FROM DRAWINGS TO FEELINGS: EXPLORING THE RELATIONSHIP BETWEEN CHILDREN'S FAMILY DRAWINGS, ATTACHMENT AND EMOTION REGULATION

A THESIS SUBMITTED TO
THE INSTITUTE OF GRADUATE PROGRAMS
OF
İSTANBUL BİLGİ UNIVERSITY

CEYHAN BÜŞRA KÖSEM

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR
THE DEGREE OF MASTER OF ARTS
IN
CLINICAL PSYCHOLOGY

2025

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Date of Approval: 6/18/2025

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ABSTRACT

Children's family drawings are commonly associated with attachment, however research on how emotion regulation plays a role in this relationship is quite limited. This study aimed to investigate how children's emotion regulation capacities and attachment are reflected in the themes that emerge in their drawings. A total of 86 children aged between 6 to 12 and their mothers participated in this study. Children's attachment security and prototypes were assessed by the Attachment Story Completion Task (ASCT) completed by the children, whereas their emotion regulation capacities were obtained from the Emotion Regulation Checklist (ERC) completed by their mothers. The family drawings were rated based on Global Rating Scales (vitality/creativity, family pride/happiness, vulnerability, emotional distance/isolation, tension/anger, role reversal, bizarreness/dissociation, and global pathology). Gender, age, and intelligence were controlled in the analyses. Findings showed that attachment insecurity and role reversal theme in the family drawings had a significant relationship, however the other family drawing themes did not show a significant relationship with the attachment and emotion regulation variables. The study's findings and limitations are evaluated and suggestions for future research and clinical practice are discussed.

Keywords: Family Drawings; Attachment; Emotion Regulation; Projective Assessment; Family Relationships

ÖZ

Çocukların aile çizimleri bağlanma ile sıkça ilişkilendirilmektedir, ancak duygu düzenlemenin bu ilişkide nasıl bir yeri olduğu konusundaki çalışmalar sınırlıdır. Bu çalışma, çocukların duygu düzenleme kapasiteleri ve bağlanma ilişkilerinin aile çizimlerinde çıkan temalarda nasıl yer bulduğunu incelemeyi hedeflemiştir. Çalışmaya 6-12 yaş aralığında 86 çocuk ve anneleri katılmıştır. Bağlanma güvenlikleri ve prototipleri çocuklar tarafından tamamlanan hikaye tamamlama testi (HKT) ile duygu düzenleme kapasiteleri ise anneleri tarafından doldurulan duygu düzenleme ölçeği (DDÖ) ile ölçülmüştür. Çocukların aile çizimleri küresel değerlendirme ölçekleri (canlılık/yaratıcılık, aile gururu/mutluluk, savunmasızlık, duygusal uzaklık/izolasyon, gerginlik/öfke, rol değişimi, tuhaflık/disosiasyon, küresel patoloji) ile puanlanmıştır. Yapılan analizlerde cinsiyet, yaş ve bilişsel zeka kontrol edilmiştir. Çalışmada bağlanma güvensizliği ile çocukların aile çizimlerinde çıkan rol değişimi teması arasında istatistiksel olarak anlamlı bir ilişki bulunmuştur, ancak diğer bağlanma ve duygu düzenleme değişkenleri ve çocukların çizimlerinden elde edilen temalar arasında bir ilişki bulunamamıştır. Elde edilen bulgular, çizimlerin bağlanma ilişkisine yönelik bazı ipuçlarını içerdiğini ancak duygu düzenlemeye yönelik bilgi sunmadığını göstermiştir. Çalışmanın bulguları ve sınırlılıkları değerlendirilmiş, gelecekteki araştırmalar ve klinik uygulamalara potansiyel katkısı tartışılmıştır.

Anahtar Kelimeler: Aile Çizimleri; Bağlanma; Duygu Düzenleme; Projektif Değerlendirmeler; Aile İlişkileri

ACKNOWLEDGMENTS

First, I would like to thank my advisor, Prof. Dr. Nilüfer Kafescioğlu, for her guidance and patience during this process. She spent a generous amount of time with me doing all the analyses and shaping the thesis. I also would like to thank Assoc. Prof. Sibel Halfon for introducing me to the children's rich inner worlds. I am deeply grateful to Dr. Gizem Toska, my first supervisor and the first person to offer me a space to slow down. I keep hearing your voice in times of self-doubt.

I would like to thank my friends for their support. I would like to start with Gökçenay, who accompanied me on this journey for years, even when the path was uncertain. At the start of this program, I could hardly imagine submitting a thesis without your contribution, and fortunately, that wasn't the case. I sincerely appreciate your guidance and support in various aspects of my personal, academic, and professional life.

To Elif, who has been my proofreader, editor, and closest friend for a very long time. Thank you for all the solutions you provided to even my smallest problems, even in times when you had no time. To Gökçe and Roza, just for being such a great friends, listening to my constant complaints every day, and reminding me we'll be okay in the end. To Beyza, my longest companion on this muddy road. To Bengü, who became my thesis buddy in such a short amount of time and keeps improving my life. To Alihan, who always made time for me when I needed his expertise. Lastly, to Ufuk for Kaşıksitting.

I would like to express my deepest gratitude to my family, especially to my parents, for their continuous support. To Yoda, who made my readings with me years ago, and to Kaşık, who was present to witness each sentence, and each opinion formed for this text. It has been quite an interesting experience to write this thesis both with you and despite you.

Lastly, I want to thank TÜBİTAK for funding my studies.

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LIST OF ABBREVIATIONS

AAI:	Adult Attachment Interview
ADHD:	Attachment Deficit Hyperactivity Disorder
ASCT:	Attachment Story Completion Task
CAI:	Child Attachment Interview
CBCL:	Child Behavior Checklist
ER:	Emotion Regulation
ER_mean:	Emotion regulation mean scores
ERC:	Emotion Regulation Checklist
FD:	Family Drawings
GRS:	Global Rating Scales
H-T-P:	House-Tree-Person
IQ:	Intelligence Quotient
IWM:	Internal Working Models
L:	Emotional Lability/Negativity
L_mean:	Emotional lability/negativity mean scores
TAT:	Thematic Apperception Test
WISC:	Weschler Intelligence Scale for Children

INTRODUCTION

Children generally communicate and establish relationships with the outside world through play. They make stories up, draw pictures of their families, assign roles to their dolls, and create figures from play dough. Each one of these activities provides us with information about children's creative world. In addition, these activities unveil some themes of the reality children live in. Many researchers argued that children's drawings can be helpful in assessing their psychological world (Appel, 1931; Corman, 1964). Over time, family drawings have become a tool for assessing children's attachment relationships (Kaplan & Main, 1985; Fury et al., 1997a).

Family drawings can help detect many signs related to children's attachment relationships with their caregivers. These signs can be related to their emotional connection or distance, how happy the child is in the family, and whether the child feels tense. For example, the research following Kaplan and Main (1985) on family drawings and attachment showed that children with more organized attachment strategies, such as securely attached children, are more likely to draw their family in a more organized and grounded fashion (Pianta et al., 1999). Similarly, Madigan et al. (2003) and Jin et al. (2017) both examined the relationship between attachment classifications and global themes in family drawings proposed by Fury et al. (1997a). In both studies, family pride/happiness detected in the family drawings has been linked with secure attachment, emotional distance with avoidant attachment, and vulnerability with anxious attachment in children (Jin et al., 2017; Madigan et al., 2003). However, to our knowledge the manifestation of emotion regulation in children's family drawings has received little attention in the existing literature. This gap in the literature suggests that emotion regulation requires more focus within family drawings research.

The current study aims to investigate the relationship between children's family drawings, their quality of attachment, and emotion regulation capacity. With this aim in mind, the first article of this thesis presents a review of the literature, while the second article details the current research study. In the literature review article, after a brief history of the

development of the use of family drawings in children's assessment, the research on family drawings is reviewed. Next, the interpretation, validity, and reliability of the family drawings are explained. Finally, the theoretical foundations and research on the use of family drawings with a focus on attachment theory and emotion regulation are presented.

The second article presents the current study with a sample of 86 children between the ages of 6 and 12 and their mothers. The current study aimed to answer the following research questions: 1) How is children's attachment security relate to the specific themes detected in children's family drawings? 2) How is children's emotion regulation relate to the specific themes in children's family drawings? 3) To what extent does emotion regulation explain the relationship between attachment security and global security in family drawings? The second article presents the methods, data analysis, results, and conclusions of the current study in detail.

LITERATURE REVIEW ARTICLE

2.1. History of Family Drawings

Children's drawings are considered an important tool for assessing their family relationships. Children's drawings are a nonverbal means of expressing their relationships, emotions, and perceptions of their family dynamics. Koppitz (1968) argued that drawings are one of the many ways children can communicate.

Kenneth Appel's (1931) study laid the groundwork for drawing-based psychological and emotional assessment. Appel described a study in which children were asked to draw pictures of their homes. After asking some questions about the house and the people who live in it, children were asked to draw the people they mentioned. Through these questions, the children were provided with a medium to express their close relationships.

