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THE RELATIONSHIP BETWEEN THE MENTALIZATION CAPACITY OF THE
CHILDREN AND AFFECT REGULATION OVER THE COURSE OF
TREATMENT

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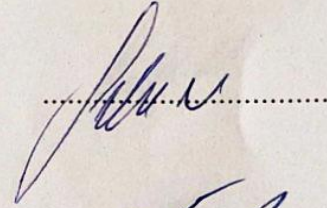
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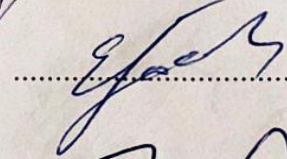
Çocukların Zihinselleştirme Kapasitesi ve Terapi Sürecindeki Duygu Düzenleme
Arasındaki İlişki

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ABSTRACT

Mentalization refers to understanding, labelling and reflecting one's own and others' mental states, as well as interpreting the behaviors motivated as by underlying mental states such as feelings, beliefs, intentions, and desires. Mentalization intertwined ability with affect regulation enables children to organize their affects, therefore any deficiency may lead to dysregulation. Moreover, initial mentalization capacity has been found to predict good outcome as well as mediate the relationship between initial functioning and outcome in adult psychotherapy, however, the effect of initial mentalization on gains in treatment have not been investigated in psychodynamic child psychotherapy. Thus, the aim of the study is to investigate the relationship between children's initial mentalization capacities and gains in affect regulation over the course of treatment. It was predicted that children with a more developed capacity for explicit mentalization would make higher gains, whereas children with mentalization deficits would make less gains in affect regulation over the course of treatment. The study sample comprised of 95 children between the ages 3 to 10 who were applied to Istanbul Bilgi University Psychological Counseling Center with internalizing and externalizing problems. In order to assess the children's initial mentalization capacity the Coding System for Mental State Talk in Narratives (CS-MST) on children's Attachment Doll Story Completion Task (ASCT) narratives was used. Children's use of total mental state words (e.g. emotions, cognitions, physiological, perception and action-based mental state words) and the use of pseudo/inappropriate mental state comments were coded in this study by reliable outside raters. In order to analyze affect regulation in psychotherapy, 362 play therapy sessions were coded with Children's Play Therapy Instrument (CPTI). Based on the nested structure of data, Multilevel Modeling was used to assess association between study variables. Result of this study showed that the total mental state talk, (i.e., explicit mentalization capacity) predicted affect regulation positively over the course of

treatment. Contrary to what was expected, the use of pseudo/inappropriate mental state comments, which can be interpreted as mentalization deficit, did not predict affect regulation over the course of treatment negatively. The findings suggest that initial developed mentalization capacity of children is important for therapy prognosis by predicting affect regulation over the course of treatment.

ÖZET

Zihinselleştirme, kişinin kendisinin ve diğerlerinin zihinsel durumlarını anlama, tanımlama ve yansıtma, aynı zamanda altında yatan duygu, inanç, niyet ve arzu gibi zihin durumları tarafından belirlenen davranışları yorumlama anlamına gelir. Zihinselleştirme duygu düzenleme ile iç içe bir beceri olarak çocukların duygularını organize etmelerini sağlar, bu nedenle de herhangi bir eksiklik duygu düzensizliğine yol açabilir. Buna ek olarak, yetişkin psikoterapisinde terapi başlangıcındaki zihinselleştirme kapasitesinin iyi bir terapi sonucunu öngördüğü ve baştaki işlevsellik ile sonuç arasındaki ilişkiye aracılık ettiği bulunmuştur. Dolayısıyla, çalışmanın amacı çocukların başlangıçtaki zihinselleştirme kapasiteleri ile tedavi sürecindeki duygu düzenlemeleri arasındaki ilişkiyi incelemektir. Tedavi sürecinde daha gelişmiş bir açık zihinselleştirme kapasitesi olan çocukların daha yüksek kazançlar elde ederken, zihinselleştirme yetersizliği olan çocukların daha az kazanç sağlayacağı tahmin edilmiştir. Çalışma örneklemini, İstanbul Bilgi Üniversitesi Psikolojik Danışma Merkezine içe yönelim ve dışa yönelim davranış problemleri ile başvuran 3 ile 10 yaş arasında 95 çocuktan oluşmaktadır. Çocukların başlangıçtaki zihinselleştirme kapasitelerini değerlendirmek için, Çocuklarda Güvenli Yer Senaryolarının Değerlendirilmesi (ASCT) anlatıları üzerinden Coding System for Mental State Talk in Narratives (CS-MST) kullanılmıştır. Çocukların toplam zihinsel durum kelimeleri (örneğin duygu, biliş, fizyolojik durum, algı ve eyleme dayalı zihinsel durum kelimeleri) kullanımı ve sahte / uygunsuz zihinsel durumu yorumlarının kullanımı bu çalışmada güvenilir dış değerlendiriciler tarafından kodlanmıştır. Psikoterapideki duygu düzenlemeyi analiz etmek için 362 oyun terapi seansı Children's Play Therapy Instrument (CPTI) ile kodlanmıştır. Verilerin iç içe yapısına dayanarak, çalışma değişkenleri arasındaki ilişkiyi değerlendirmek için Çok Düzeyli Modelleme kullanılmıştır. Bu çalışmanın sonucu, toplam zihinsel durum konuşmasının (yani, açık zihinselleştirme kapasitesi), tedavi süresinceki duygu düzenlemeyi olumlu yönde etkilediğini öngördüğünü göstermiştir. Beklenenin aksine, zihinsel yetersizlik olarak

yorumlanabilecek sahte / uygunsuz zihinsel durum yorumlarının kullanılması, tedavi sürecinde duygu düzenlemeyi olumsuz yönde etkilediğini öngörmemiştir. Bulgular, çocukların başlangıçta gelişmiş zihinselleştirme kapasitelerinin, tedavi süresince duygu düzenlemeyi etkilediğini öngörerek terapi prognozu için önemli olduğunu göstermektedir.

CHAPTER 1

INTRODUCTION

Mentalization is the ability to understand mental states of the self and the others by acknowledging each person has different minds, and to interpret accurately the behaviors and interactions with underlying mental states, such as feelings, thoughts, and wishes (Fonagy, Gergely, Jurist, & Target, 2002; Fonagy & Target, 1998). Mentalization is a dynamic multidimensional capacity organized around four dimensions which are implicit/explicit mentalization, cognitive/affective, self/other, internal/external. Maintaining the balance for each dyad of polarities is prominent in terms of the quality of mentalization (Fonagy & Luyten, 2009). For the development of this capacity, the quality of attachment with a sensitive caregiver is crucial (Schmeets, 2008). Caregiver's empathic mirroring as a response to the child's primary emotional reactions enables a child to distinguish and to be aware of his/her emotional states. This mirroring, marking and regulation by the caregiver provides the child with finding the representation of himself/herself in the mind of others at first. And it also facilitates to get a secondary representation of his/her primary affective experiences which resulted in the capacity to regulate himself/ herself. By establishing attachment with a caregiver, the child learns to read the mind of others by attributing mental states. Understanding others builds the way to the understanding of the self as an intentional agent. Therefore, mentalization includes affect regulation and the experience of self-agency in it (Fonagy et al., 2002; Scheemets, 2008; Fonagy & Target, 1998).

But the parent is not always able to understand and regulate the emotions of the child, which resulted in a deficiency in mentalization. As a result of mentalization deficit, emotional and behavioral problems, and finally psychopathology can be observed (Fonagy et al., 2002). Externalizing children use distorted mentalization which is overly positive attributions to themselves (Sharp, Fonagy, & Goodyer, 2006; Sharp, Croudace, & Goodyer, 2007) and overly negative and pseudo/inappropriate states to the others (Sharp, 2006; Sharp & Venta, 2012). Internalizing children are

hypermentalizers who are attributing possible threat and negative evaluations of social events inappropriately (Sharp et al., 2011; Banerjee, 2008). And those children have difficulty modulating the occurrence, intensity, and duration of their internal feeling states. Children with externalizing problems are high impulsive and under-regulated the emotions, children with internalizing problems are low arousal and overregulate the emotions (Eisenberg et al., 2001). And those children's affect dysregulation strategies can be observed at their play in detail because play is the main tool to reflect themselves (Chazan, 2002).

In adult psychotherapy, an initial mentalization capacity has been found to predict good outcome as well as mediate the relationship between an initial functioning and outcome of therapy (Katznelson, 2014; Müller, Kaufhold, Overbeck, & Grabhorn, 2006; Taubner, Kessler, Buchheim, Kächele, & Staun, 2011), however, the effect of initial mentalization capacity on gain in treatment in psychodynamic child psychotherapy has not been assessed. In light of this information, the aim of this study is to investigate the relationship between children's initial mentalization capacities and gains in affect regulation over the course of treatment. In this study, mentalization was operationalized as mental state talk which refers to the use of mental state words in discourse. In order to analyze children's mental state talk, the Coding System for Mental State Talk (CSMST; Bekar, Steele & Steele, 2014) was used. To measure affect regulation over the course of treatment, the affective component of the Children's Play Therapy Instruments (CPTI; Kernberg, Chazan & Normandin, 1998) was used.

In the upcoming pages, review of literature begins with multidimensional characteristics of mentalization and followed by the development of mentalization in children in detail. Later, the relation between mentalization and affect regulation will be addressed. In addition to the healthy development of mentalization and affect regulation, deficits/problems in both capacities will be reviewed. Along with those, the relation between these two abilities in psychotherapy will be mentioned. Lastly, assessment of mentalization and affect regulation is presented with the empirical

findings in literature. Following this, the current empirical study will be described and discussed in detail.

1.1. Mentalization

Mentalization refers to the ability to understand and perceive one's own and others' mental states by acknowledging that each person including himself has different intentions, feelings, thoughts, beliefs, and wishes (Fonagy et al., 2002). Considering others' mental states as well as one's own, thus answering the question of differences in human behavior is one of the psychological capacities of the human mind. (Fonagy, Steele, Steele, Moran & Higgitt, 1991a). But even if we all born with the ability to develop such capacity, the opportunity can only be created in early relationships and acquired in the course of development (Fonagy et al., 2002, Schmeets, 2008).

The main decisive factor during development is the affective relationship with the sensitive caregiver, rather than an ordinary relation between the caregiver and the child. For the child to develop the ability to mentalize, affective relationship with a caregiver who can label his/her own mental states along with the child's mental states is crucial. Exploring the mental states of the sensitive caregiver enables the child to develop mentalizing self-organization. (Schmeets, 2008). And through mentalization, one can make connections between people's actions and their underlying intentions (Allen, Fonagy & Bateman, 2008). With this association, comprehending other's behaviors as meaningful and predictable makes one's own experiences meaningful (Fonagy et al., 2002) and enables him/her to have a more coherent and integrated understanding of the world (Sharp et al., 2009). This, in turn, fosters affect regulation, impulse control, and self-monitoring and self-agency (Fonagy & Target, 1998).

1.2. Dimensions of Mentalization

While understanding mentalization, it should be noted that the need to use different kinds and ranges of mental states alone, is sufficient to show the complexity of the concept (Allen et al., 2008). Mentalization is not a ‘static’, but a ‘dynamic’ concept affected by ‘stress and arousal’ in the context of specific attachment relationships (Fonagy & Luyten, 2012, p. 19). Also, it is not a unitary, but a multidimensional capacity. A broader view of mentalization can be provided by organizing the concept around four dimensions, which are cognitive versus affective; self-versus other; internal versus external; and implicit versus explicit mentalization (Fonagy & Luyten, 2009, Fonagy, Bateman, & Luyten 2012). The balance between each dyad of dimensions or polarities is crucial in determining the quality of the person’s mentalization capacity. An imbalance in one of the opposing polarities causes an impairment at that dimension and consequently, the other end of the polarity becomes more dominant (Fonagy, Bateman & Bateman, 2011). Patients may show deficiency in some of the dimensions, and may not show in some (Fonagy & Luyten, 2009).

1.2.1. Explicit versus Implicit Mentalization

Among the four dimensions, according to Fonagy et al. (2012), the automatic-implicit versus controlled-explicit dimension is the most essential facet that underlies mentalizing. While explicit or controlled mentalization is *conscious, reflective and verbal*; implicit or automatic mentalization is *unconscious, unreflective and nonverbal*. In contrast to implicit mentalization, explicit mentalization requires attention, awareness, and effort (Fonagy & Luyten, 2009). Hence, automatic mentalization enables us to know ‘*how*’, while controlled mentalization enables us to know ‘*what*’ (Allen et al, 2008). Also, language, as an indicator for explicit mentalization, makes the process of explicit mentalization more apparent than the implicit mentalization. But

during mentalization, per se, a person is adaptively going back and forth between implicit and explicit dimensions (Allen et. al, 2008). This may also be a sign of secure attachment and a high level of mentalization (Fonagy et al., 2012).

Besides, when one mentalizes implicitly, he has a basic awareness which takes place in lower-level consciousness. Explicit mentalization, on the other hand, by the virtue of having an adaptive function of consciousness, includes higher-order consciousness which is in relation with problem-solving abilities (Baars, 1993). Under stress, one can continue mentalizing implicitly, while explicit mentalization ability is hindered (Lieberman, 2007; Mayes, 2000).

1.2.2. Internal versus External Mentalization

Both internal and external dimensions refer to mental processes: internal mentalization focuses on one's own and another's inner processes, like thoughts and feelings; while external mentalization relies on physical as well as visible features and one's own and other's observable behaviors (Fonagy et al., 2012). It is important to note that, internal-external dimensions are in relation with explicit-implicit dimensions. It can be said that internally focused mentalization includes more controlled and reflective processes, whereas externally focused mentalization involves more automatic and unreflective reactions (Fonagy & Luyten, 2012).

Also, Fonagy and his colleagues (2012) indicated that during affective mirroring process, the infant needs to understand 'marked' emotion display attributions or the emotions underlying internal states. In order for this to succeed, the infant needs to trust external cues coming from the caregiver (such as eye-gaze direction). While making these marked emotion mirroring displays, caregiver's face and looks are directed towards the infant. Consequently, the infant starts to pay attention to his or her own body and face. At this point, the infant's external physical self is as a referent for indication of caregiver's cues and so, marked and decoupled affect display referentially confirmed. For this process to succeed, the infant has to have the capacity for both

externally-focused mentalization in order to develop a response to caregiver's emotional expressions and also internally-focused mentalization which enables him to acquire caregiver's intentions. This means the infant should be able to use the *external* cues (caregiver's eye-gaze direction) to find out that caregiver has infant's emotional expressions in his or her mind (Fonagy et al., 2012).

1.2.3. Affective versus Cognitive Mentalization

In literature, affective and cognitive mentalization has often been researched separately. Some of the studies focus on belief states and reasoning in relation to states of mind, others focus more on feelings and emotions. However both emotional understanding and theory of mind are essential for children's socio-cognitive development, this separation should not be emphasized because also genuine mentalization is only possible as a result of interaction between these two systems (Fonagy & Luyten, 2009). This effective combination is referred to as '*mentalized affectivity*' or '*feeling of feelings*' (Fonagy et al., 2002).

1.2.4. Self versus Other Mentalization

One other dimension of mentalization concerns the objects of mentalization, which are the self and the other (Fonagy et al., 2012). It is expected not only to distinguish these two objects from each other but also to have a balanced focus between the self and the other (Fonagy & Luyten, 2012). Developmentally, understanding the self and the other occurs in close attachment to the relation with caregiver, hence, they are interconnected. As long as these two capacities are going hand in hand a deficiency in mentalizing capacity is not present (Fonagy & Luyten, 2009).

1.3. Development of Mentalization

1.3.1. Attachment and Mentalization

For the development to occur normally, establishment of a primary relationship between the child and the caregiver is essential. As Bowlby (1971) asserted in his attachment theory, intimate affective bond with significant other is a necessary and universal need for all human beings. This early relationship provides the child with socio-emotional and cognitive development. Besides, the infant searches for the experience of security not only physically but also emotionally as attachment system proposes, indicating that the attachment system includes emotion regulation in itself (Sroufe, 1996).

As human beings, we are not born with the ability to regulate our emotions. The dyadic regulatory system is obtained with the presence of a caregiver that understands an infant's moment-to-moment changing signs. When the child feels under stress, he/she seeks his/her caregiver, hoping to be soothed and held. As a result, the infant does not feel overwhelmed by his/her affective arousal and recovers. Later, at the end of the first year of infant's life, infant's behavior depends on the specific expectations formed with the help of past experiences with his/her caregiver. These past experiences help the child to attain representational system (Fonagy et al., 2002). This is termed as 'internal working model' (Bowlby, 1973). In order for the secure attachment bond and congruent internal working model to form, the child needs to learn to regulate his/her incompatible affects in a relationship with the caregiver by internalizing regulatory mechanism (Sroufe, 1996).

There is a reciprocal relationship between attachment and the child's mentalizing ability. Both early attachment relationships that underlie the capacity for mentalization and caregiver's mentalizing ability enables the child to develop secure attachment (Fonagy et al., 1991a). Attachment system is in relation with representational mapping and the development of the reflective function of self

(Bowlby, 1973). Secure attachment makes the child feel safe about making attributions of mental states by providing psychosocial ground for the mind to comprehend (Fonagy et al., 2002). When the infant knows that his/her mind is reflected accurately by his/her parent's contingent attitude, this makes the infant feel that he/she is recognized and understood. Thus, in turn, this secure attachment bond provides a basis for the emergence of agentive self as well as the ability to understand other's mental states (Fonagy, Steele, Moran, Steele, and Higgitt, 1991b).

Considering child's mentalizing ability, attachment security is not the only predictor. The mother's capacity to think about the child's mental states, in other words, the mother's own mentalizing ability, is also an important indicator (Fonagy et al., 2002). The mother's capacity to think about her child's mind has different names in the literature, namely maternal mind-mindedness, insightfulness and reflective function. All of these concepts are seen as related to both attachment security and the mentalizing ability of the child (Sharp et al., 2006). Likewise, mother's developed understanding of her own internal states is crucial because this makes her more sensitive and responsive to child's messages and she can understand her child's internal states accurately. As a result, the child develops self-regulation capacity. In other words, the parental mentalizing ability paves the way for attachment security which in turn provides the ground for the emergence of mentalizing ability of the child (Gocek, Cohen, & Greenabaum, 2008).

1.3.2. Social Bio-Feedback and Representational Loop

As a typical human point of view, from the time of birth, caregiver naturally reacts to the infant as if he/she is a human being with intentions behind his/her behaviors, long before the infant gains intentionality. Mother does not ignore that the infant has his/her own mental states, so his/her behaviors are not seen as a physical reaction to the external world only, but rather as an expression of intentionality. With this approach, the mother begins to verbalize the infant's behaviors with the intentions

that she assumes (Fonagy et al., 2002). And this approach also helps the child to understand his/her own inner states by exploring that he/she is seen by the other, and has a place in the other's mind (Target & Fonagy, 1996). As a result of that, the representations of the relationship between the self and others start to vary qualitatively (Beebe, Lachmann, & Jaffe, 1997), and in time the child creates his/her own internal world by using the mental state of the caregiver (Fonagy et al., 2002).

