study, the emotional lability scale had an alpha of .83 and emotion regulation had an alpha of .88.

Teacher measures. Teacher Rating Form (TRF; Achenbach, 1991) includes 118 items, 93 of which have counterparts on the CBCL, including same syndrome scales and broadband syndromes. The test-retest reliability of the Turkish form is .88 for Total Problems and the internal consistency was also adequate (Erol & Simsek, 2000). In this study, the internalizing, anxiety, and adaptive functioning scales had alphas of .84, .87, and .80, respectively.

Therapist measures. The Children's Global Assessment Scale (CGAS; Shaffer et al., 1983) is a numeric scale (from 1 to 100) used by mental health clinicians to rate the general functioning of children under the age of 18. The scale has acceptable discriminant validity and reliability (Shaffer et al., 1983).

Process Measures

Assessment of therapists' interventions. The therapists' interventions (each speech turn of the therapist) were coded by two research assistants according to Verheugt-Pleiter et al.'s (2008) mentalizing intervention categories. The categories were—(a) Maintaining contact, creating a safe environment. (b) Joining the child's play activities in pretend mode (following the child's direction in pretend mode). (c) Labeling and/or asking questions about observable physical states, behaviors, thoughts, and/or feelings. (d) Focusing on separating reality and fantasy in play, and therapeutic limit setting. (e) Exploring and making comments on mental processes such as verbalization of unspoken/implicit wishes, thoughts, and intentions, stressing the individual character of the child's mental world. (f) Pointing out the connections between mental states and behaviors, possibly identifying underlying needs and emotions either in pretend mode or directly toward the child. The ICC (2,1) for intervention categories ranged from .82 to .91.

Assessment of play activity. Children's Play Therapy Instrument (CPTI; Kernberg, Chazan, & Normandin, 1998) rates children's behavior in a therapeutic setting at different levels (for further definition of play activity categories, see Chazan, 2002). The first level involves a "Segmentation of the child's activity" (nonplay, preplay, play, and interruption). Going forward, only play segments are rated. Only the items under the affective component were used as a composite index of child's capacity for affect regulation, and calculated by taking the mean score for the following affective items: (a) Regulation and Modulation of Affect assesses how different intensities of affect are expressed and how easily these oscillations occur within the child's control, that is, from annoyance to irritability to anger to rage, scored on a range of 5 (*Very Flexible*) to 1 (*Very Rigid*). (b) Transition Between Affective States assesses how the child organizes transitions between affective states, scored on a range of 5 (*Always Smooth*) to 1 (*Always Abrupt*). (c) Appropriateness of Affective Tone to Content assesses the appropriateness of the emotions expressed by the child within the context of the play theme, scored on a range of 5 (*Always Appropriate*) to 1 (*Never Appropriate*). (d) Using Adaptive Coping Strategies in Face of Disruptive Affects assesses the degree to which the conflicts or stress in play are dealt with by an effective accommodation to given circumstances such as adaptation, problem solving, humor or sublimation, scored on a range of 5 (*Most Characteristic*) to 1 (*No Evidence*).

Sibel Halfon was trained by Saralea Chazan on the use and adaptation of CPTI. The CPTI was translated and back-translated for use in Turkish. Two master's level research assistants, who received 20 hr of training on the CPTI by the Author number 1 and rated 10 training sessions (24 play segments) prior to the study, rated the sessions. They were independent assessors who were not associated with the treating clinicians or the cases, and blind to the purposes of the study. The ICC (2,1) for affective variables ranged from good to excellent (.78–.89). Disagreements were resolved by

consultation with Sibel Halfon. The internal consistency of the composite affect component was tested by Cronbach's alpha, which was .75.

Assessment of mental state talk. Coding System for Mental State Talk in Narratives (CS-MST, Bekar, Steele, & Steele, 2014) was developed to assess various dimensions of mental state talk in children's and their parents' narratives while reading a wordless picture book, "Frog, Where are You?" by Mayer (1969). CS-MST is composed of five major categories of mental state language: emotions (e.g., happy), cognitions (e.g., think), perceptions (e.g., to smell), physiological mental state words (e.g., hungry, sleepy), and action-based mental state words (i.e., actions that inherently imply mental states, such as hiding, looking for something or laughing). These basic categories are coded in three directions: about the story characters, the self, and the other. Each use of mental state word is counted generating a frequency. Diversity of mental state words and causal connections made with mental state words can also be coded as additional variables.