Early studies, used children's drawings to assess children's intelligence (Goodenough & Harris, 1950). For example, Florence L. Goodenough (1926) developed an intelligence testing task based on children's drawings. In this task, children were expected to draw a man. Based on how they drew the man, their intellectual capacities were examined. However, DiLeo (1977) strongly argued against using drawings as a cognitive assessment and supported the idea that drawings reflect the child's psychological world rather than their cognitive abilities.

The idea of using solely family drawings was presented by psychoanalyst Louis Corman in the 1960s (Pace et al., 2022a). He developed a drawing task for children, which can be applied to children from 5 years of age. After completing the drawing process, children were asked questions about their feelings and thoughts. Unlike the Goodenough Draw-a-Man test, family drawings were not intended to assess the mental ability of the children. Therefore, they should not be used as a substitute (DiLeo, 1996). When children are given the task of drawing a man, their responses are usually intellectual; however, drawing a family arouses feelings in children. Therefore, their responses become emotional. Moreover, the feelings expressed in the drawings might be hard to express verbally.

DiLeo (1977) stated that family drawings present information regarding the most powerful forces affecting children's feelings and attitudes: their family members. How family members are depicted in these drawings helps understand children's attachment patterns and Bowlby (1982) asserts in his attachment theory that family relationships are crucial for children's attachment security.

Building on DiLeo's focus on the emotional aspects of children's drawings, Burns and Kaufman (1972) added action to the family drawing task. Instead of the traditional family drawing task of "draw a family" or "draw your family," the task was revised to "draw your family doing something together." This shift makes the family a unit in the drawing. Action adds an important factor to consider in the drawings. Drawing family members doing something together is believed to represent the emotional relationships they have with each other (Burns & Kaufman, 1972; Koppitz, 1983). Unlike traditional family drawings, kinetic family drawings consider action, style, and when examining the drawings (Koppitz, 1983).

Following Corman's contribution of using family drawings, many researchers have started using family drawings as an assessment tool for children. In the 1980s Kaplan and Main (1985) extended the scope of family drawings by linking it directly to children's attachment. In their study, they found that elements such as the size of the figures, the placement on the paper, and the distance between the figures were related to children's emotional connection with their parents. These findings suggested that children's family drawings were related to their psychological and emotional relationships. Fury and colleagues (1997a) supported the findings of Kaplan and Main (1985) and improved the assessment tool. In their study, they added more signs to the original list of signs, such as omission of the mother or the child, undifferentiated gender, and negative and neutral facial affect.

2.1.1. Research on Family Drawings

The connection between family drawings and attachment has been shown by many scholars (Kaplan & Main, 1985; Fury et al., 1997a; Madigan et al., 2003; Behrens &

Kaplan, 2011; Jin et al., 2017). Additionally, family drawings have been widely studied relation to various other areas of research as well.

Following Goodenough and Harris' (1950) footsteps, Cherney and colleagues (2006) used family drawings to assess children's cognitive development and working memory capacities. They also found that the placement, size, and interaction between figures in these drawings reflect children's inner worlds. This finding is in line with DiLeo's (1977) opposition to using these drawings to assess cognitive skills and his argument of stating drawings are more likely to be relational.

DiLeo (1977) emphasized that children's family drawings are an effective way to understand children's family relationships. How and where on the page children draw their family members can tell a lot about their family relationships. Similar to many Western languages, Turkish is written and read from left to right. Hence, children accustomed to this language structure are expected to begin drawing from the left, mirroring their writing habits. Bahçıvan-Saydam (2004) stated that the figures' placement might show the family members' importance in the child's life. The figures on the left are usually the family members with whom the child has the most significant relationship (Bahçıvan-Saydam, 2004). As a result, the figures placed on the far right can be the ones added to the composition the last.

Although many researchers have focused on the children's attachment to their parents, family drawings also depict sibling relationships. In their study, Metin and Üstün (2010) focused on how children position their siblings in their drawings using the Kinetic Family Drawing technique. Children expressed jealousy towards their siblings by not including them, positioning them on the right end of the page, or drawing them as the most petite figure. Sometimes children even changed the gender of their other-sex siblings in their drawings if they were having problems with their siblings. Moreover, the researchers noticed that some children drew their siblings apart from the other family members, which indicated that these children were putting a visible distance between the family and the sibling. Bahçıvan-Saydam (2004) argued that putting the sibling far away from the others or not including them at all indicated rejection of that member.

The omitted figures were examined through the lens that the relationship with the omitted figure might have a negative impact on the child (Koppitz, 1968; Metin & Üstün, 2010). In their study, Dunn and colleagues (2002) concluded that children scoring clinically on the Child Behavior Checklists (CBCL) tended to omit family members. Moreover, children tend to include family members biologically related to them. On the other hand, not including specific family members does not have to stem from a negative relationship with that member. For example, sometimes children drew their stepparents instead of their birth parents if they were living with their stepparents (Roe et al., 2006).

In another study, it was found that the drawings of children who experienced parental divorce included more omissions than their peers, which was considered a sign of emotional conflict (Carmela et al., 2019). Apart from omission, parental divorce affected children's drawings in several ways. For example, the family members might be positioned apart, mirroring the separation in the family relationship. Moreover, not including facial parts and leaving the figures unfinished was linked with ambiguity and unresolved grief on the child's part (Carmela et al., 2019).

In their study, Dallaire et al. (2012) investigated how parental incarceration and family stress influenced children's family drawings. Children in frequent contact with their parents showed more role confusion between themselves and their parents. Moreover, high pathology and dissociative themes in the drawings were found to be related to high-stress reports by both the child and the parent (Dallaire et al., 2012). Hence, it showed that family stress affects children's drawings.

Gernhardt et al. (2014) investigated the effect of the differences in socioeconomic background in children's drawings. The sample consisted of five groups: German rural, German urban, Turkish migrant, Turkish rural, and Turkish urban. Unlike the other groups, Turkish migrant children included more family members in their drawings. In addition, the children's drawing styles were affected by their cultures. One of the main differences between German and Turkish children was how they drew a human figure. The human figures in Turkish children's drawings were angular whereas German children's drawings were round, which is standard in Western drawing practices (Gernhardt et al., 2014). In a study conducted in Türkiye, Tezelli and colleagues (2020)

collected data from primary school students. Their study found that children did not detail the human figures, similar to the Turkish rural population in Gernhardt's study.

In Gernhardt and colleagues' (2014) study, gender differences were more distinct among Turkish children, especially among the Turkish urban population. Tezelli and colleagues' (2020) findings supported that Turkish children differentiated their figures by gender. As a rarity, sometimes the figures were at the same height and not differentiated from each other.

Goldner and Levi (2014) also investigated how children drew human figures, focusing on their perception of the body. Children's body perceptions differed based on their gender. Girls' drawings consisted of more slim figures. Therefore, the idea of an ideal body in girls tended to be less heavy than boys (Goldner & Levi, 2014). In their study, they also focused on the children's eating behaviors. Like body perceptions, eating behaviors also differed based on gender, and girls exhibited more eating problems (Goldner & Levi, 2014).

Family drawings have also been used to assess psychopathology in children. In 1982, Wright and McIntyre developed a depression scale based on family drawings. Depressed patients' drawings were separable from the control group's drawings, and the drawings improved with treatment (Wright & McIntyre, 1982). Later, Goldner and Scharf (2012) investigated how internalizing problems were present in family drawings. This study concluded that incomplete body parts and bizarre objects were associated with internalizing problems in children (Goldner & Scharf, 2012). They also argued that drawings should be examined considering the gender. They found that similar themes in the drawings meant different things in girls and boys. For example, the exaggerated sweetness and brightness in the drawings were negatively associated with depression in girls, whereas the same theme was positively associated with depression in boys (Goldner & Scharf, 2012).

All these findings emphasize that family drawings consist of many elements affecting children's lives, such as their environment, relational dynamics, and psychopathologies.

Therefore, family drawings provide valuable clues regarding children's outer and inner worlds.

2.1.2. Interpretation of Family Drawings

Attachment-based coding of family drawings began with Kaplan and Main's work in 1985. They developed a coding system that utilized the ABCD categories of attachment (avoidant, secure, anxious/ambivalent, and disorganized). In their unpublished paper, they noted that children's drawings exhibit certain signs (e.g., lack of individuation, incomplete figures, exaggeration of figures) that are connected to their attachment styles. Later, they grouped the signs based on the children's attachment histories (Kaplan & Main, as cited in Fury et al., 1997a).

Fury and colleagues (1997a) examined the validation of the use of family drawings in attachment assessment, using Kaplan and Main's coding system (1985). In their study, they improved the existing coding system by expanding the list of signs and redesigning some of the existing ones. Moreover, they added eight global rating scales (vitality/creativity, family pride/happiness, vulnerability, emotional distance/isolation between mother and child, tension/anger, role reversal, bizarreness/dissociation, and global pathology) varying between 1 "Very Low" and 7 "Very High".