During the course of development, at the beginning, infant perceives himself/herself as a physical agent who can have an effect on the bodies of other people via physical contact (Leslie, 1994), then he/she starts to realize his/her social agency which can influence behaviors and emotions of others (Neisser, 1988). By going through these processes, the infant reaches self-awareness with a contingency detection mechanism that provides the child with the consideration of the possible connections between his/her actions and external events as stimuli (Watson, 1994). While in the beginning, infant looks for the perfect contingency between his/her emotional expressions and the facial and/or vocal expressions of caregivers as a response. Later he/she starts to seek for high-but-perfect contingent reflections rather than perfect contingency (Bahrnick & Watson, 1985). Here, in return to the infant's affective display, mother's empathic mirroring is decisive. As the affective exchange between parent and infant progresses, parent reflexively continues to read the intentions and internal states of the infant. Thus, the parent mirrors the infant's mental states. She gives back what she is seeing and feeling to the infant (Schmeets, 2008). Accordingly, the child finds his/her own image in the mind of the caregiver and then creates a self-structure that is necessary to build a sense of self (Fonagy & Target, 1998). This is why Winnicott (1967) stated that this mirroring process is "giving back to the baby the baby's own self" (p.33). When infant repeatedly experiences such mirroring reactions, he/she can begin to differentiate his/her own internal states, make unknown affective experiences meaningful and so organize the self around these meaningful internal states. This process has been termed as "social bio-feedback" by Gergely and Watson (1996).

For this process, Fonagy and his colleagues (2002) used the term 'representational loop' formed in the affective communication between the mother and the child. A primary affective state of the infant is directed to mother from the infant and mother gives it back to the infant in the form of secondary representation of his/her primary experience. As a result, the infant develops the sense of self with the help of metabolized secondary representation of affective experiences (Scheemets, 2008). During the formation of secondary representation, the space created between the infant's primary affect and how the mother sees it is termed as 'transitional space' by Winnicott (1971). This space is also necessary for the development of the ability of mentalization (Schmeets, 2008). For successful integration and organization of affective experience, the child needs to coordinate the representations of both the self and the other (Fonagy et al.2002). And for this coordination, the mother also needs to create regularity in daily interaction so baby can realize similar primary experiences and so representations can be coordinated (Scheemets, 2008). This is called representational mapping (Fonagy et al., 2002). It is also crucial for the differentiation of what belongs to the infant and what it does not. And the infant must figure out the owner of secondary representation before linking this to his/her own internal state (Gergely, &Watson, 1996). At the process of the representational loop, the realization of his/her own perception of affective state and comparing it to secondary representation taken from the mother develop hand in hand for the infant (Fonagy et al., 2002). In this process, the quality of mirroring is decisive. There should be 'marked mirroring' and "reasonable congruency of mirroring" for differentiation to take place (Gergely & Watson, 1996).

So if everything goes as expected, expressed affect is differentiated from the mother with the help of marked mirroring. And if there is high-but-not-perfect contingency between the infant's emotion and marked affect-mirroring, expressed emotion belongs to the infant. Thus, infant forms a separate representation for marked-emotion expression of the parent which is connected with his/her primary emotion state. And finally, the child internalizes it as it is own. In this way, the infant gets a

secondary representation of his/her primary affective experience. As a result, , the infant begins to make accurate emotional attributions and also predicts his/her own behavior while in that emotional state (Fonagy et al., 2002, p.192). So the formation of second-order representations of affect states provides infant the ground for affect regulation and impulse control. In contrast to normal affect-mirroring development, as a result of 'lack of markedness' and 'lack of congruence', where the ability of affect regulation cannot be gained (Fonagy et al., 2002). When the mother's mirroring is incongruent, infant's mental states and mother's reflection of them matches inaccurately, thus, the internal states of the child cannot be labeled properly so they remain confusing and hard to regulate for the infant (Fonagy et al., 2002). And when the difference between the child's own primary experience and the second representation given by mother is immense, the child develops 'false self' (Winnicott, 1965). On the other hand, the mother needs to show that "her display is not for real: it is not an indication of how the parent herself feels" about the child's mental state (Fonagy et al., 2002, p. 9). But when there is a lack of markedness, mother's display of infant's affective experience is seen as mother's own feeling by the infant. Thus, the infant thinks of his/her affective experience as universal and threatening. Then again, when there is too much similarity between infant's primary and secondary affective experience, internal and external reality becomes the same, and the self and the other cannot be differentiated by the child. This prevents the child from regulating and containing his/her affects and gives the child an overwhelming experience (Fonagy et al., 2002).

1.3.3. Stages of Mentalization

Fonagy and his colleagues (2002) asserted that 'self as agent' develops through several stages during the first five years of development. These are named as physical, social, teleological, intentional and representational. Newborns cannot distinguish whether the stimuli belong to him or to the environment (Freud, 1911; Piaget, 1936).

However, for the development of physical agency, a differentiation is necessary. In the beginning, it is his/her body that allows the child to reach knowledge. As the child starts to experience the sensory world around him/her with the help of interaction between his/her body and the surrounding environment, differentiating what is self or not-self becomes gradually easier. So, this initial physical experience creates the basis of self (Scheemets, 2008, Fonagy et. al, 2002). During the first six months, seeing the self as a physical agent provides babies with the understanding of the fact that not only they can initiate the actions but also they can create changes in the environment with their actions (Fonagy et al., 2002). These interactions with the environment through actions are taking place with the mediation of the caregiver from birth. Infants gradually acquire the knowledge that they have an effect on the behaviors or emotions of caregiver with their actions (Schmeets, 2008). The awareness of this causal relationship between infant's actions and reactions of caregiver brings the baby to see the self as a social agent (Fonagy et al., 2002).

In the first months, seeking interaction with the caregiver is fundamental for the baby. Facial expressions of the baby or the caregiver shape the facial expressions of the other (Beebe et al., 1997). A few months later, taking previously acquired information into account, infants give reactions to the facial expressions of his/her caregiver. As a result, infants begin to have expectations about the reactions of the caregiver. These expectations enable the infant to predict the behaviors of the other (Fonagy et al., 2002). When the child starts deducing about intentions of others through observable consequences, this brings the child to teleological position (Fonagy et al., 2002; Fonagy & Target, 1997). As Gergely and Csibra (1997) stated, this stage starts in the second half of the first year. In the teleological position, infant's reactions are based on the stimuli which are visible, audible and/or tangible so inference about the intentions of others are based on physical environment, and not on internal states. The only source of knowledge for the infant when inferring the intentions of others is what is apparent physically. Accordingly, the infant's approach to the living and non-living objects are the same (Scheemets, 2008). Besides, a pre-symbolic way of teleological

thinking prevents the infant from forming alternative assumptions about experienced consequence as a result of observed behavior because what is seen is the only important indicator (Gergely & Csibra, 1997).

Around the second year of life, seeing the self as an intentional agency, children start to understand that actions are incited by basic mental states which are desires, emotions and perceptions and these mental states are connected both to themselves and to others (Wellman, & Phillips, 2000). Additionally, they begin to realize actions lead to changes not only in the body but also in the mind, in other words, both physical and mental changes occur. A change in the other person's focus of attention as a result of the child's pointing to an object can be an example of this situation (Scheemets, 2008). The quality of the primary relationship between the child and his/her caregiver provides the infant with the movement from the teleological position to the intentional position. The preferences of others and child's own are not seen as if they are the same anymore. In the intentional position, intentions of other person are decisive rather than the observable, physical actions. And as a consequence of accepting the presence of other's intentions behind physical acts, child comes to the stage of being aware of mental states in others for the first time. This is the beginning of the mentalizing ability (Fonagy, Gergely, et al., 2002).

Around the age of 3 or 4, beginning to see the possible mental causality, enables the child to move from physical thinking to abstract thinking. Consequently, children gain the representational point of view which internal intentional mental states have representational nature. During the development of self, with progressive acquisition of awareness of mental states, child reaches the representational self. Children have the need to develop concepts that correspond to actual experiences (Fonagy et al., 2002). The concept of mental state is more comprehensive than the actual experience because it consists of different dimensions like physiological, cognitive, and behavioral. For instance, while the actual experience of happiness is primary representation, the concept of happiness is a secondary representation (Scheemets, 2008). In interaction, the primary experience of immature affect is seen by the caregiver and then given back

to the child as the representation of primary affect. This perceived and accurately marked experience enables the child to gain secondary representation. This creates the mental space in which the child can think and feel about primary affect (Fonagy et al., 2002). This representational capacity enables the child to communicate via intentions, feelings, and thoughts behind his/her actions (Tessier, Normandin, Ersink & Fonagy, 2016). Thus, the child can experience the events as lived personally, as his/her own and creates his/her own self-memory (Perner, 2000). And later around the age of 4 or 5, children acknowledge self as 'autobiographical self' by integrating self-memory to a coherent causal-temporal organization (Fonagy et al., 2002).

1.3.4. Subjectivity before Mentalization

'Experiencing a thought as only thought is a development achievement' (Bateman, & Fonagy, 2004, p.68). Fonagy and Target (1996) established a model on the development of thought. In normal development of mentalization, it is expected that children aged two to five years, come to the mode of mentalizing by integrating two separate modes of experience which are psychic equivalence and pretend mode (Fonagy, &Target, 2006).

In psychic equivalence mode, infants see the internal world as an equation to the external world. Internal reality and external reality cannot be distinguished (Scheemets 2008). What exists in the infant's mind should exist at the outside world and vice versa. At this stage, there are no alternative ways to think about the outside world, because what is seen as external is also seen as internal (Bateman, & Fonagy, 2004). Besides, this mode can cause the infant to experience high levels of stress because every infant's projection of his/her fantasies to the outside world can be experienced and felt potentially real. Therefore, it can be a terrifying experience for the infant (Fonagy & Target, 1997). The psychic equivalence mode is also called as actual or equation mode, and is inevitably experienced by all children, since young children of age 2 to 3 are unable to differentiate the mental experiences they have and also are

unable to acknowledge the brain or the mind as the source of these mental experiences (Allen & Fonagy, 2006). At this stage, internal and external realities merge, and affect regulation becomes more difficult due to the limited and inflexible ability to give meaning to events (Csibra & Gergely, 1998).

Psychic equivalence is only one of the modes of interpreting external situations (Fonagy & Target, 1996). The acquisition of pretend mode of experiencing psychic reality is necessary for the children to decouple the internal world from physical reality (Fonagy et al., 2002). But at this stage, the distinction between internal and external is overly exaggerated by the child. (Fonagy, 1995). It is thought that internal states do not have any inferences for outside reality, and internal and external have no connection between them (Fonagy & Target, 1998).

Children provided with 'repeated experience of affect-regulative mirroring' by their parents acquire this decoupling more easily (Fonagy et al., 2002, p. 9), whereas children whose parents have difficulty in their own emotion regulation process are displayed unmarked affect expression, because those parents feel overwhelmed about the negative emotions of their children. This leads to the interruption in comprehending the differences between representational and actual mental states, and prevents children from developing affect regulation (Fonagy et al., 2002).

Psychic equivalence is 'too real', whereas pretend mode is 'too unreal', so neither of them can create internal experiences alone (Bateman & Fonagy, 2004, p.70). Therefore, an integrative mode is necessary for children to have a fully developed internal world. And they can reach this stage by recognizing the relationship between pretend and reality (Scheemets, 2008). In the course of normal development, around fourth and fifth years, the integration of psychic equivalence and pretend mode bring the child to the stage of mentalization, or reflective mode, in which mental states are comprehended as representations (Fonagy & Target, 1998). This integration enables the child to understand that internal and external reality are neither equated with nor dissociated from each other but are linked (Baron-Cohen, 1995; Gopnik 1993).

Parents can use play setting as a frame for their children to create a fully integrated mode (Fonagy and Target, 1996, p.221). This happens through what Winnicott (1965) stated as a bridge between play and reality - 'transitional space'. Transitional space enables children to make a connection between internal and external reality through their parents. The creating of this bridge between internal and external takes shape with the parent's usage of language and symbols (Winnicott, 1953). When the parent playfully comes into child's imaginative world in a secure play setting, the child sees his/her parent's 'as if' attitude about his/her intentional state with the help of symbolized his/her self-states by his/her parent (Slade, Grienberger, Bernbach, Levy, & Locker, 2005). While playing with his/her parent, the child can project his/her fantasies in the mind of the other, re-introject them, and use them again as representations of his own mental states. Thus, this accurate realization of mental states through parent's mind protects the child from feeling overwhelmed by its realness and provides him/her with alternative ways which are not present in his/her mind. (Fonagy et al, 2002). As a result, the child can reach a higher level of intersubjectivity with deeper experiences with others that makes life more emotionally meaningful and controllable. However, unsuccessful integration leads to an emotionally meaningless life (Fonagy et al., 2002, p.265).

1.4. Mentalization and Affect Regulation

Affect regulation is closely intertwined with mentalization because both of their effect on the unfolding of sense of self are crucial. (Fonagy et al, 2002). With the help of affect mirroring of sensitive caregiver who reflexively reads internal states of the child and gives it back to the child by metabolizing, child finds his/her own image in the mind of the caregiver. As a result of repeatedly mirroring reactions which are high-but-not-perfect contingent and marked, child starts to differentiate his/her own internal feeling states from caregiver's and internalizes them as his/her own. Child gets a secondary representation of his/her primary affective experience, learns mentalizing

his/her emotions, and finally come up with affect regulation and impulse control capacity by making unknown and meaningless affective experiences meaningful (Fonagy et al., 2002; Scheemets, 2008; Fonagy & Target, 1998). Therefore, not only affect regulation is preliminary to the capacity of mentalization, but also mentalization is necessary for affect regulation (Fonagy, 2006). People who have mentalizing ability are better at labeling, expressing and modulating their own emotions and also at realizing and understanding other's emotions (Hooker, Verosky, Germine, Knight, & D'Esposito, 2008). Understanding and evaluating their own minds helps people to experience different kinds of emotions and to tolerate negative feelings such as anger, sadness and anxiety (Leary, 2007a). As a result, higher an individual's capacity of mentalization, easier the control of mental processes for that individual, and higher emotional and behavioral regulation is enabled for him/her (Sharp, 2006).

While talking about the relationship between mentalization and affect regulation in children, it is necessary to give attention to the 'play' because with the help of play child develop, create and organize his/her own internal world (Chazan, 2002). Fonagy and Target (1997) proposed that children's pretend play is most fertile space for the development of mentalization skill in children. Child creates the representations of his/her own real-life experiences or an imaginary world in play. This 'as if' attitude served by play, leads to an exploration of various types of mental states, feelings and safe space for the child to discover the symbolic quality of stressful emotions through representations (Fonagy & Target, 1998). During play, the representations of thoughts and feelings enable the child to realize that they can be changed and/or even distorted, and finally, a child can try out different coping strategies. A child can change and can be more flexible in acquiring thoughts and behaviors (Fonagy & Target, 1996). Because the child can take representational distance from his/her own experiences, he/she can discover new strategies for emotion regulation in the face of negative emotions (Chazan, 2002).

1.5. The Deficit in Mentalization and Affect Regulation

When the parent is not able to understand and regulate emotions of his/her child and feels overwhelmed by his/her child, the mentalizing deficiency arises. Because of the lack of accurate and contingent parental mirroring and presence of an insecure attachment, the child tries to develop his/her own mentalizing capacity by his/her own effort, but this leads to difficulty in mentalizing, emotional and behavioral problems, and finally psychopathology (Fonagy et. al., 2002).

1.5.1. Mentalization Deficit in Childhood

Mentalization deficit can take place in different forms; like one can fail to mentalize, one can mentalize too much, one can mentalize in a distorted way or one can misuse mentalization (Allen et al., 2008). When the parent is not able to understand and regulate emotions of his/her child by feeling overwhelmed by his/her child, the deficiency arises (Fonagy et al., 2002). While mentalization is related to impulse control, attention regulation and self-monitoring in children (Fonagy & Target 1998), it is not surprising to find a relationship between behavioral problems and a deficit in mentalization skills. Even though there is not a direct relation between mentalization and behavior problems, internalizing and externalizing behavior problems can suggest a possible link (Sharp & Venta, 2012). Children who use more mental state words (e.g. emotion and cognition words) in the story has less behavioral problems (Bekar, 2014). Similarly, in the research which examined the relation between behavioral problems and the mentalizing ability of children, it was found that children with higher mentalizing capacity show less internalizing and externalizing problems and more socially competence characteristics (Ostler, Bahar, Jessee, 2010). Additionally, prior studies have shown that children with behavioral problems suffer from an inability to accurately label mental states, and use fewer mental state words, especially words

regarding emotions (Cook, Greenberg, and Kusche 1994; Rumpf, Kamp-Becker, and Kauschke, 2012).

Externalizing behavior problems consist of various disruptive, aggressive, hyperactive and antisocial behaviors (Achenbach & Rescorla, 2001). These children have difficulty in interpersonal relations which include both with peers (Vitaro, Tremblay, and Bykowski, 2001) and with parents (Greenberg, Speltz, DeKlyen, and Endriga, 1991). Children with conduct and antisocial behavioral problems have difficulty mostly in affective component of mentalization (Sharp et al., 2006). For example, children with externalizing problems cannot give appropriate examples about their own emotional experiences (Cook, Greenberg & Kusche, 1994). They also have a deficiency empathizing with others, and especially have difficulty in feelings that involve sadness and fear (Blair, 2003). Seven to 11-year-old children with externalizing problems fail to read emotions of others from their eyes (Child's Eye Task: Baron-Cohen, Wheelwright, Hill, Raste, & Plumb, 2001), so it can be said that they are impaired in emotional understanding (Sharp & Fonagy, 2008). Besides, as opposed to affective domain, these children do not have any difficulty at cognitive domain of mentalization, on the contrary, they perform successfully on the cognitive domain. But even if children with psychopathic tendencies are not cognitively impaired, they have cognitive distortions: negative distortions are directed to the other, while positive ones are directed to self (Sharp, 2006). It was demonstrated in the similar studies that children with externalizing behavior problems use distorted mentalizing which is overly positive attribution about other's thought in relation to the self rather than overly negative or neutral attribution (Sharp et al., 2006, Sharp et al., 2007). This kind of biased interpretation of others' minds (Sharp et al., 2007) and/or misreading the mind of others leads these children to use distorted mentalizing practices (Allen, 2006). Those children's mentalizing includes the characteristic of self-serving bias which prevents them from negative feedbacks from others. But this inflated views of self may lead those children to feel threatened as a result of confrontation with a realistic feedback, and so they may start acting out (Ha, Sharp, Goodyer, 2011).

The studies on cognitive information processing can support and give information about distorted mentalization. For instance, according to social cognitive theories, Dodge (1993) proposed a social information processing model of aggression. Primary-school-aged aggressive children have selective attention about hostile cues in ambiguous situations and so they behave aggressively. So when interpreting the purpose of the others' behavior they tend to have a hostile-attribution bias which is referred to as understanding cues as threatening, not benign (Dodge, 1981). They act aggressively to others because they expect aggression from outside (Sharp & Venta, 2012). In the study done by Happe and Frith (1996) it was found that children with conduct disorder successfully passed theory of mind tasks, however, they did not achieve social insight. They have intact mentalization capacity but they understand mental states differently. They have "intact but skewed theory of mind" or in other words "theory of nasty minds" (Happe & Frith, 1996, p. 395). Therefore, they can read minds, but in an inaccurate way (Sharp, 2006). They tend to attribute negative intentions to others and also they use the knowledge of others' minds' internal states to manipulate others. Especially, their mentalizing ability clearly arises in case of lying, cheating and blaming others which are necessary to manipulate people (Happe & Frith, 1996). Sutton, Reeves, and Keogh (2000) looked at the relation between disruptive behavior, avoidance of responsibility and theory of mind with the sample of middle-school-age children. A relation between theory of mind and disruptive behaviors was not found, but a relation between denial of responsibility and lack of remorse was found. This shows us that these children are comparably capable of mentalizing and understanding emotions in the eyes when they do something wrong (Sutton et al, 2000). This result does not fall far from the notion of Happe and Frith (1996) 'theory of nasty mind'. Ha and colleagues (2011) used trust game to assess mentalizing capacity. During the game, children need to predict the intentions of other player and play the game by perceiving the view of other players. Correspondingly, it was found that during play, externalizing children tend to attribute negative intentions to other players more (Ha et al., 2011).