The CS-MST was first adapted to Turkish language by using the narratives of Turkish mothers and their preschool children Bekar and Corapçı (2016) and then adapted to play therapy narratives for use in the current study. For adaptation purposes, the "story-oriented mental state talk" was replaced with "play-oriented mental state talk," which refers to participants' mental state utterances in the mode of pretend play (e.g., mother speaking as a lion: "Oh no I am so hungry, when are we going out to catch a deer?"). During the adaptation phase, 25 play segments were coded by the second author and a group of four masters level research assistants following a 1-day training workshop. The levels of interrater reliability were excellent. An ICC (2,1) of .92 was reached on all coding variables (play-oriented, self-oriented, and other-oriented mental state talk). Any disagreements were resolved before the same group of research assistants coded the remaining transcripts. An ICC (2,4) of .90 was reached among these research assistants on the remaining transcripts. Disagreements were resolved in consultation with Ozlem Bekar.

Statistical Procedures

To evaluate the temporal aspects of the psychotherapy process with relation to mental state talk and its subsequent associations with affect regulation in play, time-series analyses were conducted. Temporal change processes can be addressed when one simultaneously tracks two or more variables during the course of treatment. For instance, if during treatment one continuously tracks changes on a key psychodynamic variable (e.g., affect regulation) against changes in other process variables (e.g., therapists' and children's mental state talk), one can model temporal associations between repeatedly measured variables, so that the inherent dynamics can be quantified (for a review, see, Bollen & Curran, 2004). This type of multivariate time series analysis is called vector autoregression (VAR). A variable is said to have autoregressive components when the output of the variable linearly depends on its own previous values (e.g., child's affect regulation capacity depends on affect regulation strategies employed in prior sessions). When multiple variables are simultaneously considered (cross regressions), their outputs may linearly depend on each other variables' previous values (child's affect regulation depends on mental state talk in prior sessions). Cross-regressions answer

which change in a variable preceded change in another variable, which may be interpreted in a quasi-causal way in a mathematical sense, because significant sequential associations reflect how a variable is associated with subsequent values of the other variable. In the time-series literature, this property is called “Granger causality,” where causality is derived from systematic time-lagged associations between two or more variables (Granger, 1969). VAR was initially developed as a tool in econometrics, and has been applied to psychotherapy research in the quantification of temporal, session-to-session aspects of change of multiple factors in psychotherapy (Tschacher, Baur, & Grawe, 2000).

We conducted vector autoregressive modeling (VAR) using E-Views 9.5. The first step in this analysis concerns the stationarity of the variables. A stationary variable has the property that the mean, variance, and autocorrelation structure do not change over time, which is a common assumption of time-series analyses. A common stationarity test used is an Augmented Dickey-Fuller test (ADF, Dickey & Fuller, 1979), which assesses whether a variable has a unit root (if the variable has a unit-root, then it is not stationary). In order to continue with Granger-Causality Tests, the optimum number of lags (i.e., the number of past play segments taken into account) for each VAR model was selected based on goodness-of-fit criteria using Akaike information criteria (AIC; Akaike, 1981). To find optimal lag solution, we used a stepwise strategy to get the lowest level of AIC that indicates a better fit. Afterward, we tested separately whether therapists’ and children’s play-related mental state talk “Granger cause” affect regulation in play.

Results

Pretreatment Levels of Emotional Availability, Emotion Regulation, and Mental State Talk

Videos and verbatim transcripts of 20-min dyadic mother–child play conducted in the second session of the psychotherapy process was used to assess the quality of mother child relationship from the perspective of emotional availability/regulation and mental state talk. Emotional Availability (EA; Biringer, Robinson, & Emde, 1993) is a method to assess the dyadic interaction between an adult and a child, referring to an individual’s emotional responsiveness, regulation, and affective attunement to another; key is the expression of a wide range of emotions rather than responding to solely distress. It involves scales pertaining to maternal and child behavior. In terms of maternal sensitivity, Cansu’s mother scored five, whereas Rana’s mother scored six. These scores both represent “bland sensitivity,” scored when the adult is “good enough,” however, shows neutral affect that is less emotionally expressive. In structuring, Cansu’s mother scored four and Rana’s mother scored five. These scores represent “inconsistent” and “moderate structuring,” where the adult may leave the child without sufficient support and availability, and is either overly structuring or not contributing enough to the interaction. In nonintrusiveness, both mothers scored five, which represents sometimes benign forms of intrusiveness, where the adult may have difficulty to give the child space and let them lead in exploration and discovery. In nonhostility, Cansu’s mother scored four whereas Rana’s mother scored six. There is a qualitative difference between a four and six in that