The first subscale, vitality/creativity, measures the child's emotional investment in the task. Whether the child has gone beyond the immediate task and added any lively elements is taken into consideration. Examples include detailed backgrounds, clothing, physical features, and completed drawings.

The second subscale, family pride/happiness, measures how much of a unit the family is in the child's mind and how happy they are with their family relationships. Examples include drawing the family as a group, including cohesion, and figures showing positive relationships, and positive affect.

The third subscale, vulnerability, aims to measure the feelings of vulnerability and emotional ambivalence present in the drawing. The coders are advised to focus on the

figures' size, placement, and proximity to each other. Any exaggeration of the body parts, including the facial features, is taken into consideration.

The fourth subscale, emotional distance/isolation (between mother and child), focuses on the two figures representing the child and the mother. Similar to the vulnerability subscale, the position of the figures is examined. However, in this subscale how the two figures interact with each other is the main focus.

The fifth subscale, tension/anger, is concerned with how much tension/anger is aroused in the child when asked to draw a family. Figures are expected to be rigid and not have a positive facial feature. There may be body extremities. Moreover, the drawing might have scribbled parts.

The sixth subscale, role-reversal, aims to examine the mother-child relationship in terms of their roles. The subscale is concerned with the perception of mother as weak or vulnerable. Focus is mostly on the mother figure. In the drawings, mother should be easily differentiated from the child in terms of size. The body should not be distorted (e.g. exaggerated arms and large hands).

The seventh subscale, bizarreness/disassociation, focuses on the feelings of hostility, betrayal, or abandonment shown in the drawings. Unusual signs or symbols, angry or aggressive facial features, fantasy themes, and unusual markings having no apparent relation to the drawing are considered bizarre.

The eighth and last subscale is the global pathology rating scale. This scale aims to capture the overall pathology of the children based on their drawings. This rating is focused on the whole. It tries to find an answer to the question, "How does the child feel in this family?" Ratings are first sorted into three: 1) most disturbing, 2) generally "okay" or unsure, and 3) those who appear to be happy and complete. Then, the corresponding answer is chosen from these 3 categories.

Who or what is included or excluded in the drawings can also give us much information about the child's family structure. For example, if the child drew only some of the family members and omitted some family members, there might be a meaningful explanation. Research suggests that children's attachment representations affect their family drawings

(Kaplan & Main, 1986; Fury et al., 1997a). Securely attached children are more likely to draw more cohesive and emotionally expressive pictures depicting the family as a unit. In contrast, insecurely attached children's drawings might include exaggerated figures (too big or too small), emotional distance, and omission of the family members (Fury et al., 1997a).

A child who draws the parents too big may be reflecting strict family dynamics, while too small may indicate that they feel they have control in the family (Dilci, 2014). Additionally, if a child draws a physical barrier between themselves and either parent, this can signal a disconnection in that relationship (Dilci, 2014). Fury and colleagues (1997a) also classified drawing a physical barrier between the mother and the child or including another family member, as a sign of emotional distance in Global Rating Scales. Following this, the child drawing two or more people close to each other means a real or imagined relationship between them. Therefore, if the sibling is placed far away on the page or omitted, it may be a sign of sibling rivalry (Dilci, 2014).

Behrens and Kaplan (2011) found that girls scored higher in scales related to attachment security (vitality and family pride). In contrast, boys scored higher in scales related to attachment insecurity (bizarreness and global pathology). However, the same sample did not show any gender differences in other attachment assessment tools. Therefore, the researchers concluded that drawing ability might affect the scoring of the Global Scales. In this context, more research targeting at-risk and clinical children was necessary to assess the accuracy of family drawings global scales with these samples (Pace, 2022b).

2.1.3. Validity and Reliability of Family Drawings

Family drawings are a projective tool commonly used in assessing children's attachment. Studies conducted in recent years have examined the method of family drawings in terms of validity and reliability.

Inter-rater reliability is pivotal for confirming that different evaluators can review the material based on the same guidelines repeatedly in the same way and produce similar results with a different evaluator. The family drawings' inter-rater reliability was higher

in Fury's Global Rating Scales (GRS) than Kaplan and Main's ABCD coding. In studies using Kaplan and Main's ABCD coding system, the inter-rater reliability was found to be between 0.64 – 0.80 (Madigan et al., 2003; Behrens & Kaplan, 2011), whereas in Fury's Global Rating Scales, the inter-rater reliability was found to between 0.75 – 1.00 (Fury et al., 1997a). In addition, the Pearson's r for subscales of global ratings were calculated between .54 and 0.95 (Fury et al., 1997a; Madigan et al., 2003). These results showed that the coding guidelines for family drawings were clear to different coders (Pace et al., 2022).

In their study, Jin and colleagues (2017) included different groups of children such as community and clinical. Based on these children's drawings, family drawings were also found to be partly converged with what was considered quite the standards for attachment assessment: Strange Situation Procedure (SSP). Fury's Global Scales were more aligned with SSP than the ABCD classifications were. Jin et al. (2017) stated that classifications and scales were convergent in community and clinical children; however, Kallitsoglou et al. (2022) found different results in their study. More research was recommendeddue to the differences in these results (Pace et al., 2022b).

Many researchers mentioned the clinical validity of family drawings in their studies. Research findings indicate that family drawings can help identify attachment insecurity in some clinical populations, such as children with ADHD, adopted, and abused children (Clarke et al., 2002; Dallaire et al., 2012; Howard et al., 2017; Jin et al., 2017). Moreover, family drawings were suggested as a cost-efficient and straightforward tool (Pace et al., 2022b).

2.2. Theoretical Foundations

2.2.1. Attachment Theory

Attachment theory, developed by John Bowlby and Mary Ainsworth, provides the theoretical basis for understanding children's emotional states (Bretherton,1992). Attachment theory mainly concerns the emotional bond between the infant and the

primary caregiver (Bowlby, 1982). Bowlby (1982) argues that attachment can be present in children's behavioral patterns, and he explains attachment behavior as "instinctive social behavior with a biological function" (Bowlby, 1982, p. 179). Although other attachment figures may also be significant, the theory focuses on the relationship between the child and the child's primary caregiver (Ainsworth & Bowlby, 1991; Bretherton, 1992). This caregiver is not necessarily the biological mother, but usually, the important attachment figures are the mothers (Bowlby, 1982; Pace et al., 2020).

In his book Attachment and Loss, Bowlby (1969) used the term internal working models referring to the child's expectations of the parent's behavior. These internal models are the mental representation of the attachment relationship, which later becomes the blueprint of the child's perception of self, others, and relationships later in life. Children develop an internal model of self as worthy of care and autonomous when the attachment figure has acknowledged their needs and provided a secure base to explore the environment. In the cases where the attachment figure has not provided the necessary space for exploration or not soothe the infant's needs enough, the child may develop an internal model of self as unworthy (Bretherton, 1992; Sroufe, 1988). Thus, the internal working models include a collection of conscious and unconscious standards relevant to attachment (Bowlby, 1982; Bowlby, 1973; Cassidy, 1994).

If the attachment relationship is secure, the child is also able to trust the significant others. Therefore, the child becomes able to form loving and mutually trusting relationships later in life. However, if the attachment relationship lacks the trust that the attachment figure will show up in times of potential danger or that the child will receive unconditional love, then the infant may be insecurely attached to the attachment figure.

Regardless of whether children develop a secure or insecure attachment relationship with their primary caregivers, they experience stress when separated from their caregiver. Bowlby (1973) stated that children react with fear to the absence of an attachment figure. Even after a short period of time, it is possible to see the infants get reactive to their attachment figure leaving. Ainsworth and colleagues (1969) studied the effects of separation from the mother on infants. It was argued that infants were affected by the separation differently based on their attachment quality (Ainsworth, 1969). In her

research involving the Strange Situation paradigm, she assessed 1-year-olds in different environments, changing who is in the room with the baby every three minutes, such as the child being with their mother, the child being with both the mother and the observer, the child being with the observer, or the child being alone in the room. After analyzing how children react in these situations, she grouped babies into three categories: securely attached (B), avoidant (A), and ambivalent/resistant (C) (Ainsworth, 1969). These categories include coherent and organized ways of coping with the separation. However, some children did not act in an organized way during separation or reunion. Thus, in their study Egeland and Sroufe (1981b) created another category for anxiously attached children without avoidance or resistance behaviors: disorganized (D). Later, the fourth category they used was officially added to the system (Main & Solomon, 1990).