The hostile or negative attribution bias is particularly a characteristic of reactive aggressive children. But besides reactive aggression, some children also use proactive aggression (Crick & Dodge, 1996). For example, Griffin and Gross (2004) found that children who bully peers by using indirect or proactive aggression have an advanced mentalization capacity. Although, this capacity does not always mean better social functioning in life (Crick & Grotpeter, 1996). In this study, it was found that girls who bully their friends have advanced mentalization ability because controlling others and manipulation requires mentalizing skill. They victimize their peers by establishing intimacy and having disclosure (e.g. giving a secret) in order to be able to control and manipulate others (Crick & Grotpeter, 1996). This study is important as an example of pseudo-mentalizing in childhood. A certain amount of caution is needed when referring to this advancement of the mentalization capacity as mentalizing. As opposed to mentalizing goals, this skill is not used to enhance the capacity to form interpersonal relations (Sharp, 2006). Pseudo-mentalizing may look like mentalizing, but it lacks the main characteristics of genuine mentalization (Allen, et al., 2008) because it depends on absolute certainty about mental states of the other by dismissing uncertainty of other's mind. Besides, mental states of others may be recognized when they serve for self-interest (Fearon, Target et al., 2006). Luyten and colleagues explained pseudo-mentalizing as mostly self-serving, improbable, and inaccurate way of thinking. This can be intrusive, overactive (hypermentalizing), and destructively inaccurate (Luyten, Fonagy, Lowyck, and Vermote, 2012).

Internalizing behavioral problems are generally related to inner distress, and includes anxiety, depression, and withdrawal (Achenbach & McConaughy, 1997). The mental state of children with internalizing problems has been mostly explained under social cognitive theories related to anxiety. According to self-presentational theory, socially anxious individuals have the desire to impress other people but at the same time, they generally doubt that they do not have a positive impression on others (Leary, 2007b). In the study, it was also found that children with social anxiety use more tactics to present themselves. They use different self-presentational tactics because they want

to make positive impressions on other people (Banerjee & Waitling, 2010). But, they are afraid of possible failure and potential criticism coming from others (Epkins, 1996).

The mentalization capacity of children with internalizing problems has been studied especially in the case of anxiety problems (Sharp & Venta, 2012). As a result of a combination of cognitive model of anxiety (Beck & Clark, 1997) and social information processing model of anxiety (Daleiden & Vasey, 1991), Banerjee (2008) explained the problem of mentalization deficiency of anxious children is related to the problems on social cognition. In ambiguous situations, children with anxiety problems look for threat-related cues and attribute threatening intentions to others. The perception of threat leads to physiological hyper-arousal for those children. Anxious children are hypervigilant about a possible threat and possible negative evaluations from others in social interactions. This hypervigilance has roots in the mentalization deficit (Banerjee, 2008). But it cannot be said that there is a total deficit of mentalization in anxious children. Those children have a basic understanding of mental-states, but they have difficulty in understanding multiple links among feelings, intentions, and beliefs which is a high-level mentalizing skill (Banerjee & Henderson, 2001). In other words, children with anxiety experience confusion when they are trying to manage and understand social events with multiple mental states.

In a recent study, it was found that children with internalizing problems have impaired capacity with regard to understanding their own mental states, not the minds of others (Bizzi, Ensink, Borelli, Mora, Cavanna, 2018). Thus, even if children with internalizing problems may understand the minds of others easily, they fail to understand themselves (Bizzi et al., 2018). But those children have poorer social skills requiring understanding others' mind because they have fear of the negative social evaluation and also excessively focus on the minds of others (Banerjee & Waitling, 2010). And hypervigilance of those children are even higher in the absence of others' minds, which can make them have wrong assumptions by having a biased cognitive connection (Banerjee & Waitling, 2010, Banerjee, 2008). In addition to overthinking what others think, internalizing individuals also interpret the self in a biased way. In

contrast to externalizing children who use self-serving bias, internalizing children have self-debasing cognitive distortion which can be defined as the belief the worst will happen, taking all responsibility when things go bad, and exclusively focusing on the negative aspects of events (Barriga, Landau, Stinson, Liau, & Gibbs, 2000; Beck, 1967).

Sharp and colleagues (2011) noted that internalizing problems are associated with ‘hypermentalization’ which leads to a dysfunction in mentalization by overinterpreting the intentions of the others or overattributing the mental states to others (Sharp, Pane et al., 2011). In internalizing problems, cognitive distortions, which are excessively detailed, generally repetitive and inaccurate explanations about mental states of others, are seen as indication of hypermentalization which can be also included in pseudo-mentalization because this also lacks the essential feature of genuine mentalization (Lemma, Target, and Fonagy, 2010).

1.5.2. Affect Regulation Deficit in Childhood

Even if all children experience negative emotions, they learn to soothe themselves first with the help of caregiver, before they soothe themselves alone as a self (Eisenberg, Spinrad, and Eggum, 2010). Affect regulation can be defined as ‘the process of initiating, avoiding, inhibiting, maintaining, modulating the occurrence, form, intensity or duration of internal feeling states, emotion-related physiological states, and behaviors as a result of emotions’ (Eisenberg and Spinrad, 2004, p. 338). While healthy emotional processes provide children with adaptive coping strategies by enabling them to have the ability to handle their own feelings (Seja & Russ, 1999), any disruption which hinders emotional processes leads to unbalanced styles of expression and psychological disturbances and bears the risk of psychopathology in children (Cole, Martin, and Dennis, 2004). According to Cole, Michel, and Teti (1994), well-regulated individuals are neither overly controlled nor under-controlled. Because while well-regulation is adaptive and flexible, under or over regulation of behaviors and

emotions is maladaptive because it may not be flexible (Eisenberg, et al., 2001). Negative emotionality, impulsivity and low level of emotion regulation are related to behavioral problems in children (Eisenberg et al., 2010). While both internalizing and externalizing behavior problems are related to affect dysregulation (Eisenberg et al., 2005), children show different strategies. Children with externalizing problems are low in effortful control, show high impulsivity, and have uncontrollable behavior and affect, whereas children with internalizing problems are low in impulsivity, show behavioral inhibition, over-control their emotional reactions, and have rigid emotion regulation strategies (Eisenberg et al., 2010; Eisenberg, et al., 2005). In general, externalizing children are called as undercontrolled, internalized children are called as overcontrolled (Eisenberg et al, 2001, Achenbach & Edelbrock, 1981).

Considering play as a way of expressive communication (Chazan, 2002), both adaptive affect regulation strategies and also affect dysregulation strategies or disorganization of children with behavioral problems can be observed in play (Fonagy et al., 2002). Children who have severe emotional difficulties have different and various play capacities from each other at the beginning of the therapy (Slade, 1994). In adaptive play, wide range of emotions can be regulated, modulated and smoothly changed. However, children with internalizing problems generally show limited range of affects, lower arousal and low level of enjoyment (e.g. inhibited/conflicted play). Children with externalizing problems generally have disruptions in play because of overwhelming emotions, show impulsivity and move from affect to affect abruptly (e.g. impulsive/polarized play) (Chazan, 2002, Halfon, 2017). But psychodynamic play therapy can be effective for development of affect regulation over the course of treatment for the children with internalizing and/or externalizing behavior problems (Halfon & Bulut, 2017).

In a single case study with a 5-year-old boy with depression, at the beginning of treatment, child showed neutral interest while playing, he expressed few emotions, and his transition between affective states was abrupt. But in the middle phase of treatment, his interest to play and spectrum of affects increased but his affect regulation

was not smooth and transition between affective states was still abrupt. At the end of the therapy, he started to enjoy the play very much and expressed many affects during play. Regulation and modulation of feelings became more flexible and transition became more smooth but sometimes abrupt. But in general, his play's conflicted attitude decrease and adaptive features increased during the process (Chazan & Wolf, 2002). In another study done with three 6-year-old children with separation anxiety, change in play profile was supported with the help of psychodynamic play therapy. Results showed that decrease in dysfunctional play profiles (Halfon, Cavdar, et al., 2016).

1.5.3. The Effect of Mentalization on Affect Regulation

Children who have psychological disturbances can start therapy to acknowledge and to regulate themselves better, and psychodynamic therapy is effective for those children (Midgley, O'Keeffe, French, & Kennedy, 2017). In psychodynamic play therapy, children with behavioral problems, affect dysregulation and underdeveloped play capacity find a place to work on these issues with the help of a therapist who makes use of mentalization interventions (Verheugt-Pleiter, 2008). The outcome of therapy can be shaped and affected by different kinds of characteristics of patients. Mentalization is one of the core concepts for therapy (Allen, 2006): it does not only give information to a therapist about the person's psychopathological state, but also is significant for assessment of the processes and outcomes of psychotherapy. Patients with different mentalizing capacities show different patterns during the process of psychotherapy. Patients with lower mentalizing capacity have difficulty in analyzing problems about him/herself because of the restricted ability to understand mental states of the self and the other, and accordingly, they cannot reach to the desired level of improvement (Fonagy et al., 2002). Thus, initial mentalization capacity may predict or mediate outcome of therapy.

In a study done with female patients with eating and/or depressive disorders, Müller and colleagues (2006) found that mentalization capacity, measured with RF, at the beginning of therapy predicts therapy success, which is operationally defined as improved mental functioning at the end of the therapy. Patients with higher RF capacity have better improvement within three-months therapy than patients with lower RF (Müller, Kaufhold, Overbeck, & Grabhorn, 2006). In contrast, another study done with chronically depressed patients, RF was not found to be a significant predictor of changes in severe symptoms of depression as a result of long-term psychoanalytic psychotherapy. But, RF predicted changes in general mental functioning when compared with control group (Taubner, Kessler, Buchheim, Kächele, & Staun, 2011). Similarly, in the study of Gullestad and colleagues (2013) the effect of pre-treatment mentalization capacity, operationalized as Reflective Functioning, on two different treatment models which are hospital day treatment and outpatient individual psychotherapy and also on psychological improvement was assessed. The study was conducted with patients with borderline and/or avoidant personality disorder. It was found that RF does not significantly predicts the outcome in both therapy models. However, dividing the data into two groups as low RF and medium-high RF revealed that while patients with low RF only show better improvement on psychosocial functioning in one therapy model, patients with medium-high RF gain improvement equally in both treatment models. This may be due to the fact that the patients with higher RF have a better understanding of therapy and they can be more flexible on different conditions (Gullestad, Johansen, Høglend, Karterud, & Wilberg, 2013). There are also some studies that investigates the initial capacity of ‘conceptual cousins’ of mentalization. They may deserve attention because mentalization as an umbrella concept includes the other concepts. For example, the higher initial capacity of Psychological Mindedness (PM; Appelbaum, 1973), which is characterized as understanding meanings and reasons of actions by linking thoughts, feelings and behaviors, predicted better therapy outcome (McCallum, Piper, Ogrodniczuk, & Joyce, 2003). In a study done with patients with several different disorders, Leweke and

colleagues (2009) examined the pre-treatment effect of Alexithymia, which is an inability to describe emotions appropriately. They found that high initial alexithymia is significantly related to poor treatment outcome (Leweke, Bausch, Leichsenring, Walter, & Stingl, 2009). And similarly, in the studies on pre-treatment effect of alexithymia in group therapy, results showed that difficulty in describing emotions is linked with less improvement (Ogrodniczuk, Piper, & Joyce, 2005, 2008, 2010).

Although there are some studies which support that the initial mentalizing capacity may predict treatment outcome, results are not conclusive. It can be due to that fact that there are different mechanisms that can be affected by mentalization and those mechanisms may have influence on outcome of therapy. For instance, since mentalization and affect regulation are strongly related with each other during development, this relation may naturally be observed in the process of therapy. There are some studies that demonstrate this strong relation between mentalization and affect regulation in and during therapy by measuring therapists', mothers' or children's mentalizing capacity or practices.

In a study examined the relation between adherence to mentalization during sessions and growth of affect regulation in child psychodynamic therapy, results revealed that in high mentalization adherent treatments, affect regulation increased towards the end of therapy, but there was no change in affect regulation over time in low adherent treatment. This indicated that as adherence to mentalization increases, higher levels of affect regulation can be achieved (Halfon & Bulut, 2017). Halfon, Yılmaz, and Çavdar (2019) stated that in high mentalization adherent treatments, dysphoric affect was related to higher affect regulation, while for low mentalization adherent treatments, there was no relation found. Additionally, it was found that adherence to mentalization was associated with symptomatic relief at trend level, whereas change in affect regulation was significantly linked with improvement in global functioning. Study revealed that the usage of expression of dysphoric affects only paved the way for affect regulation and thus outcome gain where the context of mentalization practices is present (Halfon et al., 2019). Both mother's and child's use

of mental state talk in mother-child play predicted affect regulation in play. But children's mental state talk predicted affect regulation of children better than the mother's mental state talk, very likely because of the relation between the child's self-reflection and his/her regulation process, which provides the child with more insight regarding his/her internal states (Dorlach, 2016). Also, in a study that examined the relation between the therapists and children's use of mental state words and affect regulation in long-term psychodynamic play psychotherapy conducted with two single cases with separation anxiety, it was found that while one of the cases showed improvement, the other did not. Results indicated that the case who showed clinically significant improvement over the course of treatment, affect regulation in play was predicted by the use of mental state words of both the therapist's and the child's. On the other hand, the case in which clinically significant improvement was not seen, while the use of mental state words of therapist predicted affect regulation at trend level, the child's use of mental state words was not predicted child's affect regulation at all (Halfon, Bekar, and Gürleyen, 2017a). Additionally, a more detailed examination revealed that in the clinically improved case, more mental state words had been used, and therefore the case was more advanced in explicit mentalization capacity (Allen et al., 2008), than clinically non-improved one. These results show both the importance of child's initial mentalizing capacity and the significant link between mentalization and affect regulation. This study presents that the initial mentalizing capacity of children can be important for therapy outcome by predicting affect regulation (Halfon et al., 2017a). Yet, no study that investigated and demonstrated the prediction of initial mentalization capacity of children on the affect regulation of children over the course of therapy to date. This study aims to fill this gap.

1.6. The Assessment of Mentalization and Affect Regulation

1.6.1. The Assessment of the Child Mentalization

There are many concepts related with mentalization such as reflective function (RF), metacognition, theory of mind (ToM), mindfulness, mindreading, social or emotional understanding, and perspective taking (Allen, 2003; Choi- Kain & Gunderson, 2008). Even though the approaches to measure these 'conceptual cousins' of mentalization can be relevant to assess mentalizing ability, the most relevant concept is reflective function (Vrouva, Target & Ensink, 2012). Reflective function is referred to as the capacity to think about the mental states of self and others, through creating representations that lead to specific behaviors, feelings, and thoughts about the self and the others (Fonagy & Target, 1997). As a part of the London Parent-Child Study, data on Adult Attachment Interviews (George, Kaplan, and Main, 1985) were collected and analyzed (Fonagy et al., 1991b). In a study based on these data, Main (1991) asserted that coherence narrative enabled developing ideas on mentalization and reflective function as a manifestation of mentalization in speech. So Fonagy and his colleagues (1998) developed Reflective Functioning Scale in order to assess mentalization, operationalized as reflective functioning capacity of adults based on the AAI. RF is thought as a concept related with adult attachment representations and the capacity to reflect mental states of their own parents in the context of their early childhood experiences. Consequently, narratives told during AAI can be used as indicators for RF capacity in this coding system (Fonagy, Target, Steele, and Steele, 1998).

Development of a measurement system for mentalization is crucial in assessing the quality of mentalization-based psychotherapies and in order to clarify the role of mentalization during the development of psychopathology (Vrouva et al., 2012). While it is important to develop a valid and reliable measure that assesses mentalizing ability, it is also a challenging process. Because, it is a multidimensional concept and it includes various psychological processes. Also, these processes can be inconsistent

across the polarities and are subject to change through emotional arousal as well as interpersonal relations. With the help of adults' language ability, the expressions of attachment relations and their own narratives about their early childhood could be an indicator of mentalizing capacity (Fonagy et al., 1998). However, for child subjects, it is more challenging and quite different than the adults because of young children's undeveloped language skills. Therefore, alternative measurement methods other than the medium of verbal communication are necessary (Vrouva et al., 2012).

When the children's capacity of mentalization is taken into consideration, it is meaningful to begin with Theory of Mind developed by Premack and Woodruff (1978), since the cognitive aspect of mentalization is widely studied and understood in Theory of Mind, which can be defined as the ability to understand that others have separate minds with different beliefs, ideas, and feelings that influence their behavior (Baron-Cohen, Leslie & Frith, 1985). ToM mostly focuses on the cognitive perspective taking and false belief understanding in pre-school age children (Vrouva et al., 2012). False belief refers to mental states in which the child has information about reality but he/she realizes that the other person's knowledge about the same thing is different, and acts according to his/her false belief. Therefore, an understanding of false belief is developed as a result of the distinction between appearance and reality (Astington, Harris & Olson, 1988). This provides us with tools to assess children's knowledge about the pretend and psychic equivalence modes, and also children's mentalizing stance (Fonagy & Target, 2000).

However, the construct of ToM has been criticized due to its underestimation of affective and regulatory processes and overemphasizing cognitive dimension (Carpendale & Chandler, 1996). Since mentalization ability is beyond certain age levels and cognitive tasks (O'Connor & Hirsch, 1999), as a result, affective mentalization skills have also been studied. When compared to ToM studies, affective mentalization skills studies focused more on personal differences and environmental factors (Cutting & Dunn, 1999; Rosnay & Harris, 2002). Affective components of mentalization skills have been operationalized as affective labeling and affective

perspective-taking (Cutting & Dunn, 1999; Hughes & Dunn, 1998; Youngblade & Dunn, 1995). In affective labeling tasks, children are presented with drawings of different facial expressions, and are asked to identify different emotional states, which are sadness, happiness, anger, and fear (Steele, Steele, Croft & Fonagy, 1999; Taumoepeau & Ruffman, 2008). In the affective perspective tasks, several vignettes featuring animal protagonists in emotion-evoking scenarios are presented to the child and the child is asked to describe how the animal puppet feels in particular situations (Denham, 1986). As can be seen in the researches, while affective mentalization skills are found to be more related to prosocial behaviors (Denham, 1986), cognitive mentalizing abilities are associated with educational level and the status of parents (Cutting & Dunn, 1999). Similarly, with the aim of going beyond the cognitive domain, Affective Task (AT) is also developed (Fonagy, Target, and Ensink, 2000). AT aims to measure children's affective understanding within a semi-structured interview context (Ensink, 2003).