Cansu’s mother is rated to be “covertly hostile,” showing a high level of negative affect leading to emotional dysregulation in the dyad. In contrast, Rana’s mother was rated to be “generally non-hostile” showing occasional frustration but generally regulating negative affect. In child responsiveness/emotion regulation capacity, both children scored five out of seven, which indicates occasional dysregulation, and frequent distress, and therefore excessive reliance on the adult for optimal emotional regulation, which turns out to be ineffective.

The proportion of Rana’s and Cansu’s mothers’ mental state talk to the total number of words that they used in the mother–child dyadic play were .08 and .05, respectively. Children also showed differences in their use of mental state talk: Rana’s mental state talk to the total number of word she used was 0.11, whereas this proportion was 0.05 for Cansu.

Treatment Process

Therapists’ interventions. One session was randomly selected from the beginning (1st to 5th sessions), middle (20th to 25th sessions) and the end phase of treatment (38th to 42th sessions) and each intervention (each speech turn of the therapist) was coded according to aforementioned intervention types. Most interventions included an element of Type I; therefore, that was not coded as a separate intervention. Out of 547 interventions identified in Cansu’s sessions, 40% included Type II, 43% included Type 3, 7% included Type 4, 6% included Type 5, and 4% included Type 6 interventions. Out of 312 interventions in Rana’s sessions, 11% included Type II, 36% included Type 3, 1% included Type 4, 49% included Type 5, and 10% included Type 6 interventions. Overall, Cansu’s therapist responded to the child’s each speech turn and frequently made Type II and 3 interventions, whereas Rana’s therapist most characteristically made Type 3 and Type 5 interventions.

Quantitative analyses of mental state talk and affect regulation. Using the CPTI, each child’s overall activity during each session was segmented on the basis of behavioral observations into four mutually exclusive categories: preplay, play activity, nonplay, and interruptions. As per the CPTI manual, only the longest play segment of each session was used for further analyses. While the affect regulation component ($M = 3.5$, $SD = .40$) was used from the CPTI, for mental state narrative, play-related mental state words for each participant were counted and then summed and composite scores for therapists ($M = 15.44$, $SD = 24.32$) and children ($M = 14.32$, $SD = 28.96$) were computed.

Granger causality tests. ADF indicated that play-related mental state talk of Cansu has a unit root (meaning it is not stationary); therefore, this variable was converted to stationary through taking its first difference. AIC yielded that 1-lag would be optimal for both cases (looking at past values of 1 play segment from the previous session). Pairwise Granger causality tests indicated that therapist’s use of play-related mental state words predicted subsequent affect regulation in play at trend level for Cansu, $F(1, 40) = 2.34$, $p = .07$, whereas this was significant for Rana, $F(1, 41) = 4.10$, $p < .05$. Cansu’s use of play-related mental state words did not predict subsequent affect regulation, $F(1, 40) = 1.78$, $ns.$, but we found a significant association for Rana, $F(1, 41) = 5.82$, $p < .05$.

Qualitative analysis of the clinical data. To clinically investigate therapists' and children's use of play-related mental state talk and affect regulation in play over the course of treatment three sessions (please see Appendix A in the online supplemental material) with the highest z-scores for both therapists' and patients' mental state talk from the opening sessions (1st–10th), from the middle of the treatment (15th–25th), and from the ending sessions (30th–42th) were chosen for clinical analyses. These session excerpts were used to contrast the children's idiosyncratic use of mental state words, the therapists' different types of mentalization techniques and their effect on the children's subsequent affect regulation. It will be possible to see that even though both children use mental state words to speak about play characters' desires and intentions, their capacity for symbolization in play are at different levels, and thus they need different kinds of mentalizing interventions from the therapists for effective affect regulation. Verbatim session transcripts are presented with Authors' comments on the therapist's mentalizing interventions and its concomitant effect on affect regulation.