Secure attachment in children is characterized by the ability to use the primary caregiver as a secure base (Bowlby, 1982). Securely attached children can also tolerate the mother's absence, and they show a wish to interact with the mother when she returns. However, insecurely attached children come up with different strategies to cope with the absence of the mother. Some children get frustrated by the separation and cannot be soothed even after the mother returns. Other children do not react to the mother leaving or returning and show little or no interest in interaction or proximity. They tend to ignore the mother when she returns (Ainsworth, 1982). A minority of children act dysregulated and incoherent when separated from their mothers. In other words, they do not have a consistent attachment strategy. In insecure attachment, whether avoidant or ambivalent-resistant, the primary caregiver does not fulfill the role of a secure base. Therefore, these children are far more dysregulated than their secure peers (Ainsworth et al., 1978).

In early years, attachment is more about the proximity to the attachment figure, whereas as children grow older, it becomes more about the attachment figure's availability (Bowlby, 1987; as cited in Ainsworth, 1990). Children do not need to be physically close to their mothers for soothing or security as they used to be when they were infants. Especially during middle childhood (7-12 of age), children socialize with their peers and form new relationships. These relationships also mean new attachment figures (Kerns & Brumariu, 2016). Therefore, measuring school-aged children's attachment using

Ainsworth's Strange Situation might not be suitable since the nature of the attachment relationship changes over time.

2.2.1.1. Children's Family Drawings and Attachment

Children's drawings can capture their mental representations of self and attachment figures (Behrens & Kaplan, 2011). Children's drawings depict how they perceive and process their bonds with caregivers through themes, shapes, and the distance between figures. In 1985, Kaplan and Main were the first to come up with the idea that family drawings can be informative about children's attachment. Moreover, their study can be seen as the first systematic attempt to conceptualize children's drawings and their relationship to their drawings (Fury et al., 1997a). In their study, Kaplan and Main developed a coding system for family drawings focusing on children's attachment. Later, Fury and colleagues (1997a) added to the system and redesigned some of the existing parts. This attachment-based coding system of family drawings includes a 24-item checklist of specific markers, such as which figures are drawn, who in the family is omitted, and whether there are false starts. The coding system also includes the four global attachment classifications: secure, avoidant, ambivalent, and disorganized. Lastly, eight global rating scales (vitality/creativity, family pride/happiness, vulnerability, emotional distance/isolation between mother and child, tension/anger, role reversal, bizarreness/dissociation, and global pathology) varying between 1 and 7 were developed (Fury et al., 1997a). These eight global rating scales are used in the current study.

Since Kaplan and Main (1985), family drawings have become an attachment assessment tool for children. In their study, Fury and colleagues (1997a) examined the longitudinal data collected almost eight years apart. They analyzed the relationship between children's attachment history (12 to 18 months of age) and the eight global scales (Fury et al., 1997a). They found that children's attachment histories are significantly related to the eight global scales. This relationship is characterized by insecure attachment, which correlates highly with low family pride, high vulnerability, and global pathology.

Other researchers, such as Madigan et al. (2003) and Behrens and Kaplan (2011), also examined the relationship between attachment and eight global scales by comparing means. Madigan et al. (2003) found that secure attachment has a significant relationship with family pride/happiness and global pathology, avoidant attachment with emotional distance, and resistant attachment with role reversal and vulnerability. In Behrens and Kaplan's (2011) study, attachment was grouped into two categories. They found that securely attached children's drawings consisted more of the vitality and family pride theme, whereas insecurely attached children's of bizarreness theme.

Moreover, Jin and colleagues (2017) worked with clinical and community samples. They found that clinical and community samples show different qualities in attachment. Family drawings differed based on the attachment types, with vitality and family pride being prominent in secure attachment, vulnerability in resistant, and emotional distance in avoidant. Each global scale reflects a part of family relationships, illustrating how different aspects of family dynamics, such as emotional distance between members or anger, can be seen in the exact figures but mean two separate things. For example, emotional distance is significantly correlated with anxious-avoidant attachment, which can be an important factor in estimating attachment security (Fury et al., 1997a). Securely attached children are more likely to include grounded figures, whereas insecurely attached children usually draw the family floating in the air (Pianta et al., 1999).

The research on children's drawings and attachment tends to include community samples (Goldner & Scharf, 2011; Kallitsoglou et al., 2021; Madigan et al., 2003; Pianta et al., 1999). Therefore, clinical populations have not sufficiently explored the topic (Pace et al., 2022b). Moreover, research on this topic tends to be more common in Western countries than in Eastern countries. Although, there are some studies done in Japan, South Korea, Israel, and Cameroon, the subject has not been sufficiently studied in non-Western countries (Jin et al., 2017; Pace et al., 2022b).

2.2.2. Emotion Regulation

Researchers approach the concepts of emotion and affect from different theoretical frameworks. Many researchers from different areas of psychology studied the subject and investigated its relationship with other concepts. As a result, the term has become extensively researched and, at times, overused (Gross, 2015).

Schore (2001) and Fonagy (1991, 2002) describe affect as a phenomenon shaped by an individual's early experiences in close relationships. Schore (2001) argued that the development of the right brain plays a crucial role in affect regulation; Fonagy (1991, 2002) suggested that affect derives its meaning through the process of mentalization.

Sroufe (1996, 2005) and Bretherton et al. (1986) approached emotion from a developmental and attachment-focused perspective; with Sroufe (1996, 2005) positing that emotions are learned to be regulated through the secure attachment relationship with the caregiver. Gross (1998, 2011, 2015) and Compas et al. (2017) define emotion as subjective experiences that can be managed with numerous strategies. Gross (2011, 2015) views the emotion regulation process in alligment with behavioral strategies, and Compas et al. (2017) view the same process in line with cognition, behavior, and context.

Campos et al. (1989, 2004) examine emotions in the context of creation, maintenance, or disruption of one's relationships with both their internal and external environment. These varying approaches demonstrate that affect and emotion are interdisciplinary concepts and can be investigated through various perspectives. Gross (2015) suggested that affect is an umbrella term. Within affective states, emotions include examples such as happiness, sadness, and amusement.

Since the 1990s, the field of emotion regulation has gained quite popularity (Gross, 2015). Similar to the definition of emotion, many researchers came up with their understanding of emotion regulation. Their definitions can be summarized as seeing emotion regulation as a process for shaping the emotion's quality, duration, or intensity. One of the most important qualities of emotion regulation is the aim to influence the emotional trajectory (Gross et al., 2011; as cited in Gross, 2015; Premo & Kiel, 2014). For example, people

can try to find humor in an embarrassing situation by changing the quality. Many of our behaviors can carry the quality of emotion regulation. For example, taking deep breaths, going on a walk, eating something, taking a nap, hitting or screaming into pillows, reading a book, watching something, talking to a loved one, and even leaving our jobs can be a way of regulating our emotions (Gross, 2015).

Another important part of emotion regulation is that it consists of managing one's own feelings and those of others (Ivcevic et al., 2007; Salovey & Grewal, 2005). In other words, emotion regulation occurs in two ways: intrinsic and extrinsic. Intrinsic emotion regulation is when individuals are concerned with regulating their own emotions. Extrinsic emotion regulation is when individuals focus on regulating the other person's emotions, such as mothers soothing babies. During infancy, babies are affected by hunger, gas, the time of the day, sleepiness, who is around them, and where they are (Santrock, 2010). Adapting to these changes requires the ability to regulate one's emotions, or emotions to be regulated by someone else. Bion (1967) argued that it is important for parents to contain the child's experiences and inner world and transform it into something metabolized. At first, children use the mother as a tool for metabolizing their experiences, but later, they learn to regulate their affective states without the need for the mother's metabolizing. This proposition also works for emotion regulation since emotions are considered a subgroup of affective states. In other words, during infancy children are mainly externally regulated by their caregivers. Through repeated experiences, children begin to internalize these regulatory processes. Therefore, they develop self-regulating capacity through co-regulating (Sroufe, 1996).

Children's cognitive abilities influence emotion regulation. Children can use more complex emotion regulation strategies as their cognitive abilities improve. Therefore, children are expected to regulate their emotions better as they grow up (Cracco et al., 2017; Thompson, 2008). One of the many emotion regulation strategies, revaluation, gradually increases between the ages of 8 and 13 and, later, gradually decreases (Cracco et al., 2017). Additionally, between the ages of 9-12, children tend to use positive refocusing, which is having positive thoughts different from the original negative event (Sanchis-Sanchis et al., 2020).

As emotions are perceived by children in various ways, gender is a different factor that affects the way emotions are regulated. In a study done in Türkiye, researchers examined how gender affects children aged 5-6 in terms of emotion regulation (İlgar & Akbaba, 2017). They found that boys were more likely to exhibit negative emotions. İlgar and Akbaba (2017) suggested that since boys are taught to be tough and strict in Turkish society, maybe they are exposed to negative emotions more than their female peers. However, boys and girls receiving different types of parenting is not unique to Türkiye. In their study, Keizer and colleagues (2014) also notice that there is a gender difference in how children are approached.