Children's mentalization ability, similar to the assessment of adult's mentalization, can be assessed in the context of attachment. The Child Reflective Functioning Scale (CRFS) was developed to assess reflective functioning of children aged between 8 and 11 (Target, Oandasan & Ensink, 2001). Intention behind its development is to use with Child Attachment Interview (CAI; Target, Fonagy, Shmueli-Goetz, Schneider & Datta, 2000). In a research conducted by Shmueli-Goetz and colleagues (2008), it is found that primary-school-age children can meaningfully respond to direct questions about themselves, their attachment figures and conflicted situations (Shmueli-Goetz, Target, Fonagy, & Datta, 2008). Reflective functioning is revealed especially while talking about oneself and one's relations with significant others, implying that presenting specific situations enable a person to talk about self, interpersonal relations and his/her affective reactions (Fonagy & Target, 2003). Besides, most detail on the mentalizing capacity is commonly revealed in difficult interpersonal situations, because these revealing memories can be considered as a good indicator of child's 'working knowledge' of mental states and of both intra- and inter-

personal thinking (Ensink, 2003). Thus, CRFS coding system provides us with an objective and global assessment tool for assessing children's ability to mentalize (Ensink, 2003). However, it is difficult to use CRFS with younger children, due to its interview-based nature.

Additionally, there are different types of research on mental state language that assesses children's mentalizing ability. Even though the term 'mental state talk' is not synonymous with mentalization, using mental state words is an important indicator of explicit mentalization ability (Fonagy et al., 1998). Mental state is related to development of social understanding. Communication between children and their parents about thoughts and feelings enables the theory of mind to develop (Symons, 2004). And also theory of mind has implications for mental state language and therefore it allows for internalization, social competence and acknowledging the self and the other in cultural context (Symons, 2004, p.159). Some studies (Meins, 1997, 1999) asserted that children internalize representations about self and others through a discourse, regarding mental states in relation with others, especially parents. Therefore, mentalizing capacity in children is developmentally a result of a mentalistic discourse with caregivers (Meins, 1999). Including both affective and cognitive aspect, mental state language is correlated with social-emotional understanding and theory of mind (Youngblade & Dunn, 1995; Hughes & Dunn, 1998). Harris (1999) proposed that mental states regarding emotional states in a coherent discourse, enable children to understand emotional states in others. Similarly, Denham, Zoller, and Couchard (1994) stated that emotional understanding is developed in the family context in which parents explain the emotions and their consequences to their children. It was also found that children who use more mental state talk often perform better on false-belief tasks (Brown, Donelan-McCall, and Dunn, 1996). Jenkins and colleagues (2003) found that when children exposed to cognitive and feeling state talk in family settings, their mental state talk in cognitive and feeling categories improved later in their lives (Jenkins, Turrell, Kogushi, Lollis, & Ross, 2003). Moreover, Youngblade and Dunn

(1995) measured mental state talk by looking at the frequency of talking about feeling states and a relation between mental state talk and social and emotional understanding was found. Similarly, a longitudinal study revealed that children's performance on both theory of mind and emotion understanding were related to children's frequency of mental state talk with their friends (Hughes & Dunn, 1998). Mental state language in relation to cognitive and affective skills provided with a more comprehensive understanding of mentalization skills.

Also, mental state talk is measured along with narrative assessments in order to assess the capacity of children's mentalization (Bamberg & Damrad-Frye, 1991; Bettmann & Lundahl, 2007; Dyer, Shatz & Wellman, 2000). A common method for these kinds of assessments is looking at pictures and creating a story, mainly because of its two main advantages. Firstly, in creation of the story while attributing mental states to character in the story, the narrator needs to make use of perspective taking. Secondly, narrator needs to have another level of perspective taking by paying attention to the listener's mind in his/her mind and assessing what listener knows or does not know (Tager- Flusberg & Sullivan, 1995). With its ability to emotionally organize the emotionally charged moments, a narrative can also be a facilitator for the child, and this coherent meaning making process provides the narrator with emotion regulation. Other than affective meaning-making, narration enables the narrator to uncover his/her relational themes (Oppenheim, 2006). Bekar, Steele, and Steele (2014) developed the Coding System for Mental State Talk (CS-MST) with the aim of assessing mental state talks in the parents' and children's narratives. Coding System for Mental State Talk (CS-MST) was developed to assess mental state talks in narratives between the parents and the children (Bekar, et al., 2014). During the creation of the story, children and their parents talk about the mental states of the characters in the book. This coding system assesses different dimensions in mental state languages such as emotion words, cognition words, perception words, physiological words, and action-based words (Bekar et al., 2014). 'Story-oriented mental state talk' in the original setting is adapted to therapy narratives as 'play-oriented mental state talk', which is based on the mental

state utterances of pretend play character (Bekar & Çorapçı, 2016). Thus, the CS-MST has recently been used to measure mentalization capacity through Turkish children's and their parents' mental state talk in the context of play sessions (Halfon et al., 2017a; Halfon, Bekar, Ababay & Dorlach, 2017b) and through narrative-based assessment of attachment style (Cantaş, 2018, Coşkun, 2018).

1.6.2. The Assessment of Affect Regulation in Play

There are various methods for assessing affects and affect regulation of children in clinical research, including self-report measures. Some common measures of emotional experience is Self-Assessment Manikin (SAM; Lang, 1980), and the Positive and Negative Affect Schedule (PANAS; Watson, Clark & Tellegen, 1988). PANAS consists of two clusters composed of a negative and a positive dimension, and it is commonly used in clinical settings. Even though this self-report measure has the advantage of giving information about child's perspective on himself/herself, the information obtained from this measure is one-sided, and it also cannot be used with younger children due to its dependence on verbal evaluations. In order to fill this gap, some scales that are based on parent report and that assess emotion regulation have been developed. Emotion Regulation Checklist (ERC; Shields & Cicchetti, 1997) which evaluates the appropriateness of affective displays, empathy, and emotional self-awareness, and Emotion Regulation Questionnaire (ERQ; Gross, 2003) which reports two emotion strategies including expressive suppression and reappraisal of aversive emotions. These measures are also one-sided, since they are solely reflections of the parents' opinion on their children.

Aforementioned measures have advantages of giving valid information when assessing affective parts and their change, but for child subjects, assessment during play can give more comprehensive and wider information because the primary way of communicating for children is play (Shirk & Burwell, 2010). Thus, assessment through play is especially crucial since it can be applied to children of all ages. There are various

types of tools that can be used in order to assess the relation between play and the development of cognitive, affective and language ability (Gitlin-Weiner, Sandgrund, & Schaefer, 2000). Different coding systems that make use of play have assessed the development of cognitive ability (Schaefer, Gitlin, & Sandgrund, 1991), the development of mental representational way of thinking (Greenspan & Lieberman, 1994), and child's functional level at different areas including communicative, cognitive and socio-emotional ability (Lindner, 1990). Affect-Play Scale can also be mentioned (Russ, 1987, 1993). APS allows assessment of affect expression and quality of fantasy play with the help of standardized play task. While one unit assesses the types and frequencies of negative/positive and verbal/nonverbal emotions, the other one examines the quality of fantasy play based on organization, elaboration, and imagination of play (Russ, 1993). In general, even though it is effective for the assessment of children's development in different domains, information obtained from it about the child in psychotherapy process is not comprehensive enough for clinicians and researchers.

Although its importance is emphasized, there are not many measures that assess the play activity the child is engaged in during play. Play Therapy Observation Instrument (PTOI; Howe & Silvern, 1981), NOVA Assessment of Psychotherapy (NAP; Faust & Burns, 1991), Trauma Play Scale (Findling, Bratton, and Henson, 2006), and Children's Play Therapy Instrument (CPTI; Kernberg et al., 1998) can be given as extensive examples of child psychotherapy assessment tools. PTOI assesses the child's position against distressful events, attitude towards to therapist and the quality of child's play. This scale is important due to its ability to assess the goals and process of play therapy (Howe & Silvern, 1981). NOVA Assessment of Psychotherapy is used for assessing the interaction between therapist and child by focusing on the conversation between them, their exchange of questions, observed positive or negative behaviors, interpretations, and responses (Faust& Burns, 1991). The Trauma Play Scale includes dimensions like play disruptions, avoidant play behavior, and negative

affect. This scale focuses on negative emotions and negative attitude of children during play (Findling et al., 2006).

The Children's Play Therapy Instrument (CPTI; Kernberg et al., 1998) is similar to instruments mentioned above, but it is a more holistic way of assessment since it includes almost all of the domains mentioned above, and more. It is more comprehensive in categorizing play activity of children in psychodynamic play therapy. And it also allows micro analysis of the changes that take place during session or therapy. Thus, clinicians and researchers prefer to make use of this instrument in order to observe, categorize and demonstrate the child's functionality in play. Additionally, since in play the manifested abilities are not only verbalized, but it also includes nonverbal aspects (Pellegrini & Smith, 2005), CPTI also enables the clinician or the researcher to measure nonverbal aspects during play (Chazan, 2001). Extensive analysis of affect component by including affect regulation strategies makes CPTI more preferable for the assessment of play over the course of treatment. CPTI measures the play activity in a psychodynamic play therapy session (Kernberg et al., 1998). Child's play activity is coded under three main dimensions namely descriptive, structural and functional. When rating play descriptively; type of play, the child's capacity to initiate and facilitate the play, and the sphere of play are analyzed. In structural analysis of the play, affective components (types of affects and regulation strategies), cognitive components (self-other representations, narrative components (including the use of language), and developmental components (social way of play) are assessed. In Functional Analysis, as a global assessment of whole play activity, other previously rated dimensions are taken into account, along with the child's coping strategies, and awareness of the sense of self during play. As a result, the child's play activity can be assessed under four profiles of play: Adaptive, Inhibited/Conflicted, Impulsive/ Aggressive, and Disorganized (Chazan, 2002). In each profile, differences in the emotional tone of the play, ranges, and types of affects, regulation, and transitions between affects and appropriateness of affect with play can be observed. Thus CPTI provides with the understanding of both adaptive and pathological ways of play and

various types of play and affective strategies during play. Several studies pointed to the effectiveness of using CPTI on children studies (Chazan, 2000, Chazan, 2001, Chazan & Wolf, 2002, Halfon et al., 2017a, Halfon et al., 2016, Halfon & Bulut, 2017, Halfon, 2017b).

1.7. Current Study

The aim of this study is to observe the relationship between initial mentalization capacities of children and affect regulation over the course of treatment with a sample of children between ages 3 to 10. In this study, mentalization was operationalized as mental state talk. Mentalization refers to understanding internal states of the others and the self, and the use of mental state words as a reflection of mentalization. Higher use of mental states words indicates higher mentalization capacity, which provides better affect regulation. In contrast, mentalization deficiency prevents children from this achievement. However, mentalization is a multidimensional concept, and deficiencies may occur in different forms. In contrast to early studies, recent studies focus more on the interpretive way of children's perception and understanding about others' thoughts, feelings, and intentions (O'Connor & Hirsch, 1999). With the help of those studies, concepts like distortions, misperceptions, inappropriateness, and biases in mentalization emerged (e.g. Sharp et al., 2006). In this study, pseudo mentalizing as a mentalization deficit was assessed. Therefore, it was hypothesized: (1) initial total mental state talks positively predict affect regulation over the course of treatment; (2) initial pseudo/inappropriate mental state comments negatively predict affect regulation over the course of treatment.

CHAPTER 2

METHOD

2.1. Data

The source of data used for this study comes from Istanbul Bilgi University Psychotherapy Research Laboratory, established to search psychotherapy processes carried out at İstanbul Bilgi University Psychological Counseling Center. This center both provides low-cost outpatients with psychodynamic psychotherapy service and enables professional training for master's level students in the Clinical Psychology Program. The parents and the children are screened by a licensed clinical psychologist in order to decide whether the patients fit the study protocol after referrals which can be made by parents themselves or mental health, medical and child welfare professionals. Inclusion criteria for the study are children with ages between 4 and 10 years old, no psychotic symptoms, no significant developmental delays, no significant risk of suicide attempts, and no drug abuse. The patients and their parents are informed about the research project before the beginning of therapy. If parents accept to attend research project, they give a written informed consent for video recording and data collection. The research was approved by the Istanbul Bilgi University Ethics committee.

2.2. Participants

Participants were 95 children (60 % male, % 40 female) who were referred to the psychological counseling center of Istanbul Bilgi University. Ages of children between 3 and 10 (24.2 % were 3-5 years old, 49.5 % were 6-8 years old, and 26.3 % were 9-10 years old). Most of the children were in elementary school (76.8%). Other participants were going to kindergarten (21.1%) or not going to school (2.1%). Children's referral reasons were mostly behavioral problems (43.2%). Other reported problems were anxiety (23.2%), school/learning difficulties (17.9%), and somatic

complaints (6.3 %). In this data, 362 sessions of 95 clients were used. Number of sessions were not the same for every client, but ranged from 1 to 11. More than half of clients had 3 sessions (28.4%) and/or 4 sessions (23.2%) ($M=3.80$; $SD= 1.93$). Information about the patients can be seen in Table 2.1 in detail.

Some of the patients' parents were married (84.7 %), others were divorced or widowed (12.6 %). Mothers' age were in between 24 and 53 years old ($M=36.43$; $SD=4.74$). Fathers' age were in between 25 and 59 years old ($M=39.84$; $SD= 4.9$). Most of the mother graduated from university (33.7%) and high school (28.4%). Similarly, fathers' majority were graduated from high school (37.9%) and university (24.3%). Most of the fathers had a job (91.6%), but most of the mothers did not (53.7%). Socio-economic status (SES) of families ranged from low to high. And most of the families were middle-SES (42.1%). Information about patients' parents can be seen in Table 2.2 in detail.

2.3. Therapists

The therapists were 33 clinicians in Istanbul Bilgi University clinical psychology master's program. 30 therapists were female, the others were male. Their ages were in between 23 and 35 years old ($M=25$; $SD= 2.96$). Every therapist was well-educated in the theoretical background and treatment techniques of psychodynamic child therapy. They all had the same level of experience (1 to 2 years of supervised psychotherapy experience). Therapists treated 4 children on average; range from 1 to 7. Licensed psychodynamic supervisors with a minimum of 10 years of experience provided 4 hours of supervision per week (i.e. 1 hour of individual and 3 hours of group supervision) to the therapists. Information about therapists can be seen in Table 2.3 in detail.

Table 2.1. Demographic Information of the Patients

		Frequency (n)	Percent (%)
Gender	Male	57	60
	Female	38	40
Age	3-5	23	24.2
	6-8	47	49.5
	9-10	25	26.3
Education	Preschool	20	21.1
	Elementary	73	76.8
	Not Attending	2	2.1
Application Reason	Behavioral Problems	41	43.2
	Anxiety Problems	22	23.2
	School/Learning Diff.	17	17.9
	Somatic	6	6.3
	Other	9	9.6
Number of Siblings	0	30	31.6
	1	52	54.7
	2	12	12.6
	3	1	1.1
Number of Sessions	1	7	7.4
	2	14	14.7
	3	27	28.4
	4	22	23.2
	5	12	12.6
	6	5	5.3
	7	2	2.1
	8	3	3.2
	9	1	1.1
	10	1	1.1
	11	1	1.1

Table 2.2. Information about the Parents of Patients

		Frequency (n)	Percent (%)
Marital Status	Married	83	87.4
	Divorced/Widowed	12	12.6
Mothers' Age	24-33	23	24.2
	34-43	68	71.5
	44-53	4	4.3
Fathers' Age	25-35	10	10.5
	36-45	75	74.9
	46-59	10	14.6
Mothers' Education	Elementary	18	18.9
	Middle School	11	11.6
	High School	27	28.4
	University	32	33.7
	Master/Doctorate	3	3.2
	No Information	4	4.3
Fathers' Education	Elementary	14	14.7
	Middle School	15	15.8
	High School	36	37.9
	University	23	24.3
	Master/Doctorate	3	3.2
	No Information	4	4.3
Mothers' Work	Yes	44	46.3
	No	51	53.7
Fathers' Work	Yes	87	91.6
	No	8	8.4
SES	Low	16	16.8
	Low-middle	24	25.3
	Middle	40	42.1
	Middle-high	12	12.6
	High	3	3.2

Table 2.3. Information about the Therapists

		Frequency (n)	Percent (%)
Gender	Male	3	9.1
	Female	30	90.9
Age	23	6	18.2
	24	11	33.3
	25	8	24.2
	26	4	12.1
	28	1	3.0
	33	1	3.0
	35	1	3.0
Number of Clients	1	11	33.33
	2	2	6.06
	3	6	18.18
	4	10	30.30
	5	3	9.09
	6	0	0
	7	1	3.03

2.4. Setting and Treatment

Patients started therapy with weekly 45-min sessions in the clinical playroom which was with a large number of various toys suitable for play therapy with children. Each playroom were similar to each other and equipped with video camera and microphones for research. Patients have different therapists who were second and/or third-year master students in MA in the Clinical Psychology program. Conducted treatments were both psychodynamic and child-oriented. Therapists provided a safe environment with standard rules in playroom for children by identifying the boundaries of the play situation where potentially harmful actions are differentiated from symbolic aggression. In general, their interventions were facilitative and supportive by mirroring

a child's actions, feelings and thoughts. And, the therapist makes the children encourage to express their perceptions, feelings, and thoughts. Therapists attend the play as attuned according to child's play profile and made comments by thinking child's own narrative. Therapists made connections between children's reality and their play and so described their emotional experiences to make them meaningful for children.

2.5. Measures

2.5.1. The Coding System for Mental State Talk in Narratives (CS-MST)

Bekar, Steele & Steele (2014) developed The Coding System for Mental State Talk in Narratives (CS-MST) to assess mentalization capacities via mental state talks in narratives of children and parents by including different dimensions. The coding system was originally used to assess the narratives created with a wordless picture book, called "Frog, Where are You?" (Mayer, 1969), which enables to talk about mental states of characters more. For the narrative analysis, the stories told while looking at a picture by children and their parents are recorded and transcribed verbatim. With the help of manual, while coding, mental state words are identified, and the types and directions of mental states are categorized. The coding system includes five major mental state language; which are emotions (e.g. happy, worried, scared), cognitions (e.g. believe, want think), perceptions (e.g. see, look, watch), physiological states (e.g. tired, hurt, sleep), and action-based mental state words which actions imply inherently mental states like cognitions, emotions or perceptions (e.g. laugh, hide, cry). Also, these categories are coded in three directions in terms of attributions referred to whom. Clusters are formed as "story-oriented mental state talk", "self-oriented mental state talk", and "other-oriented mental state talk". Besides total word counts in narratives, causal connections and diversity of mental state counts are counted. There are three more codes that reflect features of mental states. The category of the opacity of mental states (e.g.; maybe, perhaps, guess), the category of inappropriate/pseudo mental state

comments include inaccurate attributions to the mental states of the listener or story character. The category of situational mental state words are the mental states about the context or situation (e.g. “*This game very surprising*”).

The CS-MST has been used and validated with high-inter rater reliability (.90; Bekar, 2014). And Bekar and Çorapçı (2016) adapted this system to Turkish language with the narratives of Turkish mothers and their children.