The case of Cansu. Session 10. Cansu created a story, where she was the mother and the therapist was the baby.

Child: *You are the baby. Start playing and I will prepare your food. Say "Iuh" (whining sound) When I say it is milk, you will immediately want it.*

Therapist: *I want it! (Therapist readily engages in pretend play in order to share the child's experiences and labels her pretend affect that the child assigned to her)*

Child: *That's right. Babies adore milk. Now, start crawling towards the toys. While you play, I will be in the kitchen, unaware of everything. Someone with a gun will come in from behind you, ok? (As soon as the attachment relationship is activated, Cansu feels danger.)*

Therapist: *Oh, no! I am so scared. (Therapist labels her mental state (fear) from the perspective of the play character that was assigned to her by Cansu.)*

Child: *Yes, and you don't know it. (The child becomes the person with the gun) Now, I am shooting you from behind and you don't see it. (Cansu's play narrative gets more aggressive.) You are shot. You cannot speak. You are dead now. . . . Now, I am the baby and you be the mother. You are in the kitchen, heating up the baby's food, but you heat it up too much, ok?*

Therapist: *I heat up the food too much. (Therapist labels pretend mother's behavior.)*

Child: *Now, the baby falls into the toilet and the mother pees on it and flushes. Heelp! Moom! (speaking for the baby; The play narrative gets aggressive again.)*

Therapist: *No! My baby fell in the toilet. (Therapist labels observable play behaviors.)*

Child: *You were too late. You can't save her.*

In these segments, we saw that Cansu did not have safe and stable internal attachment representations, which created deficiencies in her regulation of affect states. The intrusion of dysregulated aggressive fantasies disrupted the play organization, creating unresolved play that ended destructively. Therapist's sharing, naming, and labeling her mental states were essential initial steps for her to feel more secure with her own mental states.

Session 20. Cansu wanted to play two contestants in "taking care of a baby" contest:

Child: *Now, we both have exactly the same babies. We must take care of our babies. They need us. If you lose, then your baby will be taken away from you. So be very careful! Also, I am the grand champion of last years' contest! You will be very sorry soon. Now, start the competition. Look at how I take care of my baby. I feed her. It feels good to eat, right? (speaking to the baby) Now, I sing to her so that she can relax (The child starts humming a lullaby.) Now, I am on stage. I am the winner. Give me your baby! Just shout it out! (The child starts shouting, instructing the therapist to repeat her words.) They are stealing my baby! My little one! My little one! I promise I will get you back! (The child starts to hit the therapist.)*

Therapist: *Cansu, remember we can't hit each other. I think you got very upset seeing the baby is taken away from her mother, and that also made you angry. (Therapist sets limits and mentalizes the child's behaviors to bring back the boundary between symbolic pretense and reality and to help regulate the child's reactions.)*

Child: *Ok, I am sorry. Just shout, "my little babies!", but with a normal voice. (Cansu is able to regain the boundary between symbolic pretense and reality and return to the play.)*

In these segments, the therapist gave reality value to the child's behaviors by explaining the play sequence that made her angry, and also protected the child from too much overstimulation and overwhelming affect by stopping the symbolic play, after which the child was able to regulate herself and return to play.

Session 39. Cansu again wants to play the story of a mother, who loses her daughter.

Child: *Moom! Heelp me! (pretending to be the lost girl) Be very quick! Soon, I will forget all about this. Hurry! I am losing my memory.*

Therapist: *We need to hurry. Perhaps you are so scared, you don't want to remember what happened to you. (Therapist makes links between two mental states and points out the defensive nature of certain mental states to help the child gain control over her mental states.)*

- Child: (pretending to be the girl) *What happened to me? Mom, please tell me. I remember only a few things but if you tell me, it may all come back.*
- Therapist: *You were lost and could not reach me.* (Therapist brings back the play context to help the child make links between past and present.)
- Child: *Yes, I remember. They kidnapped me and locked me up. But, there were others. We need to save them.* (The child, with the help of the therapist, is able to remember difficult play themes and use these to expand on the play narrative.)

Overall, the clinical analysis showed that the increase in Cansu's use of mental state words in the context of difficult attachment issues was dysregulating. However, she was able to recover with therapist's interventions that differentiate pretense and reality, and that name and label mental states, and link mental states in play. These interventions helped establish a safer platform for the building blocks of the practice of mentalization.