Boys are likely to suppress sadness whereas girls are likely to suppress anger (Zeman, 2006). On the other hand, girls are likely to express a wider range of both positive and negative emotions (e.g., sadness and anxiety), while boys tend to express more externalized emotions (e.g., anger). In addition, girls exhibit more rumination, expression, and social support behavior than their male peers (Cracco et al., 2017; Sanchis-Sanchis et al., 2020). Girls ruminating more than boys considered a risk factor for depression (Nolen-Hoeksema, 2012). In addition, girls are more emotionally aware than boys (McClure, 2000). They also found that higher maternal education positively correlated with better emotion regulation skills (İlgar & Akbaba, 2017).

2.2.2.1. Emotion Regulation and Children's Family Drawings

Existing research on the relationship between emotional regulation and children's drawings has primarily explored how drawings can be a tool for emotional regulation in children. In these studies, researchers examined how drawing a picture can help a child to regulate. They found that drawing as a distraction rather than an emotional expression is more effective for reducing stress in children (Brechet et al., 2022; Drake, 2023). Yılmaz Bursa (2023) examined how children express negative emotions in their drawings. She concluded that sadness is the most common emotion children portray in their drawings. Moreover, it has been found that angry themes increase with age, and

regulating anger becomes challenging. However, it is also stated that emotional regulation strategies increase with age (Yılmaz Bursa, 2023).

In their study, Goldner and Scharf (2023) analyzed the relationship between emotional symptoms (such as worry, fear, and unhappiness) and global themes in children's drawings. Here, emotional symptoms are a subscale of a scale used for assessing children's adjustment. They found that these emotional symptoms regarding worry, fear, and unhappiness are positively correlated with emotional distance/isolation and tension/anger. Moreover, the same symptoms were negatively correlated with vitality and pride. Goldner and Scharf (2023) found that specific global rating scales in children's family drawings, such as tension/anger or emotional distance, can also be linked with emotion regulation capacity and predicting attachment relationships (Goldner & Scharf, 2023). Although several studies emphasize the importance of drawing in improving emotion regulation, far less research has examined how emotion regulation capacities find a place in children's drawings (Brechet et al., 2022; Drake, 2023). Understanding this relationship could offer a novel method for assessing children's emotion regulation difficulties.

2.2.3. Emotion Regulation and Attachment

Many researchers have linked attachment theory with emotional regulation (Sroufe, 1996; Schore, 2001; Fonagy, 2002; Schore, 2008). Secure attachment is considered pivotal for a foundation for emotional regulation (Sroufe, 2005). According to Main et al. (1985), children develop strategies for the type of caregiving they receive. This strategy helps them to regulate their behavior, feelings, cognition, and cognitive capacities. Moreover, individual differences in attachment quality are believed to correspond to individual differences in emotional regulation (Sroufe & Waters, 1977, as cited in Cassidy, 1994).

The relationship between emotion regulation and attachment begins with how the attachment relationship is a tool for regulating emotions for learning to regulate emotions. In the first years of life, the emotion regulation of the babies is linked to their attachment figures' ability to soothe them (Sroufe, 1996). Babies can be soothed through physical

touch, lullabies, and similar activities that carry closeness. Caregivers help children to regulate and decrease their stress levels (de Haan & Gunnar, 2009).

Caregivers are pivotal in helping infants regulate their emotions, especially in the first year of life (Kopp, 1989). Many professionals working in the field of developmental psychology recommend that caregivers soothe the baby before the baby gets overly distressed (McElwain & Booth-LaForce, 2006). Crying is the primary way of showing discomfort and getting the mother's attention for infants. It was found that crying infants who were quickly soothed at 3 months of age tended to cry less at 1 year of age (Ainsworth & Bell, 1972). Mothers responding quickly and warmly to their crying babies strengthens the bonds between them. Being able to reach the mother when needed fosters trust and secure attachment in infants (Santrock, 2010). Securely attached children are believed to have developed an expectation that their emotional signals will be responded to by their caregivers (Cassidy, 1994). Furthermore, children with secure attachment relationships tend to develop more substantial emotion regulation capacities (Thompson & Meyer, 2007).

According to Schore (2001), attachment theory can be considered a regulatory theory. Attachment relationships create internal working models for how individuals see themselves and others. These internal working models also consist of qualities that affect an individual's affect regulation (Schore, 2001; Schore & Schore, 2008). Building on this, including Fonagy's (1989; as cited in Bateman, 2010) term mentalization, which is the ability to find the meaning of self and others' actions, attitudes, and intentions can help to extend the idea (Fonagy & Target, 1998; Fonagy et al., 2002). This ability consists of affect regulation, the broader term for emotion regulation. Furthermore, making meaning of others' actions helps children to find meaning in their own experiences (Fonagy et al., 2002). Mentalization is also connected to the quality of the attachment relationship since secure attachment supports this capacity.

In *Emotional Development: The Organization of Emotional Life in the Early Years*, Sroufe (1996) stated that Bowlby's conceptualization of attachment although he mentions emtoions and calls attachment an "affective bond," does not include emotion regulation much. As a result of the lack of emotional regulation and attachment connection in

Bowbly's work, Sroufe aims to elaborate on Bowlby's conceptualization. According to Sroufe (1996), attachment refers to the dyadic emotion regulation between the caregiver and the infant. The experience of dyadic emotion regulation is crucial for the necessary base for self-regulation. Self-regulation cannot be mastered in a short period of time. First, children need repeated experiences of caregiver responsiveness. Over time, children rely on their caregivers, then their ability to co-regulate emotions, and lastly, themselves. The confidence in caregivers to regulate emotions is associated with the caregiver's emotional availability. The caregivers' emotional availability is related to children's attachment quality (Egeland & Sroufe, 1981b).

Paquette (2004) underlines the need to separate the terms defining mother-child and father-child relationships in literature. Mothers are usually first responders who provide soothing, and fathers are usually the ones children take risks with. Maternal sensitivity is crucial for infant emotion regulation, whereas paternal involvement, particularly through play, significantly enhances the development of children's socioemotional skills. Through rough-and-tumble plays, children test their physical limits, take some risks in a secure setting, and satisfy the child's need for stimulation (Paquette, 2004). These controlled challenges the father provides result in improved frustration tolerance, better self-regulation in high-arousal situations, and increased emotional resilience.

2.3. Summary

This article explores the relationships between attachment, emotion regulation and markers of family drawings. One of the key insights of the current review is the direct relationship between attachment and emotion regulation. Some researchers even considered attachment as a regulatory theory (Schore, 2001). Another key insight is that family drawings are a commonly used and approved tool for assessing family dynamics and children's attachment security (Pace et al., 2022a).

The reviewed literature empahsize that attachment is related to both family drawings and emotion regulation (Fury et al., 1997a; Sroufe, 1996). One of the certain limitations in the current literature is how children reflect their emotion regulation capacities in their

drawings. Understanding the relationship between family drawings and emotion regulation can help professionals see children's emotion regulation capacities in their drawings. Goldner and Scharf (2023) worked on how some global rating scales can be linked with children's emotion regulation capacities; following their steps, the preliminary analysis of the relationship between emotion regulation and global rating scales using different emotion regulation scales are presented in the research article of this thesis.

Another limitation in literature is that the possible effect of emotion regulation on the relationship between attachment and family drawings has not been studied. Despite well-established methods for examining attachment and emotional themes in children's drawings, no study has considered emotion regulation as a factor.

Lastly, another limitation in the current literature is the lack of enough studies on children's drawings in at-risk or clinical samples (Pace et al., 2022a): Jin and colleagues (2017) also emphasized the importance of examining family drawings outside of Western cultures. In conclusion, the current literature highlights the need for studies including a non-Western sample and at-risk and clinical samples.

RESEARCH ARTICLE

3.1. Introduction

Projective assessment methods are commonly used with children (Bellak & Bellak, 1949; Goodenough & Harris, 1950; Buck & Hammer, 1969; Burns & Kaufman, 1972; Kaplan & Main, 1985; Fury et al., 1997a; Bretherton, 1990). Since children's verbal communication skills are often limited by their age, they tend to prefer non-verbal communication (Koppitz, 1968). Thus, researchers have used drawings to assess children's cognitive capacities (Cherney, 2006), attachment relationships (Kaplan & Main, 1985; Fury et al.,1997a; Madigan et al., 2003; Madigan et al., 2004; Behrens & Kaplan, 2011; Jin et al., 2017), and family relationships (Bahçıvan-Saydam, 2004; Metin & Üstün, 2010).

The study of attachment relationships through children's family drawings began with Kaplan and Main in 1985. They concluded that certain elements in the drawings (e.g., grounded figures, unusual proportions, false starts) are related to children's attachment styles. Furthermore, they created an attachment-focused coding system that identified these elements and provided valuable insights from the children's perspectives. Following Kaplan and Main (1985), Fury and colleagues (1997a) refined the coding system and added subscales to assess various aspects of children's family relationships, focusing on themes of vitality/creativity, family pride/happiness, vulnerability, emotional distance/isolation between mother and child, tension/anger, role reversal, bizarreness/dissociation, as well as global pathology (Fury et al., 1997a). In their systematic analysis, Pace and colleagues (2022a) also suggested that family drawings are a culturally valid and cost-efficient tool to assess attachment styles.