2.5.1.1. Adaptation of the CS-MST for this study

In this study, the CS-MST was coded through narratives of story-stem assessment which includes a set of narratives of daily scenarios including a conflict. After the beginning of the story told to the child, it is expected from a child to continue narrative by showing and telling what happens later. In this study, as a story-stem technique Attachment Doll Story Completion Task (ASCT; Bretherton, Ridgeway & Cassidy, 1990) was used. It is a structured task that assesses children's attachment-based internal working models through their narratives. It consists of five story-stems which elicit the child's representations of attachment-related topics by using a set of dolls and related stuff about narratives. First story-stem named as "spilled juice" which while family figures are sitting at the table for dinner child drops the glass and spills juice. Second story-stem named as "monster in the bedroom" which the child goes to the bedroom to sleep and then scream by saying that there is a monster in the bedroom. Third story-stem named as "hurt knee" that when a child is at the park with his/her parents he/she falls from a high rock and hurts his/her knee. Fourth story-stem named as "departure" which the mother and the father go to a one-week long holiday and the child stays with his/her grandmother. Fifth story-stem named as "reunion" that after one week the parents return from holiday.

A group of six master-level students had coding training by Özlem Bekar, Ph.D., who is one of the authors of the CS-MST. Özlem Bekar assessed the reliability of each rater by comparing their coding about six transcribed narrative with her own

coding. The Interclass Correlation Coefficient (ICC) was calculated to decide the agreement level between raters. And ICC ranged between from .87 to .93.

And for this study, children's mental state words while telling the stories in ASCT was used to assess the mentalization capacity of children. Mental state words are categorized as emotion, cognition, perception, physiological and action-based words like an original coding system. In this study also the adaptation was done by Coskun (2018) was used. The adaptation was to develop the code about organizational aspects of mentalization, which was inappropriate/pseudo mental state comments. It was developed by accounting low-level RF subtypes which are unintegrated, bizarre or inappropriate RF (Fonagy et al., 1998) and clinical judgment of Coşkun with the consultation of Özlem Bekar and Sibel Halfon, Ph.D. (Coskun, 2018). Even if there is an inaccurate attribution, it can be coded as pseudo/inappropriate only when there is mental state word. Physical violence between characters (e.g., *hitting, kicking*), extreme hostility, serious aggression towards others (e.g., *killing, assassinating, beheading*), death as result of attacks (e.g., *“killed or eaten by the monster”*), feelings with bizarre attributions by not comprising an emotional state (e.g., *feeling gravestone, feeling death*), and mental state shutdowns which child finish the story when expected to continue the story (e.g., *sleeping, dying abruptly*) were coded as inappropriate/pseudo mental state comments.

About the category of pseudo/inappropriate mental state comments, Ayşenur Coşkun trained a group of five master-level students. Ten verbatim transcribed narratives were coded by five research assistants and ICC was ranged .74 to .95. After disagreements resolved during meetings, twenty-five of the cases of data coded by double-rater. ICC was counted and ranged .83 to .99.

In this study, total mental state talk and pseudo/inappropriate mental state comments were used by taking proportion child's all mental state words and child's pseudo/inappropriate words to child's word counts.

2.5.2. The Children's Play Therapy Instruments (CPTI)

The Children's Play Therapy Instrument (CPTI; Kernberg, et al., 1998) is a comprehensive instrument to assess different aspects of play activity of children in psychodynamic play therapy. The verbatim transcribed session is analyzed with different levels. The first level is the segmentation of the activity. In this part, the session is categorized as non-play, pre-play, play or interruption. The non-play activity includes all activities outside the realm of play such as talking with a therapist. In the pre-play activity, child prepares the setting for play such as choosing characters. Interruption is only coded when the child leaves the room for any reason. And play activity, the child's engagement to play activity with his/her or therapist's initiation. At the end of the segmentation, only the longest play segment is coded under three main dimensions which are Descriptive, Structural and Functional. For each dimension, subscales under them are rated by using 5-point Likert scale in which 5 is *Most Characteristic*, 4 is *Considerable Evidence*, 3 is *Moderate Evidence*, 2 is *Minimal evidence* and 1 is *No Evidence*.

Descriptive Analysis includes type of Play Activity which includes gross motor activity, exploration, manipulation, fantasy, gameplay; Script Description which assesses how the play is initiated, facilitated and ended, and Sphere of Play which looks the realm of play as autosphere (e.g. child play with his/her body), microsphere (e.g. child start the game at one place and continue there), and macrosphere (e.g. a child uses different parts of the room while playing)

Structural Analysis of play includes four components which are Affective (overall hedonic tone, spectrum of affects, affect regulation, affect transition, appropriateness of affect), Cognitive (the level of role play, stability of representation, style of representation), Narrative (e.g., themes of play activity, use of language), and Developmental (child's psychosexual development, social development, age-appropriate development of play).

Functional Analysis assesses the child's coping strategies and defense mechanisms. There are four clusters and examples of defense mechanisms: Adaptive (e.g. problem-solving, sublimation, humor), Conflicted (e.g. intellectualization, doing and undoing, somatization), Polarized (e.g. splitting, projective identification, omnipotent control), Extreme Anxiety, in other words Disorganized, (e.g. fusion, autistic encapsulation, freezing). Child's awareness of him/herself as a player is also assessed in this dimension (Chazan, 2002).

In this study, only Affective Component of the CPTI was used. This component includes *Overall Hedonic Tone* which shows a child's satisfying level about play activity. The *Spectrum of Affects* indicates ranges of affects showed verbally or nonverbally during play ranged from 5 (Very wide) to 1 (Constricted). *Affect Regulation and Modulation* reflects the capacity of children to regulate and modulate different emotions, and to expresses different intensities of affects with or without child's own control, scored on a range of 5 (Very Flexible) to 1 (Very Rigid). *Affective Transition* assesses the style of movement from affect to affect or between affect ranges of 5 (Always Smooth) to 1 (Always Abrupt). *Appropriateness of the Affective Tone* which indicates expressed affects whether appropriate to play content or not. In addition, some *Affect Types* aggressiveness/anger, anxiety/fear, pleasure, and sadness/hurt are coded separately by accounting how much intense or not. But for this study 'Affect Modulation Composite' was created by averaging Regulation, Transition and Appropriateness raw scores of the session. This composite scales provided us with the overall affective organization of the child and with index measure for regulation. In the present study, our Affect Modulation Composite scale showed good internal consistency with (ICC) of 0.73.

In Turkey adaptation, the CPTI was translated and back-translated by Sibel Halfon to assess play therapy sessions. Halfon gave 20 hours training to master's level research assistants. During training, research assistants coded and rated 10 videos for practice until their inter-rater reliability reached an expected value which was an intra-class correlation (ICC) of 0.70. After they were certified with enough reliability, the

data was coded as pairs. Pairs of independent coders reached good to excellent scores (0.76-1) in sessions ($M=.95$; $SD= 0.57$). In this data 46 % of the data coded double, then continued to be coded individually.

2.5.3. Turkish Expressive and Receptive Language Test (TİFALDİ)

Berument and Güven (2010) developed TİFALDİ to measure the language abilities of the Turkish-speaking children the ages between 2 to 12. The test consists of two subscales which are receptive and expressive language abilities. Each subscale is started with age appropriate item by depending on children's chronological age and continue with other items by getting harder. The Receptive Language subscale includes 104 quartered cards with black-white pictures and each word is coupled with one picture inside four ones. The administrator tells the word and asked the child to show the picture of the word. Berument and Güven (2010) demonstrated that receptive language test has good internal consistency in general (alpha of .99) and across age groups (alpha of .88 to .96). It also has a significant relationship with WISC-R verbal scale scores ($r= .447$; $p<.001$) which shows its validity to measure verbal skills. The Expressive Language subscale consists of 80 cards with black-white pictures. The cards are shown to the child one by one and expected from child to name of the picture on the card. It was reposted by Berument and Güven (2010), that it has adequate internal consistency in general (alpha of .98) and across age groups (alpha of .96 to .86). In terms of validity, standard scores of the expressive language subtest were significantly related with WISC-R verbal scale ($r= .521$; $p<.001$). At the end of the application of both tests, standardized score ($M=100$, $SD= 15$) is calculated for the child with the transformation of raw score of the child by depending on chronological age. In this study, only the expressive language abilities of participants were controlled through standardized scores of the expressive language scale.

2.5.4. The Child Behavior Checklist (CBCL)

The Child Behavior Checklist was developed by Achenbach (1991) to assess emotional, social and behavioral problems of children. Usually, the checklist is completed by parents. There are 112 items about problem behaviors on a 3-point scale in which 0 refers to not true, 1 refers to sometimes true, and 2 refers to very true (Achenbach, 1991). CBCL is clustered under two main categories as internalizing and externalizing behavior problems. Internalizing Behavior Problems include social withdrawal, social problems, somatic complaints, and anxiety/depression, and Externalizing Behavior Problems include delinquent and aggressive behavior problems. And it also presents Total Behavior Problems by including all domains (Achenbach, 1991). The severity of the problem is measured as clinical, borderline and non-clinical level with the cut-off score of 49.

CBCL is a highly reliable measure with test-retest reliability with $\alpha=.90$ for Internalizing, $\alpha=.94$ for Externalizing and $\alpha=.97$ for Total Problem categories (Achenbach & Rescorla, 2001). Erol, Arslan, and Akçakın (1995) adapted the checklist to the Turkish context. It was found high test-retest reliability with the alpha of .84 and high internal consistency with the alpha of .81 for externalizing scale, .82 for internalizing scale and .88 for the total problem scale. In this study, only Total Behavior Problems were controlled through a raw score of total problems as pre-treatment characteristic.

2.6. Procedure

After decided the patient was suitable for the Bilgi University Psychological Counseling Center by a licensed psychologist, parents were given the consent form to fill if they accepted their child to be a participant in Psychotherapy Process Research. The consent form included consent for the video and audio recording during therapy in the case of acceptance of participation of research. Before intake session with a

therapist, one of the research assistants who were also students of first, the second and third year in master program invited parents and their children for the research procedure implementations. The procedure included various emotional and cognitive assessments with children and various scales filled by parents. All implementation sessions were also videotaped and transcribed. Attachment Doll Story Completion Task (ASCT) was one of the emotional assessment tools in this meeting. And in this study, CS-MST was coded with the narratives of story-stems of children.

After research implementation, treatment started for the child. During therapy, the child's sessions were videotaped and verbatim transcribed. For coding, the child's session are randomly selected in each child's every 10 sessions (e.g. 1-10, 11-20, etc). These selected entire sessions were coded with Child Play Therapy Instrument (CPTI) by independent coders. After each session were segmented, longest play segment for each session was used according to the CPTI manual. For this study, the child's affect regulation strategies in the sessions were assessed with the CPTI's affective components.

In this study, the data consisted of patients from 2016 Fall to 2017 Spring, 2017 Fall to 2018 Spring and also some patients from 2018 Fall.

CHAPTER 3

RESULTS

3.1. Data Analysis

In our data psychotherapy sessions (N = 362) were nested within patients (N = 95) who were nested within therapists (N = 33). Therefore, we used a multilevel modeling approach using MLwin Version 3 (Rasbash, Steele, Browne, & Prosser, 2014).

3.2. Results

The means, standard deviations, and inter-correlations of the variables are presented in Table 3.1 and the results of the full model are portrayed in Table 3.2. When looked at descriptive statistics and inter-correlations between measures per sessions, the results showed that age was significantly associated with affect regulation. Gender was significantly associated with affect regulation, which indicated that boys showed significantly higher levels of affect regulation than girls. Pretreatment psychological problems had a significantly negative association with affect regulation. Expressive language ability of children was significantly associated with affect regulation, indicating that children with better language ability had higher affect regulation. Besides, while total mental state talk had a significantly positive association with affect regulation, pseudo /inappropriate mental state comments had a significantly negative association.

In this data, since multiple clients were treated by the same therapists, it was investigated the degree of interdependency due to therapists. It was used two-level (sessions nested within patients) and three levels (sessions nested within patients nested within therapists) "empty" multilevel models, where Affect Regulation was entered as the dependent variable with no predictor variables. The therapist level ICC was 0.01,

ns., which showed that therapists accounted for about 0.3 % of the variance in Affect Regulation, suggesting that the variance in the session measures is not attributable to differences between therapists. In contrast, between patients ICC was 0.29, $p < 0.01$, accounting for 8 % of the variance in Affect Regulation, suggesting that the variance in the session measure is attributable differences between patients. Thus, the two-level model is appropriate, because not all variance is attributable to session-level variables. Therefore, it was used only the two-level model.

Next, it was run mixed-effects multilevel model with maximum likelihood (ML) estimation to analyze the data that nests change in time within the patients. In the model, total mental state talk and pseudo/inappropriate mental state comments were the predictors and we controlled for gender, age, expressive language ability (TIFALDI), and pre-treatment problem levels (CBCL Total Problems). All variables were grand mean centered. In the model, Affect Regulation was the dependent variable, while total mental state talk significantly and positively predicted a change in affect regulation, pseudo/inappropriate mental state comments did not predict a change in affect regulation. Besides, none of the other variables were significant.

Table 3.1 Descriptive Statistics and Inter-Correlations Between Measures per Sessions.

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
(1)Age	6.85	2.01	-						
(2)Gender	0.60	0.49	-0.15**	-					
(3)Pretreatment Problems	57.01	25.49	-0.21**	0.04	-				
(4)Language	60.51	15.33	0.76**	-0.11*	-0.31**	-			
(5)Pseudo Mental State	0.01	0.01	-0.29**	0.40**	0.11*	-0.23**	-		
(6)Total Mental State	0.08	0.03	0.31**	-0.15**	-0.22**	0.24**	-0.41**	-	
(7)Affect Regulation	3.62	0.52	0.15**	-0.14**	-0.11*	0.19**	-0.12*	0.24**	-

Notes. Gender was dummy coded as (0 = female, 1 = male).

** $p < .01$.

* $p < .05$.

Table 3.2 Summary of Multilevel Model Predicting Affect Regulation by Age, Gender, Language, Pretreatment Problems, Mentalization Capacity in Treatment.

Intercept and Predictors	Model: Affect Regulation		
	β	SE	t -Ratio
Intercept (β_{00})	3.700	0.057	64.91**
Age (β_{01})	-0.016	0.028	0.57
Gender (β_{02})	-0.129	0.075	1.72
Pretreatment Problems (β_{03})	-0.000	0.001	0.00
Language (β_{04})	0.006	0.004	1.5
Pseudo Mental State Talk (β_{05})	-0.973	3.004	0.32
Total Mental State Talk	3.589	1.229	2.92**

** $p < .01$.

* $p < .05$.

CHAPTER 4

DISCUSSION

The aim of this study was to see the relationship between initial mentalization capacities of children and affect regulation over the course of treatment. On the one hand, the use of mental state words was an indication of developed mentalization capacity in childhood. On the other hand, the use of pseudo/ inappropriate mental state words was an indication of mentalization deficit of children. It was expected that, first of all, total mental state words would positively, and pseudo/ inappropriate mental state words would negatively predict affect regulation over the course of treatment. Results revealed that the type of initial mentalization capacity predicts affect regulation differently. Total mental state talk significantly and positively predicted affect regulation over the course of treatment even after controlling for children's pseudo word use. However, contrary to what was expected, pseudo/inappropriate mental state comments did not significantly predict affect regulation. In the light of the hypothesis and the information given above, the results will be discussed under two titles below to show the effect of developed mentalization capacity and/or deficit in mentalization on affect regulation.

4.1.1. Developed Mentalization Capacity on Affect Regulation

Even though mental state talk is not the same with mentalization, the definitions of mentalization refer to mental states in one way or another (Allen, 2006). Thus, higher use of more mental state words can be interpreted as better mentalization capacity in children, because, first of all, ascribing mental states or thinking through mental states demonstrate that child has a better understanding of the mind of the self and the others, and secondly, using mental states in discourse is indispensable for explicit mentalization capacity (Fonagy et al., 2002, Fonagy & Luyten, 2009). Language is a medium of explicit mentalization, so the use of mental state words in speech is an

indication of more solid explicit mentalization ability to express and to organize internal states and experiences (Allen et al., 2008). With the ability of naming and comprehending mental states of self and the others, child can control his/her mental processes better and so in turn has higher emotional and behavioral control (Sharp, 2006). Under these circumstances, it can be said that every single mental state utterance is valuable in evaluating the internal world of the children (Allen et al., 2008). By the virtue of being verbal, conscious, deliberative and reflective, explicit mentalization requires attention, intention, awareness, and effort. Therefore, this capacity provides the child with a better ability to solve problems and handle with them (Fonagy & Luyten, 2009). Individuals with solid explicit mentalization capacities can represent their negative emotions verbally and they can coherently organize themselves by achieving adaptive distance from those affective states (Allen et al., 2008; Fonagy & Target, 2007). And during therapy, the reflection of the level of explicit mentalization can be observed. For example, during therapy, patients with low explicit mentalization capacity are easily affected and confused under intense arousal, attachment related situations and negative emotions. As a result, it is more difficult for those patients to change and progress with the therapy and to change the automatic arousal regarding internal states of others (Arntz, Klokman, and Siedwerde, 2005; Arntz, Bernstein, Oorschot, Robson, & Schobre, 2006). In contrast, when the patients have solid explicit mentalization capacity, talking and naming powerful emotions and playing emotionally loaded scenarios are less threatening (Allen et al., 2008). So, child can play with reality by transforming, changing and revising the play, which in turn makes him/her know the internal and external states of himself/herself better. As a result, child can regulate his/her emotions in the play and finally benefit from the therapy (Verheugt-Pleiter, 2008; Fonagy & Target, 1996).

In addition, children who have better mentalizing ability are less likely experience an activation of their attachment system during interactions with others, as they are more likely to interpret and perceive others' responses as benign, rather than threatening. Therefore, a great amount of mental space is created to mentalize and be

in-relation with others (George & Solomon, 1996). So, in therapy, a child with a better mentalization capacity will find it easier to develop a relation with his/her therapist and to play adaptive and regulative play. Higher engagement in pretend play means higher use of mental state talk, which in turn supports emotion regulation (Galyer & Evans, 2001). Besides, when those children are playing, fantasy and reality are not separated from each other for them (Fonagy & Target, 1998). By being in mentalizing mode they can experience mental states as representations, thus play can serve as a fertile area for the use and understanding of mental states. This 'as if' attitude served by play characters through representations leads to the exploration of various types of mental states (Fonagy & Target, 1998). To facilitate mentalizing, therapist can comment on mental content of play characters, child's behaviors, or play in general. Therapist can identify mental states underlying child's behavior and play, or can verbalize the intentions of the play characters, significant others of child, or reflect the uniqueness of the child's mental world (Fonagy, 2000). For the children with developed mentalization capacity, it will be easier to regulate themes, thoughts and emotions raised in the play, or to understand the connections created and told by therapist during play, or organize his/her own experiences because he/she has an access to a sense of self, structured and secured with mental states (Verheugt-Pleiter, 2008). And when the child is able to perceive play characters and himself/herself as having an internal world, this brings about regulation of affects for the child in play (Target & Fonagy, 1996, Fonagy et al., 2002).

Positive prediction of initial total mental state talk of children on affect regulation in play during therapy may reveal that children who start with better mentalization capacity gain even higher capacity with the help of therapist. With the help of the feelings aroused in the child during the therapy, the child learns to think about those feelings, which is essential to control these emotions effectively, to regulate the intensity and duration of these emotions, and to learn to express these feelings to others and to his/her own self (Allen, Bleiberg, Haslam-Hopwood, 2003). According to Fonagy and colleagues, it is called as 'mentalized affectivity'. It is a term more used

for the improved mentalization capacity with the help psychotherapy. Mentalized affectivity consists of three elements, which are identifying, modulating, and expressing affects. Mentalized affectivity is also in relation with advanced affect regulation capacity and therefore provides the subject with the discovery of his/her own affect states. It defines how affect regulation is shaped through mentalization (Fonagy et al., 2002).