The case of Rana. Session 2. Right after playing hide and seek, the child tells the therapist to close her eyes and takes a snake from the toy box:

- Child: *Ok, now open your eyes. Hssss (pretending to be the snake; Hide and seek is a symbolic reenactment of the child's issues related to separation and reunion. After this game that possibly heightens the child's attachment anxieties, she puts the therapist in the position of someone who is left in the dark and awaiting danger.)*
- Therapist: *Oh, there is a snake! Perhaps, that snake wants to scare me, when I least expect it.* (Child giggles) (Therapist mentalizes her feelings while she waits with eyes closed in the dark and upon hearing the therapist, the child feels understood and giggles.)

Rana also brings to play her attachment issues however compared with Cansu, she was able to enact her issues more symbolically, and with more pleasurable affect. The therapist was able to put into words mental states (i.e., fear), that were not yet named by the child, but were clearly in the play narrative, which helps bring a different perspective to the child's affect representations.

Session 23. The child created a story, where the characters were away on a train trip:

- Child: *Grandmother and the children are on a trip. But even before they take the trip, there are dangers. It is a little scary, but they don't know it. Ok, help me so that we can make the road dangerous.* (She places roadblocks) *Now, a bad surprise awaits them. Let's make this bridge invisible. Ha, ha, ha! You are in a lot of trouble, now! Let's place an invisible bomb here. And another test. There will be a sand storm.*
- Therapist: *So many tests. I think we create so many dangers, perhaps also to test whether they can survive being away from home.* (Therapist mentalizes the play narrative and links it to the child's present-

ing problem in pretend mode to help the child mentalize how she feels when away from home.)

- Child: *Yes, they have to persevere. Now, I want to ask you a question. Let's say you were real real tiny. Tiny as an ant, and they threw you into the sand. Would you get lost in the sand, or would you be happy that now that you are so small, you can do anything. . . . You can get inside anything you want, you can explore every nook and cranny . . .*
- Therapist: *Hmmm, that's a real dilemma. On the one hand, when one is so small one can get lost, on the other hand, it gives one an opportunity to explore so much. Maybe that is why it is so confusing to be away from home. A part of you wants to explore, and another part is scared of the unknown dangers . . .* (Therapist mentalizes Rana's dilemma bringing together two mental states; her fears when away from home, and the excitement of exploration.)

The child was again working symbolically on her separation anxiety in play, however, this time the therapist explicitly named the struggle the play characters face when away from home, which seemed to have created a scaffold for the child to spontaneously use a rich metaphor to elaborate on conflicting mental states, that is, the desire to explore and the fear of getting lost. The therapist picked this up and linked the child's ambivalence to what she experiences in her life.

Session 39. The child wanted to make a railroad and build a chateau in the sand, something they had done in the previous sessions.

- Child: *We had made a rail road here. And there used to be a chateau. Remember? Let's try to recreate that again. But I can't make it the same.* (She tries really hard to make exact lines within the sand and fails.) *It doesn't work. I am bored.* (Child disengages from the play when she cannot tolerate that things cannot be the same after time passes, and possibly fearing the upcoming termination.)
- Therapist: *It is so hard to recreate what we had done in the past. And hard to accept that time passes. Maybe that's what upsets you.* (Therapist empathizes with the child's mental state and links it to her feelings and frustration.)
- Child: *We need a security guard to protect the chateau. For when thieves come. See, they are trying to approach the chateau. But, they can't reach it. The chateau is protected. Nothing happens to it.* (The child, possibly feeling understood and regaining the sense of safety after the therapist's mentalizing intervention, is able to protect the chateau.)

Overall, Rana started therapy with a more explicit capacity for mentalization, and we saw that being able to express her mental

states in play was regulating for her as she was able to elaborate on and find solutions for her dilemmas in play with the help of the therapist, who not only labeled observable mental states but also verbalized of unspoken/implicit feelings and linked them to the child's mental world.

Discussion

This study investigated the association between the therapists' and children's use of mental state words and affect regulation in play in long-term psychodynamic play psychotherapy with mentalization principles. Results showed that in the case of *Rana* who showed clinically significant improvement over the course of treatment, both the therapist's as well as the child's use of mental state words predicted subsequent affect regulation in play. Whereas for *Cansu*, who did not evidence clinically significant improvement, but only showed improvement in psychosocial functioning, therapist's use of mental state words predicted subsequent affect regulation at trend level of significance, and the association between the child's affect regulation and use of mental state words was not significant.