Attachment plays an integral role in emotion regulation, which is the process of shaping the quality, duration, or intensity of emotions (Campos et al., 2004; Thompson et al., 2008; Gross, 2015). The emotion regulation skill develops in early childhood through parent-child relationships. When caregivers attend to the child's needs, children learn

about emotions and internalize their caregiver's ability to regulate emotions (Sroufe, 1996). Many researchers argue that early childhood experiences are pivotal for children's socioemotional development (Thompson, 1994; Sroufe, 2005). Hence, emotion regulation can be viewed as a relational skill. Children with secure attachment receive more support in identifying emotions and soothing themselves. Therefore, their emotion regulation capacities tend to be greater (Thompson & Meyer, 2007). Sroufe (1996) argued that regulation comes from co-regulation, and secure attachment is positively related to children's emotion regulation capacities. Since insecurely attached children do not receive reliable support from their caregivers, they show emotion regulation difficulties.

Since children often struggle to express their emotions directly, family drawings have become a helpful tool for understanding children's inner worlds. Research focusing on interpreting family drawings through the lens of attachment theory has become quite common (Pace et al., 2022a). Especially Fury et al. (1997a) and Pace et al. (2022a; 2022b) have shown that family drawings can detect secure and insecure attachment.However, there has been limited research on how children's emotion regulation capacities are represented in their family drawings. While Goldner and Scharf (2023) pioneered the research on the depiction of children's emotions in their drawings, further research is necessary to clarify the relationship between emotion regulation and these representations. Incorporating the role of emotion regulation as a factor influencing the relationship between attachment and family drawings could help professionals better understand how attachment relates to family drawings.

3.2. Purpose of the Study

The purpose of the study is to investigate the relationship between attachment security, children's emotion regulation capacity, and characteristics of children's family drawings. In a recent systematic review and meta-analysis, Pace and colleagues (2022b) concluded that family drawings can be used to assess preschool and school-aged children's attachment representations. However, they also emphasized the lack of studies focusing on at-risk and clinical samples as well as on different cultural backgrounds. The current

study aims to fill that gap by examining a clinical sample from a non-Western culture. The use of family drawings offers an approach to overcome the limitations associated with typical narrative or observational approaches for assessing children's attachment (Pace et al., 2022a). The current study will allow us to explore the associations between family drawings and a narrative method for assessing children's attachment (Child Attachment Story Task) within a non-Western clinical sample. The findings may provide insights for clinicians and researchers working with children in terms of understanding the role of children's drawings in attachment and emotion regulation.

The proposed research questions and hypotheses are as follows:

Research Question 1) How is children's attachment security related to the specific themes detected in children's family drawings?

Hypothesis 1a) Higher levels of attachment security will predict higher levels of vitality/creativity and family pride/happiness in children's drawings.

Hypothesis 1b) Higher levels of attachment security will predict lower levels of vulnerability, emotional distance/isolation, tension/anger, role reversal, and bizarreness/dissociation in children's drawings. There are mixed results on global pathology however, it is expected to have a negative association with attachment security

Research Question 2) How is children's emotion regulation related to the specific themes in children's family drawings?

Hypothesis 2a) Higher levels of emotional expression and awareness will predict higher levels of vitality/creativity and family pride/happiness and lower levels of vulnerability, emotional distance/isolation, tension/anger, role reversal, bizarreness/dissociation, and global pathology.

Hypothesis 2b) Higher levels of emotional lability/negativity will predict lower levels of vitality/creativity and family pride/happiness and higher levels of vulnerability, emotional distance/isolation, tension/anger, role reversal, bizarreness/dissociation, and global pathology.

Research Question 3) To what extent does emotion regulation explain the relationship between attachment security and global security in family drawings?

Hypothesis 3a) Higher levels of attachment security will be associated with higher levels of emotional expression and awareness, which in turn will be related to higher levels of global security in children's family drawings.

Hypothesis 3b) Higher levels of attachment security will be associated with lower levels of emotional lability and negativity which in turn will be related to higher levels of global security in children's family drawings.

3.3. Method

3.3.1. Participants

The participants of this study are a subgroup of children who participated in an ongoing study conducted by Dr. Sibel Halfon. The participants for the present study were children between the ages of 6 and 12 and their mothers. The age range for the present study was determined based on the studies focusing on family drawings and the appropriate age range that was reported for the other instruments in the study (Bretherton et al., 1990; Fury et al.,1997a; Shields & Cicchetti, 1997).

The data from the original study have already been collected from 143 participants. These data were collected at the Istanbul Bilgi University Psychological Center from patients who applied for routine testing and are initially screened by a clinical psychologist for eligibility. The inclusion criteria for the original study included children between the ages of 6 and 16, and the exclusion criteria pertained to cases that were not accepted to the Psychological Counseling Center. These criteria indicated to rule out diagnoses such as psychosis, severe eating disorders, severe developmental delays, and acute risk of harm to self and others. The same exclusion criteria hold for the current study. Additionally, IQ scores were considered to rule out mental disability.

Of the 143 participants from the original study, 25 who were out of the age range of 6 to 12 of the current study were excluded. 13 participants with IQ scores lower than 70 were also excluded to rule out mental disability (Kaufman et al., 2006). In addition, 18 children were excluded from the current study since they were not administered all the assessment tools of the current study. Lastly, one participant was excluded due to a diagnosis of the Autism Spectrum Disorder. Finally, the present study included a total of 86 participants.

The demographic information of the participants can be seen in Table 3.1. As can be seen almost half of the participants were male and half were female. As for their mean intelligence scores, the Full Scale Intelligence Quotient's (FSIQ) mean was 103.44 (*SD*=15.48). Intelligence scores were obtained through two tests: WISC-R and WISC-IV. The 71% of the obtained intelligence scores were through WISC-IV (*M*=102.69, *SD*=14.75) whereas the other 29% was obtained through WISC-R (*M*=105.22, *SD*=17.30).

The education levels of mothers and fathers were also collected. 17.4% (n= 15) of the mothers completed elementary school, 11.5% (n=10) completed secondary school, 24.4% (n=21) completed high school, 3.5% (n=3) completed a 2-year university degree, 32.6% (n= 28) completed 4-year university, and 10.5% (n= 9) completed a graduate degree. Of the father, 19.8% (n= 17) completed elementary school, 16.3% (n=14) completed secondary school, 25.6% (n=22) completed high school, 2.3% (n=2) completed university (2 years) and 27.9% (n= 24) completed university (4 years), 7% (n= 6) completed a graduate degree, lastly the education information of one father (1.2%) was missing.

Using G*Power to determine the sample size for multiple linear regression, a priori power analysis for a medium effect size of 0.15 at 0.05 significance level where the power is set for .80 showed a sample size of 92. However, the sample size for the mediation analysis was determined as 100 with the use of MedPower (Kenny, 2017) with effect of paths a and b set for .30, path c' for .10 and at alpha level of .05. Thus, the sample size of the current study was determined as 100 participants. However, the current sample included 86 participants even though all efforts were made to collect data from a greater number of children.

Table 3.1. Demographic Information of Participants

	n	%	M	SD	Skewness	Kurtosis	SE
Gender							
Female	42	48.8					
Male	44	51.2					
Age			8.16	1.67	.43	-.77	
Female			7.88	1.29	.23	.-55	
Male			8.43	1.95	.248	-1.31	
Mother Education							
Elementary	15	17.4					
Secondary	10	11.5					
High School	21	24.4					
University (2 years)	3	3.5					
University (4 years)	28	32.6					
Graduate Degree	9	10.5					
Father Education							
Elementary	17	19.8					
Secondary	14	16.3					
High School	22	25.6					
University (2 years)	2	2.3					
University (4 years)	24	27.9					
Graduate Degree	6	7.0					
Missing	1	1.2					
Intelligence			103.44	15.48	-.008	-.68	
Female			104.42	15.6	.38	-.63	
Male			102.5	15.48	.13	-.60	

3.3.2. Procedure

The original study's data were collected at Istanbul Bilgi University Psychological Counseling Center between 2016-2025. In order to recruit participants, the center makes social media announcements about the study via the center's Instagram account. Families who applied for the psychological assessment of their children at Istanbul Bilgi University's Psychological Counseling Center were first invited to an intake session with a clinical psychologist in which they were asked if they would like to volunteer to take part in the research project conducted by Dr. Sibel Halfon, the primary investigator of the original study. Those parents who agreed to participate were provided with an informed consent form to participate in the original study and consent for video and audio recordings. Subsequently, children were informed about the process and asked if they would be okay with the recordings. Istanbul Bilgi University's Clinical Psychology Master's students conducted the further assessments as part of their clinical training.