4.1.2. Mentalization Deficit on Affect Regulation

Since the result is against our expectation, it was decided to examine the data qualitatively in order to have a better understanding. When the children who had high levels pseudo/inappropriate mental state words taken into account, it was revealed that they mostly chose gross-motor or game play, most probably in order to protect themselves from the dysregulation that may arise from symbolic play. Those children keep away from imaginary/symbolic play mostly at the beginning of the therapy and prefer other types of plays such as board games, and gross-motor plays like playing football. On the first two sessions with children with high levels of pseudo words, fantasy play was chosen in 10 sessions (38.55%), while other types of play were preferred in 16 sessions (61.45%).

In our data, two of children (UŞK and MHS) who had high level use of pseudo/inappropriate mental state comments preferred game play for every coded session. Besides, it was seen that they had average/high level of affect regulation at those coded play sessions. This information is vital, because it was known that game/structured plays contain children's uncomfortable feelings and unacceptable actions and thoughts (Bellinson, 2013). Structured plays like game play may enable children to regulate the level of frustration, anxiety and anger during play (Oren, 2008). Thus, it can be easier for children to regulate emotions during structured play, as they can predict what will happen during structured board game rather than fantasy play, which can be thought as having a connection with the unconsciousness. And in

psychodynamic therapy, therapist continues with the material child brings to play room, so he/she does not push the child to play another game. Thus, child can maintain the regulation phase with structured play (Bellinson, 2000).

A more detailed investigation of the data revealed that another child with similar levels of pseudo MST (MT) started the therapy with gross motor and game play, and then moved to the symbolic play, demonstrating average/high level of affect regulation for every coded sessions. This indicates that over the course of the therapy, children may move from structured play to fantasy play as they acquire functional capacities. When the time comes, the child may be ready to regulate emotions raised in fantasy play (Vergeut-Pleiter, 2008). Therefore, in this study, we did not observe dysregulation in those children's play due to the way the play was organized as a result of play type preference. It may be that the result was not significant since we assessed affect regulation within play setting.

The quality of fantasy play can be another reason why we could not find significant effect as a result of analysis of affect regulation in play. In our data, we also observed that even though some children with high pseudo/inappropriate level preferred fantasy play and show good level of affect regulation. They may stay in 'pretend mode' and used play as a defensive strategy to distance themselves from disturbing emotions. Boundary between fantasy and reality can be very distinct for them, thus enabling them to protect themselves from threatening and painful mental states and to continue to play (Zevalnik, 2008). They can entirely refuse the reflection of their internal world on the external world by staying at pretend mode. This type of play can be easily confused with healthy play, so the therapist needs to pay close attention to pretend mode. Child seems to have developed symbolic play capacity, but actually he/she cannot integrate his/her reality to his/her play. Also, during this type of plays, child does not let the therapist talk about play situation, about the relation between therapist and child, or about the issues outside the therapy. And when therapist makes a comment about external reality, they can stop playing because the boundary

between fantasy and reality disappeared. Child uses the pretend mode only as a defense to prevent himself/herself from affect dysregulation (Verheugt-Pleiter, 2008).

Below there are two short vignettes from the play segments of two children (ESS and MCU) who had high level of pseudo mental state comments. These two sessions are from the beginning of therapy for both children. They preferred fantasy play and they both showed average/high affect regulation. They played without disruption with good level of modulation during play until the therapist made a comment that made the child remember reality,:

ESS 7th Session:

Ç: soldiers are gathering, now other soldiers are going home (soldiers are walking) when they arrived (one screamed) 'Ah! Everything in my house was stolen!', I will catch them (he runs) then he gave up...Other soldiers also came to the base and they did not dead, they are alive. They decide to protect their vehicles. They have another ambulance and also a plane...my soldiers are ready and we attack on your soldiers, let's create your base...your team is small, our team is big. We are attacking now

T: We are occupied by your team

Ç: I will kick these enemies

T: You get angry and hit the soldiers

Ç: I hate this soldiers. Let's tidy up, and play another game

As soon as the therapist made a comment from outside of play about the child's own self, he had difficulty regulating himself but at that time he decided to end the play. Due to our coding system, we only coded the longest play segment, and did not coded the part after the play is ended. Therefore, in the coded play segment he had showed average affect regulation.

MCU 11the Session:

Ç: *There is big wave, and monster is coming...route is changing, route is changing (he is moving the ship in the sand) ...Where is the captain, 'ah captain route has been changed'*

T: *How big is this wave?!*

Ç: *Yes, ship is almost broken!...*

T: *It is really difficult for the ship*

Ç: *Ship is hitting the rock and taking wateer!*

T: *oh it hit the rock!*

Ç: *...every where is sand, we should put them to the truck, you will be truck*

T: *this truck is totally loaded with sand, pity, truck, how it will move...how much sand you loaded to me, how can I move (child empties sand from truck) aa the sand is emptied!*

Ç: *started again...it is still continuing (child puts sand to truck)*

T: *still continue, he does not think about me*

Ç: *when the time will finish?*

T: *We still have 2 minutes*

Ç: *okey, we can tidy up*

The situation is also similar in this piece of play segment, when the therapist made a comment about play situation connected to the child, he got far away from play and asked about the remaining time and then finished the game before time is up.

As can be seen in the examples, children seemed like controlling their emotions in play until a comment came from outside world, pushes the child away from playing; which indicates that they may be playing defensively with the help of pretend mode. Therefore, this can be the reason why children who use pseudo/inappropriate mental state comments did not show affect dysregulation in play.

Furthermore, in this study, the data was not divided according to diagnosis (internalizing or externalizing), total behavior problems were controlled. This also can be another reason why we could not find significant result. In literature, it is known that children who make use of inappropriate attributions, which can be called as distorted and pseudo mentalizing, are children with externalizing problems (Sharp, 2006; Sharp et al., 2006; Sharp et al., 2007, Coşkun, 2018). If the effect of pseudo/inappropriate mental state comments on affect regulation in externalizing children and internalizing children are taken into account separately, the results could be supportive of our expectation with externalizing children.

In addition, mentalization deficiencies can arise especially when the child is triggered by attachment related issues and/or when the child faces emotionally overwhelmed situations and intense interpersonal relations (Fonagy & Allison, 2012). And in this study, initial mentalization capacity was assessed with the instruments including stories related to attachment figures. So, a child who has a fragile mentalization capacity does not know how to cope with emotionally intense thoughts and feelings about attachment figures, results in higher arousal and non-mentalizing reactions. Under those circumstances, the child may interpret self's and others' minds malevolent and using more pseudo/ inappropriate mental state words (Fonagy & Allison, 2012). But, after the beginning of the therapy, child can feel secure with therapist who provides a safe and calming environment (Winnicott, 1982). And as a result of therapist's mentalizing interventions during therapy, may decrease the child's need to use of pseudo/inappropriate mental state words with the help of increased mentalization capacity which increases the ability to regulate emotions (Verheught-Pleiter, 2008; Chazan, 2002).

4.2. Clinical Implications

Children who need therapy are coming to therapy suffering from behavioral problems regardless of the severity and the type of the problems. In any case, children

need therapy because of their difficulties in their lives. So, when the therapist deals with the problems of a child, protective factors and strengths of the child may be unknowingly disregarded. But, therapists can benefit from paying attention to the protective factors the child has by not forgetting the problems of the child. A child who comes to the therapy with better developed mentalization capacity may counter the negative effects of his/her characteristics that would hinder the positive outcome of the therapy. Thus, they can develop better affect regulation ability with the facilitative impact of developed mentalization capacity, which is referred to as the use of mental state words in this study. Thus, mentalization capacity can be assessed as a strength of the child in the beginning of and throughout the therapy.

The development of affect regulation paves the way to the development of therapy by providing symptom relief and increase in psychosocial functioning (Verheugt,-Pleiter, 2008). In this study, positive effect of pretreatment mentalization on affect regulation over the course of treatment is able to show us that initial mentalization capacity can be thought as an important factor for therapy prognosis by means of predicting affect regulation. Thus, therapist can focus more on the child's affect regulation reactions as a result of mentalization interventions rather than focusing on symptomatic changes. This holds the potential to make therapy process more effective.

In general, even though therapy is a dynamic process, assessment period before commencing therapy is beneficial for the therapist to understand the client better and to know which techniques and/or approaches suit the needs of the patients the best (Zevalnik, 2008). This study shows the importance of assessing pretreatment mentalization capacity of children, so that the therapist can decide the appropriate mentalization technique to begin the therapy with. Children who start therapy have various mentalization capacities, which is in relation to the nature and severity of the problems children have. So throughout the therapy, therapist needs to be constantly attuned to child's level of mental functioning, and has to decide which kind of relation to seek, and to create contact in the same level which make child feel seen and

understood (Vrouva et al., 2012). For example, if the child has little mentalization capacity, therapist first serves the caring environment in order to provide the child with the space for the development to take place. To achieve this, therapist should be attuned with child's accurate level. If the child is at equivalence mode therapist should have relation through that mode. For example, therapist needs to decide whether the child is ready for the therapist's verbalizations. If the child is not ready and has a little mental space, he/she can interpret verbal intervention as an attack to himself/herself (Verheugt-Pleiter, 2008). Or if the child has better mentalization capacity, interventions can be implied faster and efficiency of therapy increases.

4.3. Limitations and Future Research

This study emphasized the effectiveness of developed mentalization capacity on affect regulation with multilevel analysis. During our study, we are faced with several limitations. First of all, although sample size in this study can be thought as sufficient, it still was relatively small. Larger sample and preferably more time points can provide more advanced methodology and would be better for the generalizability of the results. Moreover, in order not to conduct the research with insufficient sample size, we included patients with different numbers of sessions. Additionally, some patients' therapy sessions were not terminated. Both because the sample size was small and the aim of this study was to see the effect of mentalization capacity regardless of behavioral problems, internalizing and externalizing behavior problems were not investigated separately in the data. Future researches can take this into consideration and separate the data, because those children have different mentalization and affect regulation strategies. And also, pre-post symptomatic assessment can be beneficial to see the effect of mentalization on symptomatic relief with the mediation of affect regulation.

Naturalistic design of this study, which is conducted with patients in psychodynamic therapy, provided us with a direct reflection of clinical work. But the

study without control group design limited in its internal validity even if it had high external validity. In addition, the effect of mentalization capacity on affect regulation in play documented as a strength. Even though we expected to see the influence of improvement during therapy to children's daily lives, it was not possible to tell children's affect regulation capacity outside the therapy setting with the instruments we used. Thus, in addition to the change in affect regulation over the course of treatment, the change in affect regulation outside of the therapy can be assessed in further researches. Because, even if therapists see the changes and/or child feels the change in the ability to control his/her feelings, it is important to assess the parents' observations and how they evaluate the change in the process.

In this study, only pseudo/inappropriate mentalization was assessed as a mentalization deficit. This can also be thought as a strength because it reveals clearer information. But mentalization is a multidimensional concept and there are various kinds of mentalization deficits. The analysis of relation between different mentalization deficits and affect regulation can provide wider picture of the effect of mentalization failures and enables the development of useful clinical interventions regarding different deficits. Another limitation is the assessment of mentalization. Development of pseudo/inappropriate mental state comments' coding criteria were dependent on low RF scoring system (Fonagy et al., 1998). But every single inaccurate comment could not be included in this coding system because of the lack of mental state words, and our caution to not to break the frame of CS-MST (Bekar et al., 2014). Besides, in literature, pseudo mentalization defined as having different characteristics (Sharp & Venta, 2012, Allen et al., 2008), but this coding system focuses more on the inappropriate side of pseudo mentalization. Further studies can look at pseudo mentalization with the help of a more comprehensive assessment tool to capture other aspects of this mentalization deficit, which can provide better results. And in this study, total mental state talk was assessed not by separating the types of mental states (e.g. emotion, cognition, perception, physiological, action-based) from each other. In future studies, types, frequency, variety and causality of mental states can be analyzed.

In this study, affect regulation was created by averaging affect regulation, transition between affects, and appropriateness of affects. But, coding system is giving information about the affect types in the play segment. Affect regulation can change in terms of dominant affect experienced in the sessions. Child can have different level of affect regulation under anger sadness, or anxiety. Therefore, further research can look for the effect of dominant affect in the session.

Affect regulation during sessions were coded by the observer with CPTI. Even if CPTI includes nonverbal characteristics, additional nonverbal assessment tools can give more detail information to analyze the sessions.

In our study, the aim was to see prediction of affect regulation in therapy by different initial mentalization capacities. But in future researches the association between mentalization capacity and the growth of affect regulation can be assessed throughout therapy. In addition to initial mentalization capacity, the relation between mentalization adherence during therapy and affect regulation can be assessed. This can give detailed information about how mentalization capacity influences affect regulation in therapy and the growth of affect regulation over the course of therapy. And in this study only initial mentalization capacities were assessed, future research can investigate pre-post mentalization capacities and the relation of the change through affect regulation. Also, it is important to take into another mechanisms as moderator into consideration. These mechanisms can be the attitude and reactions of the therapists, the characteristics of the therapists and the relation between child and the therapist and etc. When it was looked at the affect regulation during therapy, the effect of therapists can be very crucial. The capacity of mentalization had been developed with the relation to caregiver. Thus, in therapy, child's relation with therapist reflects the child's relation with his/her parents and reflects the level of mentalization capacity. Further research can look at the therapists' effect on affect regulation. Because the ability of therapist can be mediator between mentalization capacity and the affect regulation.

4.4. Conclusion

This study is aimed at investigating the effect of initial mentalization capacity on affect regulation in play over the course of treatment. Findings showed that the effect of different mentalization capacities, which can be either developed or deficient, influence affect regulation over the course of treatment differently. Firstly, the prediction of total mental state talks as developed mentalization capacity on affect regulation was assessed. Secondly, the prediction of pseudo/inappropriate mental state talk as mentalization deficit on affect regulation was investigated.

Findings of this study demonstrated that total mental state talk significantly predicted affect regulation over the course of treatment positively, while pseudo/inappropriate mental state words did not significantly predict affect regulation negatively. But we also know that there can be children that use pseudo/inappropriate mental state words along with appropriate mental state words. This results led us to see the protective effect of developed mentalization capacity of children while gaining affect regulation over the course of treatment and to see how important solid mentalization capacity is for children.

It is hoped that this study encourages the therapist to focus on protective factors of children, to see the importance of mentalization in therapy prognosis, and to realize the importance of assessment period of therapy in general. It is also expected that this study directs researchers to assess the effects of different initial mentalization capacities over the course of treatment and the relation between mentalization and affect regulation on child therapy.

REFERENCES

- Achenbach, T. M., & Edelbrock, C. S. (1981). Behavioral problems and competencies reported by parents of normal and disturbed children aged four through sixteen. *Monographs of the Society for Research in Child Development*, 1-82.
- Achenbach, T. M. (1991). *Manual for the Child Behavior Checklist: 4–18 and 1991 profile*. Burlington, VT: University of Vermont, Department of Psychiatry.
- Achenbach, T. M., & McConaughy, S. (1997). *Empirically based assessment of child and adolescent psychopathology: Practical applications* (2nd ed.). Thousand Oaks, CA US: Sage Publications.
- Achenbach, T. M., & Rescorla, L. A. (2001). *Manual for the ASEBA School-Age Forms & Profiles*. Burlington, VT: University of Vermont, Research Center for Children, Youth, & Families.
- Allen, J. G. (2003). Mentalizing. *Bulletin of the Menninger Clinic*, 67(2), 91–112.
- Allen, J.G. (2006). Mentalizing in practice. In J.G. Allen & P. Fonagy (Eds.), *Handbook of mentalization-based treatment* (pp. 3–30). New York:Wiley.
- Allen, J., Fonagy, P., & Bateman, A. W. (2008). *Mentalizing in clinical practice*. Washington: American Psychiatric Publishing.
- Allen, J. G., Bleiberg, E., & Haslam-Hopwood, T. (2003). Mentalizing as a compass for treatment. *Bulletin of the Menninger Clinic*, 67(1), 1-4.
- Allen, J. G., & Fonagy, P. (Eds.). (2006). *The handbook of mentalization-based treatment*. England: John Wiley & Sons.
- Astington, J. W., Harris, P. L., & Olson, D. R. (Eds.). (1988). *Developing theories of mind*. Cambridge, England: Cambridge University Press.
- Appelbaum, S.A. (1973). Psychological-mindedness: Word, concept and essence. *International Journal of Psychoanalysis*, 54, 35-46.
- Arntz, A., Klokman, J., & Sieswerda, S. (2005). An experimental test of the schema mode model of borderline personality disorder. *Journal of Behavior Therapy and Experimental Psychiatry*, 36(3), 226-239.

- Arntz, A., Bernstein, D., Oorschot, M., Robson, K., & Schobre, P. (2006). Theory of mind in borderline and Cluster-C personality disorder: No evidence for deficits. *Unpublished manuscript, Maastricht University*.
- Baars, B. J. (1993). *A cognitive theory of consciousness*. Cambridge University Press.
- Baron-Cohen, S. (1995). *Mindblindness: An Essay on Autism and Theory of Mind*. Cambridge, MA: Bradford, MIT Press.
- Baron-Cohen, S., Leslie, A. M., & Frith, U. (1985). Does the autistic child have a “theory of mind”? *Cognition, 21*(1), 37-46.
- Baron-Cohen, S., Wheelwright, S., Hill, J., Raste, Y., & Plumb, I. (2001). The “Reading the mind in the eyes” Test revised version: A study with normal adults, and adults with Asperger syndrome or high-functioning autism. *Journal of Child Psychology and Psychiatry and Allied Disciplines, 42*(2), 241–251.
- Bahrack, L. R., & Watson, J. S. (1985). Detection of intermodal proprioceptivevisual contingency as a potential basis of self-perception in infancy. *Developmental Psychology, 21*, 963–973.
- Banerjee, R. (2008). Social cognition and anxiety in children. In C. Sharp, P. Fonagy & I. Goodyer (Eds.), *Social cognition and developmental psychopathology* (pp. 239-269). New York: Oxford University Press.
- Banerjee, R., Henderson, L. (2001). Social- cognitive factors in childhood social anxiety: a preliminary investigation. *Social Development, 10*, 558 – 72.
- Banerjee, R., & Watling, D. (2010). Self-presentational features in childhood social anxiety. *Journal of Anxiety Disorders, 24*(1), 34-41.
- Bamberg, M., & Damrad-Frye, R. (1991). On the ability to provide evaluative comments: Further explorations of children's narrative competencies. *Journal of Child Language, 18*(3), 689-710.
- Barriga, A. Q., Landau, J. R., Stinson, B. L., Liau, A. K., & Gibbs, J.C. (2000). Cognitive distortion and problem behaviors in adolescents. *Criminal Justice and Behavior, 27*, 36-56.