Our findings show that therapists' use of mental state talk is facilitative of emotion regulation in psychodynamic play therapy in a positive outcome case, and we detected a similar trend in a case with no symptomatic improvement; however, a closer inspection of the data indicated that there was a difference in the specific mentalizing interventions used in these cases. *Cansu's* therapist most characteristically joined the child's pretend play and labeled observable aspects of play narrative using mental state language (Type II interventions) and *Rana's* therapist mostly tried to help the child to think in terms of mental states, by pointing out implicit feelings and thoughts of the play characters or play themes, and their unique importance for the child (Type 5 interventions). Even though both of these interventions are mentalizing (Allen et al., 2008; Muñoz-Specht et al., 2016), they are at different levels of the developmental spectrum of mentalizing interventions (Verheugt-Pleiter et al., 2008). For *Cansu*, therapist's interventions were mostly directed toward attention regulation and affect regulation, which are aimed at bringing inner experiences to play without overt disruption and giving reality value to affect states through their mirroring and labeling (Verheugt-Pleiter et al., 2008). With such children, Slade (1994) has also emphasized the importance of helping the child play with rudiments of telling a coherent story, identify their feelings and help find solutions in play to contain the intense feelings generated. In effect, the therapist's choice of interventions attuned to the child's level of mental functioning helping her feel seen, understood and aimed to regulate her arousal levels, which are associated with some of her improvement in psychosocial functioning, although not yet to the point where a good outcome can be identified. In contrast, *Rana* had a more solid ability to organize and express her internal experiences, and a capacity for explicit mentalization (Allen et al., 2008). Speaking about emotions and enacting powerful emotional scenarios in play seemed to make them less frightening and provided opportunities for their reorganization and modulation. In effect, therapist commented on the child's mental contents by emphasizing the important themes and situations for the child or by focusing on the underlying affects, which promoted affect regulation in play, and was associated with a good outcome. We saw the emergence of

"mentalized affectivity" (Fonagy, Gergely, Jurist, & Target, 2002), the capacity to discover the subjective meaning in her own affective experiences.

These results indicate that the children's initial capacity for mentalization could be a mediating factor in explaining the link between mental state talk and affect regulation. Prior studies that used reflective function as a mediator of treatment outcome were only conducted in the field of adult psychotherapy research, and even though there is preliminary evidence that reflective functioning measured at baseline was a significant predictor for changes in symptoms (i.e., Müller et al., 2006; Taubner et al., 2011), this association has not been consistently supported (Gullestad, Johansen, Høglend, Karterud, & Wilberg, 2013). Our findings indicate that the initial levels of mentalization could be important for therapy prognosis. In our case, *Rana* had already developed a more solid capacity for explicit mentalization, that is the capacity to be curious about her own or other's thoughts and feelings, and how they might relate to the way they behave (Allen et al., 2008). In contrast, *Cansu* seemed to have a more significant deficit in the development of mental processes itself (Fonagy, 2000). She had difficulty differentiating the notion of speaking about an experience from being in it or acting upon it. Slade (1994) has spoken of such children who have difficulty putting into language their feelings, because the very act of verbalizing their internal world also diffuses the boundary between language and actuality. Articulation of powerful feelings such as fears of being "stolen," of being unwanted, and of being lost brought those feelings to the surface in a way that was overwhelming, creating marked emotion dysregulation and play disruptions for *Cansu*. In situations where mentalization is disrupted, children experience emotions only through matching them with external reality (Fonagy & Target, 1996; Target & Fonagy, 1996), for example by acting out anger through destructive behaviors such as hitting the therapist. In other words, the negative emotion cannot be verbally represented and coherently organized in context; therefore, children cannot achieve an adaptive distance from the overwhelming affective state, which is necessary to develop and internalize coping skills (Fonagy & Target, 2007). In line with these findings, we observed that *Cansu's* use of mental state talk did not predict subsequent affect regulation, possibly due to her heightened anxiety with regards to her expectations of danger especially within the attachment context. This is also supported by prior research, which showed that children with anxiety disorders are hypervigilant with regards to possible threats coming from the outside as a consequence of ToM deficits (Banerjee, 2008). The therapist's naming and labeling mental states in instances of play disruption promoted a feeling of being "seen" and "known" paving the way to regulation.