The order of the tests used in the current study follows family drawings, ASCT, WISC-R, or WISC-IV. In the family drawing test, the child and the administrator sat across from each other. One A4 paper and two pencils were used, and colored pencils or erasers were not provided. If the child asked for an eraser, they were told to cross out the elements they did not want in their drawings. After one paper and two pencils were given, the administrator asked the child to "draw a family." As the child finished drawing, the administrator asked the related questions (see Appendix C). For the ASCT, the sitting positions remained the same. The administrator informed the child about the task. For each story, the child was only given the materials for the current story and the other materials were kept out of sight. Stories were read from the manual by using the dolls. After each story, the child was asked "What happens next?" The children were free to play with the dolls according to the story if they wanted to. At the end of each story, the children were asked (1) what the child thought, and (2) what the child felt. Dolls to represent the child was chosen based on the child's gender. For the coding process, the ASCT was coded by a trained coder for the original study.

3.3.3. Measures

3.3.3.1. Demographic Information Form

The demographic Information Form was a part of the developmental history form used at the Center. It has questions about the age, sex, and education of the children. It also has questions on age, sex, education, employment status and occupation of the parents.

3.3.3.2. Attachment Story Completion Task (ASCT)

The Attachment Story Completion Task (ASCT; Bretherton et al., 1990) is a semi-structured interview. This measure assessed the children's internal working models and attachment security. During the task, children are presented with the beginnings of six stories that are designed to activate the children's attachment systems. The first one is to prepare the child, therefore it is not coded. These stories are enacted using dolls and materials important in the stories, such as a big bed, a rock, and a car. The children are then asked to complete the stories as they wish. The way they complete the stories reflects their internal working models of attachment. Moreover, Granot and Mayseless (2001) adapted the ASCT for 10- to 12-year-old children. They also added another classification step to the original system developed by Bretherton and colleagues in 1990. In ASCT, children's answers to each story are rated by trained coders as secure or insecure. The attachment security is calculated based on how many secure responses the child gives. Five secure responses are coded as secure, four secure responses are coded as fairly secure, and three or fewer secure responses are coded as insecure.

The task also provides a categorical attachment coding system. The narratives in the stories are examined. In secure attachment, narratives are expected to be cohesive, descriptive and logical, including both positive and negative affect. The relationship with the caregiver is depicted as responsive. The story ends in a positive manner. In avoidant attachment, the key factor is that the children have a minimizing strategy in their narratives. The affect is either nonexistent or very limited. The relationship with the

caregiver is also limited. Sometimes the caregivers are non-responsive, sometimes the help they provide is quite instrumental. Moreover, the child might not be help-seeking in stress-evoking stories. In ambivalent attachment, both the positive and the negative affect are heightened and exaggerated. The caregiver tends to use confrontation rather than comforting the child, and the child might show codependent tendencies towards the caregiver. Narratives can be overfilled with irrelevant details. Lastly, in disorganized attachment, the affect is inconsistent and can be exaggerated. The relationship with the caregiver is complex and might include severe punishment. In these children's stories, people can get hurt and the outside world is dangerous. The narrative is not organized and might include bizarre themes (Granot & Mayseless, 2016).

The instrument was adapted to Turkish by Uluç in 2005. In the adaptation study, reliability scores for the stories were between .81 and 1 (Uluç, 2005). The interrater reliability was .83 (Şeflek & Akgün, 2024). The ASCT data to be used in this study was previously collected by Dr Sibel Halfon as part of the original study. The secure, fairly secure, and insecure codings were utilized to indicate the children's attachment security in the current study.

In the current study, attachment was coded by two raters. Both coders received training for the coding system developed by Granot and Mayseless (2001). The coding was based on verbatim transcripts or recordings of the procedure. The first rater was a master's degree student in Clinical Psychology and coded 71 participants for her master's thesis the previous year. During the training, first rater coded 5 examples and gained an average reliability score of 0.92. The second rater is the primary researcher of this thesis, who is also a master's degree student in Clinical Psychology, and rated the remaining 15 participants. During the training, the second rater coded 10 examples and gained an average reliability score of 0.98.

3.3.3.3. Children's Family Drawings

The drawing of the family is expected to project some aspects of the family the child has. Although there are many different applications in the literature, the materials used for the

drawing are limited to one pencil and one paper for each participant in the current study. Then, participants are provided with some questions about the family in the picture (see Appendix C). The answers are used to identify which human figure refers to who in the family if needed.

In the current study, the family drawings were scored based on the Family Drawings Global Rating Scales developed by Fury and her colleagues in 1997a where the inter-rater reliability was reported to range from 0.75 to 1.00. Additionally, the Pearson correlation for subscales of global ratings was found to vary between .54 (Madigan et al., 2003) and 0.95 (Fury et al., 1997a). Overall, these results indicated that the coding system is clear to different raters (Pace et al., 2022b). In the present study, family drawings were coded by the researcher and a clinical psychologist who was blind to the study conditions. The researcher obtained the coding manual from the second author of the manual (Fury et al., 1997b). First, the clinical psychologist was introduced to the family drawings coding system by the researcher. The researcher also shared three drawings she coded previously, and each subscale was discussed. Subsequently, the two raters worked on 10 drawings as a way of training together in a pilot coding phase.

First, in this pilot coding phase the two raters coded four drawings separately. The inter-rater reliability scores varied between -1.45 and 1.0. After discussing the coding, the inter-rater reliability scores calculated from the same drawings changed from .89 to 1.0. Later, they separately coded six drawings and the inter-rater reliability varied between 0.89 and 1.0. Since they had proven strong reliability, they moved on to the data used in this study. 29 of the 86 drawings were rated by both coders (34% of the data). The final inter-rater reliability was found to be between 0.72 and 0.90, which suggests good reliability between two coders. The remaining drawings were divided among the coders. Since the researcher conducted family drawings on two children, those drawings (2%) were also rated by the clinical psychologist for rater to be blind to the material. The researcher rated the remaining 55 drawings (64%).

This coding tool has eight subcategories or themes with scores ranging from 1 “Very Low” to 7 “Very High:”

a. Vitality/Creativity: This subcategory focuses on the child's emotional investment in completing the task. Drawings rated high in this category can be exemplified as complete and expressive.

b. Family Pride/Happiness: This subcategory focuses on the child's sense of belongingness (security) and general feelings of happiness.

c. Vulnerability: This subcategory focuses on the emotional ambivalence in the drawings. In this category, the placement of the figures on the page and how body parts are drawn (e.g., exaggerated or omitted) are taken into consideration.

d. Emotional Distance/Isolation between mother and the child: In this category, the presence of anger or sadness is important. Also, the physical distance between the mother and the child is considered.

e. Tension/Anger: This subcategory focuses on how the figures are drawn, such as drawn on top of each other or floating on the page carelessly with little to no detail. It shows how much anger or tension is awakened in the child due to being asked to draw his or her family.

f. Role Reversal: In this category, the mother and child figure sizes are examined. The child's figure drawn bigger than the mother's indicates a role reversal between the two.

g. Bizarreness/Disassociation: Unusual themes or figures are considered as bizarre.

h. Global Pathology: In this category, the focus is on how visibly negative the drawing is.

The scale does not provide a total score. However, in the current study to examine the third research question, a total score was computed following the steps described by Dallaire et al (2012) where they computed a "Global Insecurity" score with the use of factor analysis of the eight subcategories that emerged from children's family drawings. Following Dallaire and colleagues (2012), we conducted a Principal Component Analysis

(PCA) with the subscales. The factor score was calculated using the regression model and used as Global Insecurity score in the following analyses.

3.3.3.4. Emotion Regulation Checklist

The Emotion Regulation Checklist is a 24-item questionnaire developed by Shields and Cicchetti in 1997. The questionnaire is completed by an adult who is well acquainted with the child. This scale measures children's ways of coping and managing their emotions. Statements are rated on a 4-point Likert scale from 1 ("Rarely or Never") to 4 ("Almost Always"). The scale has two sub-scales. One focusing on children's capacity for emotional expression and emotional self-awareness (Reis et al., 2016), and the other on emotional lability/negativity (Reis et al., 2016). Internal consistency of emotion regulation and emotional lability/negativity was found to be .83 and .96 and the two subscales were found to be significantly correlated (r=-.50, p < .001) (Shields & Cicchetti, 1997). Batum and Yagmurlu conducted the Turkish adaptation of the scale. The internal consistency for emotion regulation subscale was .73 and .75 for emotional lability/negativity subscale (Batum & Yagmurlu, 2007). In the present study, the internal consistency for emotion regulation subscale was .60, whereas for the emotional lability/negativity subscale it is calculated as .75. Lastly, the full scale internal consistency was found .70.

3.3.3.5. Weschler Intelligence Scales for Children

In this study, the children's intelligence score will be used as a control variable. Two versions of WISC are included in the study based on the year the data were collected. In 2016 and 2017, WISC-R (Weschler, 1974) was used, and later it was replaced by WISC-IV (Weschler, 2003), the next version. The Turkish adaptation and standardization of WISC-R were conducted by Savaşır and Şahin in 1995 and WISC-IV in 2011 by Öktem and Uluç.