- Bateman, A., & Fonagy, P. (2004). *Psychotherapy for borderline personality disorder* (pp. 529-532). Oxford: Oxford University Press.
- Beebe, B., Lachmann, F., & Jaffe, J. (1997). Mother-infant interaction structures and presymbolic self and object representations. *Psychoanalytic Dialogue*, 7: 133-182.
- Beck, A. T. (1967). *Depression: Clinical, experimental, and theoretical aspects*. University of Pennsylvania Press.
- Beck, A. T., & Clark, D. A. (1997). An information processing model of anxiety: Automatic and strategic processes. *Behaviour Research and Therapy*, 35(1), 49-58.
- Bekar, O. (2014). Mental state talk in mothers' and preschool children's narratives: relation to children's social-emotional functioning and maternal stress. *ProQuest Information & Learning*, AAI3625722.
- 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, United States.
- Bekar, O. & Corapcı, F. (2016). *Anlatılardaki Zihin Durumlarını Kodlama Sistemi*. Unpublished manuscript, Department of Psychology, Ozyegin University, Bogazici University, Turkey.
- Bellinson, J. (2000). Shut up and move: The uses of board games in child psychotherapy. *Journal of Infant, Child, and Adolescent Psychotherapy*, 1(2), 23-41.
- Bellinson, J. (2013). Games children play: Board games in psychodynamic psychotherapy. *Child and Adolescent Psychiatric Clinics*, 22(2), 283-293.
- Berument, S. K. ve Güven, A. G. (2013). Türkçe İfade Edici ve Alıcı Dil (TİFALDİ) Testi: I. Alıcı Dil Kelime Alt Testi Standardizasyon ve Güvenilirlik Geçerlik Çalışması. *Türk Psikiyatri Dergisi*, 24(3), 192-201.

- Bettmann, J. E., & Lundahl, B. W. (2007). Tell me a story: A review of narrative assessments for preschoolers. *Child and Adolescent Social Work Journal, 24*(5), 455-475.
- Bizzi, F., Ensink, K., Borelli, J. L., Mora, S. C., & Cavanna, D. (2018). Attachment and reflective functioning in children with somatic symptom disorders and disruptive behavior disorders. *European Child & Adolescent Psychiatry*.
- Blair, R. J. R. (2003). Neurobiological basis of psychopathy. *British Journal of Psychiatry, 182*, 5-7.
- Bretherton, I., Ridgeway, D. & Cassidy, J. (1990). Assessing internal working models of the attachment relationship: An attachment story completion task for 3-year-olds. In M. Greenberg, D. Cicchetti & M. Cummings (Eds.), *Attachment in the preschool years: Theory, research and intervention* (pp. 273-308). Chicago: University of Chicago Press.
- Brown, J. R., Donelan-McCall, N., & Dunn, J. (1996). Why talk about mental states? The significance of children's conversations with friends, siblings, and mothers. *Child development, 67*(3), 836-849.
- Bowlby, J. (1971). *Attachment and Loss*. Harmondsworth : Penguin Books
- Bowlby, J. (1973). *Attachment and Loss, Vol. 2: Separation: Anxiety and anger*. London: Hogarth Press and Institute of Psycho-Analysis.
- Cantaş, N. (2018). *Attachment security and mental state talk among mother-father-child triads* (Unpublished master's thesis). İstanbul Bilgi Üniversitesi, İstanbul, Turkey.
- Carpendale, J. I., & Chandler, M. J. (1996). On the distinction between false belief understanding and subscribing to an interpretive theory of mind. *Child Development, 67*(4), 1686-1706.
- Chazan, S. E. (2000). Using the children's play therapy instrument (CPTI) to measure the development of play in simultaneous treatment: A case study. *Infant*

Mental Health Journal: Official Publication of The World Association for Infant Mental Health, 21(3), 211-221.

Chazan, S. E. (2001). Toward a nonverbal syntax of play therapy. *Psychoanalytic Inquiry*, 21(3), 394-406.

Chazan, S. (2002). *Profiles of play: Assessing and observing structure and process in play therapy*. Jessica Kingsley Publishers.

Chazan, S. E., & Wolf, J. (2002). Using the Children's Play Therapy Instrument to measure change in psychotherapy: The conflicted player. *Journal of Infant, Child, and Adolescent Psychotherapy*, 2(3), 73-102.

Choi-Kain, L. W., & Gunderson, J. G. (2008). Mentalization: Ontogeny, assessment, and application in the treatment of borderline personality disorder. *American Journal of Psychiatry*, 165(9), 1127-1135.

Cole, P. M., Martin, S. E., & Dennis, T. A. (2004). Emotion regulation as a scientific construct: Methodological challenges and directions for child development research. *Child Development*, 75(2), 317-333.

Cole, P. M., Michel, M. K., & Teti, L. O. D. (1994). The development of emotion regulation and dysregulation: A clinical perspective. *Monographs of the Society for Research in Child Development*, 59(2-3), 73-102.

Cook, E. T., Greenberg, M. T., & Kusche, C. A. (1994). The relations between emotional understanding, intellectual functioning, and disruptive behavior problems in elementary-school-aged children. *Journal of abnormal child psychology*, 22(2), 205-219.

Crick, N. R., & Dodge, K. A. (1996). Social information-processing mechanisms in reactive and proactive aggression. *Child Development*, 67(3), 993-1002.

Crick, N. R. & Grotpeter, J. K. (1996). Relational aggression, gender, and social psychological adjustment. *Child Development*, 66, 710-722.

- Csibra, G., & Gergely, G. (1998). The teleological origins of mentalistic action explanations: A developmental hypothesis. *Developmental Science, 1*, 255-259.
- Coşkun, A. (2018). *Associations between use of mental state talk and externalizing and internalizing problems* (Unpublished master's thesis). İstanbul Bilgi Üniversitesi, İstanbul, Turkey.
- Cutting, A., & Dunn, J. (1999). Theory of mind, emotion understanding, language and family background: Individual differences and inter-relations. *Child Development, 70*(4), 853-865.
- Daleiden, E. L., & Vasey, M. W. (1997). An information processing perspective on childhood anxiety. *Clinical Psychology Review, 17*(4), 407–429.
- Denham, S. (1986). Social cognition, prosocial behavior, and emotion in preschoolers: Contextual validation. *Child Development, 57*, 194-201.
- Denham, S. A., Zoller, D., & Couchoud, E. A. (1994). Socialization of preschoolers' emotion understanding. *Developmental Psychology, 30*(6), 928.
- Dodge, K. A. (1993). Social-cognitive mechanisms in the development of conduct disorder and depression. *Annual Review of Psychology, 44*, 559–584.
- Dodge, K. A., & Newman, J. P. (1981). Biased decision-making processes in aggressive boys. *Journal of Abnormal Psychology, 90*, 375— 379.
- Dyer, J. R., Shatz, M., & Wellman, H. M. (2000). Young children's storybooks as a source of mental state information. *Cognitive Development, 15*(1), 17-37.
- Dorlach, G. (2016). *How mothers and children talk about minds: the relationship between mentalization attachment security and affect regulation* (Unpublished master's thesis). İstanbul Bilgi Üniversitesi, İstanbul, Turkey.
- Eisenberg, N., Spinrad, T. L., & Eggum, N. D. (2010). Emotion-related self-regulation and its relation to children's maladjustment. *Annual Review of Clinical Psychology, 6*, 495-525.

- Eisenberg, N., Cumberland, A., Spinrad, T. L., Fabes, R. A., Shepard, S. A., Reiser, M.,..., & Guthrie, I. K. (2001). The relations of regulation and emotionality to children's externalizing and internalizing problem behavior. *Child Development, 72*(4), 1112-1134.
- Eisenberg, N., Sadovsky, A., Spinrad, T. L., Fabes, R. A., Losoya, S. H., Valiente, C., ..., & Shepard, S. A. (2005). The relations of problem behavior status to children's negative emotionality, effortful control, and impulsivity: concurrent relations and prediction of change. *Developmental Psychology, 41*(1), 193.
- Eisenberg, N., & Spinrad, T. L. (2004). Emotion-related regulation: Sharpening the definition. *Child development, 75*(2), 334-339.
- Ensink, K. (2003). *Assessing theory of mind, affective understanding and reflective functioning in primary school-aged children*. Unpublished doctoral dissertation. London: University College London.
- Epkins, C. C. (1996). Cognitive specificity and affective confounding in social anxiety and dysphoria in children. *Journal of Psychopathology and Behavioral Assessment, 18*, 83–101.
- Erol, N., Arslan, B. L., & Akçakın, M. (1995). The adaptation and standardization of the Child Behavior Checklist among 6-18 year-old Turkish children. *Eunethdis: European Approaches to Hyperkinetic Disorder. Zürich: Fotoratar, 97-113*.
- Faust, J., & Burns, W. (1991). Coding therapist and child interaction: Progress and outcome in play therapy. *Play Diagnosis and Assessment, 663-690*. Fonagy, P., Gergely, G., Jurist, E., & Target, M. (2002). *Affect Regulation, Mentalization, and the Development of the Self*. New York: Other Press.
- Fearon, P., Target, M., Sargent, J., Williams L.L., McGregor, J., Bleiberg, E., Fonagy, P. (2006). Short term mentalization and relational therapy (Smart): An integrative family therapy for children and adolescents. In Allen, J.G. & Fonagy,

- P. (Eds.), *The handbook of mentalization-based treatment*. (pp. 201-222). Hoboken, NJ, US: John Wiley & Sons Inc.
- Findling, J. H., Bratton, S. C., & Henson, R. K. (2006). Development of the trauma play scale: An observation-based assessment of the impact of trauma on play therapy behaviors of young children. *International Journal of Play Therapy, 15*(1), 7.
- Freud, S. (1911). Formulations on the two principles of mental functioning. In: J. Strachey (Ed.), S.E., Vol. 12 (pp. 213-216). London: Hogarth Press.
- Fonagy, P. (1995). Playing with reality: The development of psychic reality and its malfunction in borderline personalities. *The International Journal of Psychoanalysis, 76*(1), 39.
- Fonagy, P. (2000). Attachment and borderline personality disorder. *Journal of the American Psychoanalytic Association, 48*, 1129–1146.
- Fonagy, P. (2006). The mentalization-focused approach to social development. In Allen, J.G. & Fonagy, P. (Eds.), *The handbook of mentalization-based treatment*. (pp. 223-232). Hoboken, NJ, US: John Wiley & Sons Inc.
- Fonagy, P., & Allison, E. (2012). What is mentalization? The concept and its foundations in developmental research. *Minding the child: Mentalization-based interventions with children, young people and their families*, 11-34.
- Fonagy, P., Gergely, G., Jurist, E., & Target, M. (2002). *Affect Regulation, Mentalization, and the Development of the Self*. New York: Other Press.
- Fonagy, P., Steele, M., Moran, G., Steele, H., & Higgitt, A. (1991a). The capacity for understanding mental states: The reflective self in parent and child and its significance for security of attachment. *Infant Mental Health Journal, 13*, 200 – 216.
- Fonagy, P., Steele, M., Moran, G. S., Steele, H., & Higgitt, A. C. (1991b). Measuring the ghost in the nursery: a summary of the main findings of the Anna Freud Centre/University College London parent–child study. *Bulletin of the Anna Freud Centre, 14*, 115–131.

- Fonagy, P. & Target, M. (1996). Playing with reality: I. Theory of mind and the normal development of psychic reality. *International Journal of Psychoanalysis*, 77, 217-223.
- Fonagy, P., & Target, M. (1997). Attachment and reflective function: Their role in self-organization. *Development and Psychopathology*, 9(04), 679-700.
- Fonagy, P., & Target, M. (1998). Mentalization and the changing aims of child psychoanalysis. *Psychoanalytic Dialogues*, 8(1), 87-114.
- Fonagy, P., & Target, M. (2000). Playing with Reality: III. The persistence of dual psychic reality in borderline patients. *International Journal of Psychoanalysis*, 81: 853-874.
- Fonagy, P., & Target, M. (2003). *Psychoanalytic theories: Perspective from developmental psychopathology*. Routledge.
- Fonagy, P., & Target, M. (2006). The mentalization-focused approach to self-pathology. *Journal of Personality Disorders*, 20(6), 544-576.
- Fonagy, P., Target, M., & Ensink, K. (2000). *The affect task: Unpublished measure and coding manual*. London: Anna Freud Centre.
- Fonagy, P., & Target, M. (2007). Playing with reality: IV. A theory of external reality rooted in intersubjectivity. *International Journal of Psychoanalysis*, 88, 917-937.
- Fonagy, P., Bateman, A., Luyten, P. (2012). Introduction and Overview. In A. Bateman, & P. Fonagy, P. (Eds). *Handbook of Mentalizing in Mental Health Practice*. (pp. 3-42).
- Fonagy, P., Bateman, A., & Bateman, A. (2011). The widening scope of mentalizing: A discussion. *Psychology and Psychotherapy: Theory, Research and Practice*, 84(1), 98-110.
- Fonagy, P., & Luyten, P. (2009). A developmental, mentalization-based approach to the understanding and treatment of borderline personality disorder. *Development and Psychopathology*, 21(4), 1355-1381.

- Fonagy, P., & Luyten, P. (2012). The multidimensional construct of mentalization and its relevance to understanding borderline personality disorder. In A. Fotopoulou, D. Pfaff, & M.A. Conway (Eds.). *From the couch to the lab: Trends in psychodynamic neuroscience*. (pp. 405-426). Oxford: Oxford UP.
- Fonagy, P., Target, M., Steele, H., & Steele, M. (1998). Reflective functioning manual, version 5.0, for application to adult attachment Interviews. London: University College London.
- Galyer, K. T., & Evans, I. M. (2001). Pretend play and the development of emotion regulation in preschool children. *Early Child Development and Care*, 166(1), 93-108.
- Gergely, G., & Watson, J. (1996). The social biofeedback model of parental affect mirroring. *International Journal of Psycho-Analysis*, 77, 1181–1212.
- Gergely, G., & Csibra, G. (1997). Teleological reasoning in infancy: The infant's naive theory of rational action. A reply to Premack and Premack. *Cognition*, 63: 227-233.
- George, C., & Solomon, J. (1996). Representational models of relationships: Links between caregiving and attachment. *Infant Mental Health Journal: Official Publication of The World Association for Infant Mental Health*, 17(3), 198-216.
- George, C., Kaplan, N., & Main, M. (1985). The Adult Attachment Interview. Unpublished manuscript, University of California at Berkeley
- Gitlin-Weiner, K., Sandgrund, A., & Schaefer, C. E. (Eds.). (2000). *Play diagnosis and assessment*. Wiley.
- Gocek, E., Cohen, N., & Greenbaum, R. (2008). *Mothers' Mental State Language and Emotional Availability in Clinical Vs. Nonclinical Populations*. VDM Verlag.
- Gopnik, A. (1993). How we know our minds: The illusion of first-person knowledge of intentionality. *Behavioral and Brain Sciences*, 16, 1- 14, 29- 113.

- Greenspan, S. I., & Lieberman, A. F. (1994). Representational elaboration and differentiation: a clinical-quantitative approach to the assessment of 2-to 4-year-olds. *Children at play*, 3-32.
- Greenberg, M. T., Speltz, M. L., DeKlyen, M., & Endriga, M.C. (1991). Attachment security in pre-schoolers with and without externalizing behavior problems: A replication. *Development and Psychopathology*, 3, 413–430.
- Griffin, R. S., & Gross, A. M. (2004). Childhood bullying: Current empirical findings and future directions for research. *Aggression and Violent Behavior*, 9(4), 379-400.
- Gross, J. J. (Ed.). (2013). *Handbook of emotion regulation*. Guilford publications.
- 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(6), 674-689.
- Ha, C., Sharp, C., & Goodyer, I. (2011). The role of child and parental mentalizing for the development of conduct problems over time. *European Child & Adolescent Psychiatry*, 20(6), 291-300.
- Halfon, S. (2017). Play profile constructions: An empirical assessment of children's play in psychodynamic play therapy. *Journal of Infant, Child, and Adolescent Psychotherapy*, 16(3), 219-233.
- Halfon, S., & Bulut, P. (2017). Mentalization and the growth of symbolic play and affect regulation in psychodynamic therapy for children with behavioral problems. *Psychotherapy Research*, 1-13.
- Halfon, S., Çavdar, A., Orsucci, F., Schiepek, G. K., Andreassi, S., Giuliani, A., & de Felice, G. (2016). The non-linear trajectory of change in play profiles of three children in psychodynamic play therapy. *Frontiers in psychology*, 7, 1494.
- Halfon, S., Yılmaz, M., & Çavdar, A. (2019). Mentalization, session-to-session negative emotion expression, symbolic play, and affect regulation in psychodynamic child psychotherapy. *Psychotherapy (Chicago, Ill.)*.

- Halfon, S., Bekar, O., & Gürleyen, B. (2017a). An empirical analysis of mental state talk and affect regulation in two single-cases of psychodynamic child therapy. *Psychotherapy, 54*(2), 207.
- Halfon, S., Bekar, Ö., Ababay, S., & Dorlach, G. Ç. (2017b). Dyadic mental state talk and sophistication of symbolic play between parents and children with behavioral problems. *Journal of Infant, Child, and Adolescent Psychotherapy, 16*(4), 291-307.
- Happé, F., & Frith, U. (1996). Theory of mind and social impairment in children with conduct disorder. *British Journal of Developmental Psychology, 14*(4), 385-398.
- Harris, P. L. (1999). Individual differences in understanding emotion: The role of attachment status and psychological discourse. *Attachment and Human Development, 1*, 307–324.
- Hooker, C.I., Verosky, S.C., Germine, L.T., Knight, R.T., & D'Esposito, M. (2008). Mentalizing about emotion and its relationship to empathy. *Social Cognitive and Affective Neuroscience, 3*(3), 204-217.
- Howe, P. A., & Silvern, L. E. (1981). Behavioral observation of children during play therapy: Preliminary development of a research instrument. *Journal of Personality Assessment, 45*(2), 168-182.
- Hughes, C., & Dunn, J. (1998). Understanding mind and emotion: longitudinal associations with mental-state talk between young friends. *Developmental Psychology, 34*(5), 1026-1037.
- Jenkins, J. M., Turrell, S. L., Kogushi, Y., Lollis, S., & Ross, H. S. (2003). A longitudinal investigation of the dynamics of mental state talk in families. *Child development, 74*(3), 905-920.
- Katznelson, H. (2014). Reflective functioning: A review. *Clinical Psychology Review, 34*, 107–117.

- Kernberg, P. F., Chazan, S. E., & Normandin, L. (1998). The children's play therapy instrument (CPTI): description, development, and reliability studies. *The Journal of psychotherapy practice and research*, 7(3), 196.
- Lang, P. J. (1980). Self-assessment manikin. *Gainesville, FL: The Center for Research in Psychophysiology, University of Florida*.
- Leary, M. R. (2007a). Motivational and emotional aspects of the self. *Annu. Rev. Psychol.*, 58, 317-344.
- Leary, M.R. (2007b). How the self became involved in affective experience: Three sources of self-reflective emotions. In J.L. Tracy, R.W. Robins, & J.P. Tangney (Eds.). *The Self-Conscious Emotions: Theory and Research*. (pp.38-52). New York, NY: Guilford Press.
- Lemma, A., Target, M., & Fonagy, P. (2010). The development of a brief psychodynamic protocol for depression: Dynamic Interpersonal Therapy (DIT). *Psychoanalytic Psychotherapy*, 24(4), 329-346.
- Leslie, A. M. (1994). TOMM, ToBy, and agency: Core architecture and domain specificity. In L. Hirschfeld & S. Gelman (Eds.), *Mapping the mind: Domain specificity in cognition and culture* (pp. 119–148). New York: Cambridge University Press.
- Leweke, F., Bausch, S., Leichsenring, F., Walter, B., & Stingl, M. (2009). Alexithymia as a predictor of outcome of psychodynamically oriented inpatient treatment. *Psychotherapy Research*, 19(3), 323-331.
- Lieberman, M. D. (2007). Social cognitive neuroscience: a review of core processes. *Annu. Rev. Psychol.*, 58, 259-289.
- Lindner, T.W. (1990). Transdisciplinary play-based assessment. Baltimore, MD: Paul H. Brookes. Schafer, C.E., Gitlin, K., & Sandgrund, A. (Eds.). *Play diagnosis and assessment*. New York: Wiley.
- Lutyen, P.; Fonagy, P.; Lowyck, B.; Vermote, R. Assessment of Mentalization. In Bateman, A., & Fonagy, P. (2012). *Handbook of mentalizing in mental health practice*. American Psychiatric Pub.