The observed differences in these children's initial mentalization capacities are possibly linked with their previous experience and practice with mentalization in the parent-child relationship. *Rana's* internal working models likely included a schema for mental state processing with an adult that is benign if not regulatory, as suggested by EA scores, whereas *Cansu* may have had to learn to avoid "seeing" the mental states with/in her mother due to their inconsistently hostile content (as also indicated on the EA assessment; Fonagy & Bateman, 2007). Fonagy, Gergely, and Target (2007) proposed that this could be due to frequent activation of the attachment system in the dyad at the expense of temporarily deactivating the mentalization processes in an attempt

to prioritize and restore safety. This provided the therapist and the child with a weaker platform for carrying and processing mental states, and the therapist was working on bringing Cansu's mentalization skills to her age level, especially by trying to build up her trust for interacting with a helpful, mentalizing adult. Further research is needed to see whether longer treatment with children like Cansu would compensate for this initial lack of mentalization skills, and associated affective dysregulation.

Another major discrepancy between the two children had to do with the family backgrounds. Cansu's mother reported significantly more adverse experiences in her childhood, including traumatic experiences such as physical abuse. A history of maltreatment in parents' backgrounds have been shown to impair the mentalization capacity in parent-child dyads (Koren-Karie, Oppenheim, & Getzler-Yosef, 2004). Cansu's mother's mental state words was sparse in her discourse compared with that of Rana's mother. Rana's parents had a more stable background, even though they also suffered from significant losses that harbored fears of losing their child. Prior studies have also noted that parental trauma history and psychopathology are negatively associated with successful therapeutic outcome in psychoanalytic therapy, especially in the case of children with anxiety disorders (Fonagy & Target, 1996). All these adverse factors are potentially associated with Cansu's poor symptomatic improvement.

Limitations and Directions for Future Research

Our results support the function of pretend play as a fundamental arena for the development of mentalization. Previous literature has shown positive associations between mentalization skills, communication and pretend play (Garner, Dunsmore, & Southam-Gerrow, 2008); however, we were able to show this association specifically in psychotherapy context and show preliminary findings for specific pathways associated with therapeutic change.

The strengths of the study include its longitudinal design, and use of observational measures of play and mentalization, but the study remains exploratory and limitations must be considered when interpreting the results. Even though longitudinal studies of single cases are ideal to study the psychoanalytic process in depth, there is an issue with generalizing from a single case. An improved methodology would be based on a repeated single case design, preferably with more time points, involving relatively large sample of treatments for adequate comparison. Furthermore, even though we were able to document that mentalization in play leads to affect regulation, we are not able to tell whether the child is able to practice this capacity outside of the therapy situation, and directly link these to measures of symptom assessment. Moreover, even though these two cases shared certain demographic variables, it is not possible to establish that two patients are comparable in a case study design. Thus, we were not able to account for other individual factors or therapy variables (i.e., alliance) that may have affected the course of these two therapies. Future studies can also apply other measures of process to understand core therapist factors and therapeutic interaction that aid in the development of mental state talk and affect regulation in play. Further, even though we were able to systematically assess the characteristics of the work done with the children, we were not able to assess the parent work within the scope of the study, which can be investigated in future work. Finally, we cannot capture the organizational aspects

of mentalization with the CS-MST (Bekar et al., 2014) as it would be possible with the Reflective Functioning Scoring System (Fonagy, Target, Steele, & Steele, 1998). Yet, the CS-MST pertains to the microlevel components and specifics of speech (i.e., what to say to the patient), as it informs psychotherapy interventions and supervision. CS-MST asks whom the mental state is about, and what type of mental state is used more frequently. RF's questions are somewhat different: it asks whether and how the mental states are organized in one's mind. We believe that these two measures assess both overlapping and distinct parts of the mentalization construct.

In conclusion, this study sought to put forth an empirical model that could be used to deepen our understanding of salient forces such as mentalization, mental state talk, and symbolic play in psychodynamic play therapy. Psychodynamic play therapy provides a fundamental platform for facilitating the development as well as the practice of mentalization and affect regulation in children.

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