- Main, M. (1991). Metacognitive knowledge, metacognitive monitoring, and singular (coherent) vs. multiple (incoherent) models of attachment: Findings and directions for future research. In C. M. Parkes, J. Stevenson-Hinde, & P. Marris (Eds.), *Attachment across the life cycle* (pp. 127 – 159). London: Tavistock-Routledge.
- Mayer, M. (1969). *Frog, where are you?* New York: Dial Press.
- Mayes, L. C. (2000). A developmental perspective on the regulation of arousal states. *Seminars in perinatology*, 24(4), p.267-279).
- McCallum, M., Piper, W.E., Ogrodniczuk, J.S., & Joyce, A.S. (2003). Relationships among psychological mindedness, alexithymia and outcome in four forms of short term psychotherapy. *Psychology and Psychotherapy: Theory, Research and Practice*, 76, 133_144.
- Meins, E. (1997). *Security of Attachment and the Social Development of Cognition*. London: Psychology Press.
- Meins, E. (1999). Sensitivity, security, and internal working models: Bridging the transmission gap. *Attachment and Human Development*, 1, 325–342.
- Midgley, N., O’Keeffe, S., French, L., & Kennedy, E. (2017). Psychodynamic psychotherapy for children and adolescents: an updated narrative review of the evidence base. *Journal of Child Psychotherapy*, 43(3), 307-329.
- Müller, C., Kaufhold, J., Overbeck, G., & Grabhorn, R. (2006). The importance of reflective functioning to the diagnosis of psychic structure. *Psychology and Psychotherapy: Theory, Research and Practice*, 79(4), 485-494.
- Neisser, U. (1988). Five kinds of self-knowledge. *Philosophical Psychology*, 1, 35 59.
- O’Connor, T. G., & Hirsch, N. (1999). Intra- Individual Differences and Relationship-Specificity of Mentalising in Early Adolescence. *Social Development*, 8(2), 256-274.

- Ogrodniczuk, J.S., Piper, W.E., & Joyce, A.S. (2005). The negative effect of alexithymia on the outcome of group psychotherapy for complicated grief: what role might the therapist play? *Comprehensive psychiatry*, *46*, 206-213.
- Ogrodniczuk, J.S., Piper, W.E., & Joyce, A.S. (2008). Alexithymia and therapist reactions to the patient: Expression of positive emotion as a mediator. *Psychiatry*, *71*, 257-265.
- Ogrodniczuk, J.S., Piper, W.E., & Joyce, A.S. (2010). Effect of alexithymia on the process and outcome of psychotherapy: a programmatic review. *Psychiatry Research*. doi:10.1016/j.psychres.2010.04.026.
- Ostler, T., Bahar, O. S., & Jessee, A. (2010). Mentalization in children exposed to parental methamphetamine abuse: relations to childrens mental health and behavioral outcomes. *Attachment & Human Development*, *12*(3), 193-207.
- Oppenheim, D. (2006). Child, parent and parent-child emotion narratives: Implications for developmental psychopathology. *Development and Psychopathology*, *18*, 771-790.
- Oren, A. (2008). The use of board games in child psychotherapy. *Journal of child psychotherapy*, *34*(3), 364-383.
- Piaget, J. (1936). *The Origins of Intelligence in Children*. New York: International Universities Press, 1952.
- Pellegrini, A. D., & Smith, P. K. (Eds.). (2005). *The nature of play: Great apes and humans*. Guilford Press.
- Perner, J. (2000). Memory and theory of mind. In: E. Tulving and F. I. M. Craik (Eds.), *The Oxford Handbook of Memory* (pp. 297-312). Oxford: Oxford University Press.
- Premack, D., & Woodruff, G. (1978). Does the Chimpanzee Have a Theory of Mind. *Behavioral and Brain Sciences*, *1*(4), 515-526.
- Rasbash, J., Steele, F., Browne, W. J., Goldstein, H., & Charlton, C. (2014). A user's guide to MLwiN. *Centre for Multilevel Modelling, University of Bristol, UK*.

- Rosnay, M. & Harris, P.L. (2002). Individual differences in children's understanding of emotion: The role of attachment. *Attachment and Human Development*, 4, 39-54.
- Rumpf, A. L., Kamp-Becker, I., Becker, K., & Kauschke, C. (2012). Narrative competence and internal state language of children with Asperger Syndrome and ADHD. *Research in Developmental Disabilities*, 33(5), 1395-1407.
- Russ, S. (1987). Assessment of cognitive affective interaction in children: Creativity, fantasy, and play research. In J. Butcher & C. Spielberger (Eds.), *Advances in personality assessment* (Vol. 6, pp. 141–155). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Russ, S. (1993). Affect and creativity: The role of affect and play in the creative process. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Schaefer, C. E., Gitlin, K., & Sandgrund, A. (Eds.). (1991). *Play diagnosis and assessment* (Vol. 152). Wiley-Interscience.
- Schmeets, M. G. C. (2008). Theoretical Concepts. In Verheugt-Pleiter, A. J. E., Zevalkink, J., & Schmeets, M. G. C. (Eds.). *Mentalizing in children therapy*. (pp. 7-20). London: Karnac.
- Seja, A.L. & Russ, S. (1999). Children's fantasy play and emotional understanding. *Journal of Clinical Child Psychology*. 28(2), 269-277.
- Shields, A., & Cicchetti, D. (1997). Emotion regulation among school-age children: The development and validation of a new criterion Q-sort scale. *Developmental psychology*, 33(6), 906.
- Sharp, C., Williams, L. L., Ha, C., Baumgardner, J., Michonski, J., Seals, R., Patel, A. B., Bleiberg, E., Fonagy, P. (2009). The development of a mentalization based outcomes and research protocol for an adolescent inpatient unit. *Bulletin of the Menninger Clinic*, 73(4), 311-338.
- 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(1), 197-214.
- 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(1), 181–202.
- Sharp, C., Pane, H., Ha, C., Venta, A., Patel, A. B., & Fonagy, P. (2011). Theory of mind and emotion regulation difficulties in adolescents with borderline traits. *Journal of the American Academy of Child and Adolescent Psychiatry*, 50(6), 563–573.
- Sharp, C., & Fonagy, P. (2008). The parent's capacity to treat the child as a psychological agent: Constructs, measures and implications for developmental psychopathology. *Social Development*, 17(3), 737–754.
- Sharp, C. (2006). Mentalizing Problems in Childhood Disorders. In J.G. Allen & P. Fonagy (Eds.), *Handbook of mentalization-based treatment* (pp. 3–30). New York: Wiley.
- Sharp, C., & Venta, A. (2012). Mentalizing problems in children and adolescents. In N. Midgley & I. Vrouva (Eds.), *Minding the child: Mentalization-based interventions with children, young people and their families* (pp. 35-53). London: Routledge.
- Shirk, S., & Burwell, A. (2010). Research on therapeutic processes: In psychodynamic psychotherapy with children and adolescents. *Assessing change in psychoanalytic psychotherapy of children and adolescents: Today's challenge*, 177-205.
- 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(4), 939.

- Slade, A. (1994). Making meaning and making believe: Their role in the clinical process. *Children at play: Clinical and developmental approaches to meaning and representation*, 81-107.
- Slade, A., Grienenberger, J., Bernbach, E., Levy, D., & Locker, A. (2005). Maternal reflective functioning, attachment and the transmission gap: A preliminary study. *Attachment and Human Development*, 7(3), 283–298.
- Sroufe, L. A. (1996). *Emotional development: The organization of emotional life in the early years*. New York: Cambridge University Press.
- Steele, H., Steele, M., Croft, C., & Fonagy, P. (1999). Infant-mother attachment at one-year predicts children's understanding of mixed-emotions at six years. *Social Development*, 8, 161-178.
- Sutton, J., Reeves, M., & Keogh, E. (2000). Disruptive behaviour, avoidance of responsibility and theory of mind. *British Journal of Developmental Psychology*, 18(1), 1-11.
- Symons, D. K. (2004). Mental state discourse, theory of mind, and the internalization of self–other understanding. *Developmental Review*, 24(2), 159-188.
- Tager-Flusberg, H. & Sullivan, K. (1995). Attributing mental states to story characters: A comparison of narratives produced by autistic and mentally retarded individuals. *Applied Psycholinguistics*, 16, 241-256.
- Target, M., & Fonagy, P. (1996). Playing with reality II. *The International Journal of Psycho-analysis*, 77(3), 459-479.
- Target, M., Fonagy, P., Shmueli-Goetz, Y., Schneider, T., & Datta, A. (2000). Child Attachment Interview (CAI): Coding and classification manual, Version III. Unpublished manuscript. London: University College London.
- Target, M., Oandasan, C., & Ensink, K. (2001). *Child Reflective Functioning Scale scoring manual: For application to the child attachment Interview*. Unpublished manuscript UK: Anna Freud Centre/University College London.

- Taumoepeau, M. & Ruffman, T. (2008). Stepping stones to others' minds: Maternal talk relates to child mental state language and emotion understanding at 15, 24, 33 months. *Child Development*, 79, 284-302.
- Tessier, V. P., Normandin, L., Ensink, K., & Fonagy, P. (2016). Fact or fiction? A longitudinal study of play and the development of reflective functioning. *Bulletin of the Menninger Clinic*, 80(1), 60-79.
- Taubner, S., Kessler, H., Buchheim, A., Kächele, H., & Staun, L. (2011). The role of mentalization in the psychoanalytic treatment of chronic depression. *Psychiatry: Interpersonal & Biological Processes*, 74(1), 49-57.
- Vitaro, F., Tremblay, R.E., & Bykowski, W.M. (2001). Friends, friendships and conduct disorders. In J. Hill & B. Maughan (Eds.), *Conduct disorders in childhood and adolescence* (pp. 346–376). Cambridge: Cambridge University Press.
- Verheugt-Pleiter, A. J. E. (2008). Treatment Strategy. In A. J. E. Verheugt-Pleiter, J. Zevalkink, J, and M. G. C. Schmeets, M. G. C. (Eds.). *Mentalizing in children therapy*. (pp. 41-67). London: Karnac.
- Vrouva, I., Target, M., & Ensink, K. (2012). Measuring mentalization in children and young people. *Minding the child: Mentalization-based interventions with children, young people and their families*, 54-76.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063–1070.
- Watson, J. S. (1994). Detection of self: The perfect algorithm. In S. Parker, R. Mitchell & M. Boccia (Eds.), *Self-Awareness in animals and humans: Developmental perspectives* (pp. 131–149) Cambridge: Cambridge University Press.
- Wellman, H., & Phillips, A. T. (2000). Developing intentional understandings. In: L. Moses, B. Male, and D. Baldwin (Eds.), *Intentionality: A Key to Human Understanding*. Cambridge, MA: MIT Press.

- Winnicott, D. W. (1967). Mirror-role of mother and family in child development. In:
The Predicament of the Family, ed. P. Lomas. London: Hogarth, pp. 26- 33.
- Winnicott, D. W. (1971) *Playing and Reality*. Harmondsworth: Penguin Books.
- Winnicott, D. W. (1965). *Maturational processes and the facilitating environment*.
New York: International Universities Press.
- Winnicott, D. W. (1953). Transitional objects and transitional phenomena. *The
International Journal of Psychoanalysis*, 34(2), 89-97.
- Winnicott, D.W. (1982). *The Maturational Process and the Facilitating Environment*.
London: The Hogarth Press.
- Youngblade, L. M., & Dunn, J. (1995). Individual differences in young children's
pretend play with mother and sibling: Links to relationships and
understanding of other people's feelings and beliefs. *Child Development*,
66(5), 1472-1492.
- Zevalkink, J. (2008). Assessment of mentalizing problems in children. In A. J. E.
Verheugt-Pleiter, J. Zevalkink, J, and M. G. C. Schmeets (Eds.). *Mentalizing
in children therapy*. (pp. 22-40). London: Karnac.

Appendix A. Attachment Doll Story Completion Task (ASCT)

Yönerge: “Şimdi, nelerimiz var bir bakalım.” (*Aile figürlerini çıkarın*). “Bak bu bizim ailemiz. Bu annesi, bu babası, bu büyükannesi, bu da çocuk (*Çocukla aynı cinsiyette olan oyuncuğu gösterin*). Hadi çocuğa isim verelim. Çocuğun ismi ne olsun istersin? Şimdi ailemizle ilgili bazı öyküler uydurup oynatacağız. Ben bu aile ile ilgili öyküler anlatmaya başlayacağım, sen de bu öykülerin sonunu anlatacaksın.”

Doğum Günü Öyküsü (ısınma oyunu)

Uygulayıcı: “Bu bir masa. Bakalım üzerinde ne varmış?” (*Katılımcı pastayı görüp isimlendirene kadar beklenir.*) “Bu ne pastası? Evet, bir doğum günü pastası. Şimdi öyküyü dikkatlice dinle. “Anne çok güzel bir doğum günü pastası yapmış. Şimdi de herkesi masaya çağırıyor.”

(*Anne figürü oynatılarak*) Anne: “Büyükanne, baba, X (*çocuğun verdiği isim*). Hadi gelin. Doğum günü partisi yapalım. Hadi bakalım sen bu öykünün gerisini oynat.”

1) *Kazara Dökülen Meyve Suyu Öyküsü:*

Araçlar: Çocuk, anne, baba, masa, tabaklar

Uygulayıcı: “Tamam, aklıma yeni bir hikaye geldi.” (Büyükanneyi alın ve yeni figürleri aşağıda gösterildiği gibi yerleştirin, masadan uzaklaştırın.) (İçinde sofr malzemelerinin olduğu kutuyu sallayın.) “Akşam yemeği için sofrayı hazırlamamda bana yardım eder misin?” (Kutu katılımcıya verilir, katılımcı sofrayı hazırlayana kadar beklenir, eğer yardım isterse yardımcı olunur.) “Şimdi aileyi yemek masasının etrafına oturtalım, böylece yemeğe hazır olsunlar.” (Katılımcı figürleri yerleştirene kadar beklenir.) “Burada ailemiz akşam yemeği yiyor. X ayağa kalktı, uzandı ve

meyve suyunu kazara devirdi.” (Çocuk figürünü meyve suyu kabını devirecek şekilde hareket ettirin, çocuğun kabı açıkça görmesini sağlayın.)

Anne: “X, meyve suyunu döktün.” (Sitemli ama aşırıya kaçmayan bir ses tonuyla; anneyi X’e çevirin ve konuştuğu sırada hareket ettirin.)

Uygulayıcı: “Şimdi ne olduğunu bana göster.”

2) *Yatak Odasındaki Canavar Öyküsü:*

Araçlar: Çocuk, anne, baba, üzerinde battaniyesi olan bir yatak

Uygulayıcı: “Ailemizi yeni oyun için hazırlayabilir misin? “Şimdi neler olduğuna bak. Dikkatlice dinle.”

Anne: (Annenin yüzü öyküdeki çocuğa çevrilir ve konuşurken hafifçe hareket ettirilir.) “Yatma vakti. Hadi bakalım, odana git ve uyu.”

Baba: (Yüzü çocuğa dönerek, bir parça hareket verip ve sesi kalınlaştırarak) “Şimdi yatağına git”

Çocuk: “Tamam anne baba gidiyorum.” (Çocuk figürünü yatağa doğru yürütün.)

Uygulayıcı: “X üst kattaki odasına gidiyor, gidiyor.”

Çocuk: (Korkmuş bir ses tonuyla) “Anne! Baba! Odamda bir canavar var! Odamda canavar var!”

Uygulayıcı: “Şimdi ne olduğunu bana göster.”

3) *Yaralı Diz Öyküsü:*

Araçlar: Çocuk, anne, baba, kayalık için sünger, çimen için keçe

Uygulayıcı: “Tamam, Şimdi başka bir öyküm var. Ben bunları toplarken, sen ailemizi oraya koy ve yeni öykü için hazırla. Bak şimdi elimde neler var! (Bir parça yeşil alan ve kayalık yerleştirilir.) Bu bir park. Bunlar bizim ailemiz, parkta dolaşmaya çıkmışlar ve bu parkta yüksek, oldukça yüksek bir kayalık var.”

Çocuk: “Anne, baba bakın. Bu yüksek, çok yüksek kayalığa nasıl da tırmandığımı seyredin.” (Çocuk figürünü kayalığa tırmandırılmaya başlanır, daha sonra düşer.)
“Off! Dizim acıyor.” (Ağlamaklı bir sesle)
Uygulayıcı: “Şimdi ne olduğunu bana göster.”

4) *Ayrılık Öyküsü:*

Araçlar: Çocuk, anne, baba, büyükanne, çimen ve araba için bir kutu
Uygulayıcı: “Hadi bu sefer büyükanneyi kullanalım.” (Yeşil alan ve arabayla birlikte, aile ve büyükanneyi masaya aşağıdaki gibi yerleştirilir. Arabanın katılımcının önünde olması ve her iki ebeveynin çocuklara ve büyükanneye bakıyor olması önemlidir.) “Burası onların ön bahçesi ve bu onların arabası. Bu ailenin arabası.” (Araba katılımcının önünde durduğu sırada anne ve babanın yüzlerini çocuk ve büyükanneye çevrilir.) “Sanırım, anne ve baba tatile gidiyorlar.”
Anne: (Anne hafifçe hareket ettirilerek çocukla konuşturulur.) “Evet, X. Baban ve ben bir tatile gidiyoruz. Şimdi senden ayrılıp, tatile çıkıyoruz.”
Baba: (Baba hafifçe hareket ettirilerek çocukla konuşturulur.) “Bir hafta sonra görüşürüz. Büyükannen seninle kalacak.”
Uygulayıcı: “Şimdi ne olduğunu bana göster.”

5) *Yeniden Bir Araya Gelme Öyküsü:*

Araçlar: Çocuk, anne, baba, büyükanne, çimen ve araba için bir kutu
Uygulayıcı: “Tamam, Ne oldu biliyor musun? Bir hafta geçti ve büyükanne pencereden dışarı bakıyor.” (Büyükannenin yüzü arabaya doğru çevrilir ve konuşurken biraz hareket ettirilir.)
Büyükanne: “Bak X, annen ve baban geri geldi. Tatilden eve geri döndüler.”
Uygulayıcı: “Şimdi ne olduğunu bana göster.” (Katılımcının arabayı eve yaklaştırmasına izin verilir ve gerekiyorsa yardımcı olunur.