3.4. Results

3.4.1. Descriptive Statistics

To test the normality of the data, descriptive statistics were examined. In the process, means, standard deviations, minimum and maximum values, skewness and kurtosis values for study variables were examined. The skewness and kurtosis values were all between -2 and +2, which is considered a normal distribution (George & Mallery, 2010), except for the vitality/creativity subscale of family drawings in boys (see Table 4.1)

3.4.1.1. Attachment Security

The attachment security of children was calculated based on their answers on the Attachment Story Completion Task. According to their answers, 65.1% (n=56) of the children had insecure attachment, 22.1% (n=19) had fairly secure attachment, and 12.8% (n=11) were securely attached. When divided into categories based on their narratives in story stems, 20.9% (n=18) were found to be securely attached, 40.7% (n=35) avoidant, 25.6% (n=22) ambivalent, and the remaining 12.8% (n=11) had disorganized attachment.

3.4.1.2. Family Drawings

Family drawings were rated based on Global Rating Scales developed by Fury and colleagues (1997a). In this scale, the categories were separately examined. The mean scores were 2.79 (*SD*= 1.74) for vitality/creativity, 3.37 (*SD*= 1.69) for happiness/family pride, 4.57 (SD= 1.52) for vulnerability, 4.21 (SD= 1.20) for distance/isolation, 4.09 (*SD*= 1.56) for tension/anger, 3.22 (*SD*= 1.02) for role reversal, 3.71 (*SD*= 1.52) for bizarreness/dissociation, and 4.20 (*SD*= 1.59) for global pathology.

3.4.1.3. Emotion Regulation Checklist

The average score on emotion regulation subscale was 2.16 (*SD*= 0.48) while the average score on the emotional lability/negativity subscale was 2.03 (*SD*= 0.40), and the average score of emotion regulation checklist was 2.10 (*SD*= 0.31).

Table 4.1 Descriptive Statistics for Children's Attachment, Family Drawings, Emotion Regulation

	Min	*Max*	*M*	*SD*	Skewness	Kurtosis
Family Drawings						
Vitality/Creativity	1	7	2.79	1.74	1.10	.33
Male	1	7	2.27	1.40	1.60	2.70
Female	1	7	3.33	1.91	.69	-.64
Happiness/Family Pride	1	7	3.38	1.69	.23	-.82
Male	1	7	3.16	1.60	.19	-.80
Female	1	7	3.60	1.77	.21	-.92
Vulnerability	1	7	4.57	1.52	-.55	-.40
Male	1	7	4.89	1.37	-.59	.44
Female	1	7	4.24	1.62	-.41	-1
Isolation/Emotional Distance	1	7	4.21	1.20	.88	0.18
Male	2	7	4.36	1.01	.60	1.06
Female	1	7	4.05	1.36	.03	-.45
Tension/Anger	1	7	4.09	1.57	-1.40	-.74
Male	1	7	4.34	1.38	-.26	-.33
Female	1	7	3.83	1.71	.09	-.96
Role Reversal	1	6	3.22	1.02	-1.22	-.42
Male	1	5	3.42	.84	-.67	.42
Female	1	6	3.02	1.16	.35	-.52
Bizarreness/	1	7	3.71	1.52	.49	-.56

Dissociation						
Male	1	7	3.86	1.58	.38	-.70
Female	1	7	3.55	1.45	.60	-.27
Global Pathology	1	7	4.20	1.59	-.23	-.74
Male	1	7	4.45	1.53	-.17	-.51
Female	1	7	3.93	1.61	-.24	-1.05
Emotion Regulation						
Emotion Regulation			2.16	.45	.58	.71
Male			2.23	.44	.56	.69
Female			2.08	.45	.68	1.16
Emotional Lability/ Negativity			2.03	.40	.48	.01
Male			2.10	.40	.37	.09
Female			1.97	.41	.66	.29
ERC			2.10	.31	-.19	-.59
Male			2.18	.27	-.36	-.16
Female			2.02	.32	.10	-.60

Note. Number of male participants are shown in parentheses. ERC is used for Emotion Regulation Checklist.

3.4.2. Data Analysis

This study used a non-experimental quantitative research design. All data analysis was done on SPSS version 30. Age, gender, intelligence, and the education levels of parents were used as control variables. The data analysis started with a descriptive analysis of all study variables. Next, bivariate analyses were conducted to examine the associations between each family drawing subcategory and the children's attachment security, as well as their emotion regulation. To test the first two hypotheses, stating that attachment security and emotion regulation will predict the subcategories in children's family drawings, separate multiple linear regression analyses were conducted with also including

the control variables. Finally, the indirect effect of emotion regulation in the relationship between global security in family drawings and children's attachment quality was examined with mediation analysis. The mediation analyses were conducted with PROCESS macro v5.0 developed by Hayes (2024).

3.4.3. Correlation Analysis

In this section, the results of Pearson bivariate correlation analyses are presented for the study variables (i.e., children's family drawings, attachment security, and emotion regulation capacities) and control variables (i.e., age, gender, IQ, and parent education levels). These control variables were included to estimate the potential confounding effects of their influence on children's attachment and emotion regulation. The correlation coefficients of all variables are summarized in Table 4.2.

Gender had a significant relationship with two of the drawing themes: vitality/creativity and vulnerability. In boys' drawings, vitality/creativity scores were lower *(r* =-.306, *p* <.01*)* and vulnerability scores were higher *(r* =.214*, p* < .05*)* than in girls. All the other correlations with gender were nonsignificant. Moreover, gender was significantly associated with the score calculated from factor analysis of family drawings, global insecurity (*r*=.219, *p*<.05), and attachment security (*r*=-.261, *p*<.05), indicating that boys showed higher global insecurity and lower attachment security.

Age had a significant and negative relationship with the family drawing themes of role reversal (*r* =-.221*, p*< .05) and bizarreness/dissociation (*r* =-.231*, p* < .05). The remaining drawing themes were not found to have a significant association with children's age.

Children's IQ scores showed a significant negative relationship with the family drawing theme of tension/anger, attachment insecurity, and emotion regulation capacities. Higher IQ scores were associated with lower tension/anger (*r* =-.231, *p*< .05) scores, attachment insecurity (*r*=-.254*, p*<.05), and emotion regulation (*r*=-.242, *p*< .05). Higher scores on this scale indicate higher emotion regulation capacities (Batum & Yagmurlu, 2007). Therefore, having negative correlations with the emotion regulation subscale suggests

that higher cognitive capacity in children was associated with lower emotion regulation capacity.

Mother's education and father's education did not show any significant correlation with any of the study variables. Therefore, they are not added in further analyses and the correlation table. However, mothers' and fathers' education were found to be significantly correlated with each other (r=.758 p<.01) and children's IQ scores (r=.609 p<.01 for mothers' education, r=.431, p<.01 for fathers' education).

The attachment security was coded into three groups: secure, fairly secure, and insecure. There was no significant relationship between attachment security and any of the themes in family drawings. These results were unexpected since attachment security is considered an important factor seen in children's family drawings. Based on the attachment prototypes, a new and binary variable named "attachment insecurity" was computed (0 for secure prototype, 1 for insecure which included avoidant, ambivalent, and disorganized prototypes). Attachment insecurity had a significant relationship with only one of the family drawing themes, the role reversal (r=.224, p<.05).

Table 4.2. Correlation table

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.	—														
2.	.166	—													
3.	-.062	-.128	–												
4.	-.306*	-.062	.141	—											
5.	-.130	.045	.125	.627**	—										
6.	.214*	-.106	-.009	-.545**	-.642**	—									
7.	.133	-.041	-.085	-.611**	-.533**	.443**	—								
8.	.163	-.186	-.231*	-.611**	-.750**	.700**	.574**	—							
9.	.190	-.221*	-.045	-.357**	-.348**	.455**	.461**	.444**	—						
10.	.105	-.227*	-.050	-.370**	-.642**	.475**	.467**	.692**	.345**	—					
11.	.167	-.145	-.098	-.628**	-.745**	.684**	.597**	.824**	.517**	.763**	—				
12.	.219*	-.156	-.132	-.737**	-.851**	.805**	.700**	.900**	.596**	.764**	.923**	—			
13.	-.102	.068	-.254*	-.029	-.022	-.090	.114	.049	.224*	-.023	-.008	.040	—		
14.	.157	.086	-.130	.060	-.019	-.067	.015	-.039	-.073	.001	.025	-.025	-.047	—	
15.	.169	.152	-.242*	-.146	-.052	-.023	-.043	.003	-.083	-.043	-.021	.001	.034	.045	—

Note. * p<.05. ** p<.01. 1. Gender, 2. Age, 3. Weschler Intelligence Scales for Children (WISC), 4. Vitality/Creativity, 5. Family Pride/Happiness, 6. Vulnerability, 7. Emotional Distance/Isolation, 8. Tension/Anger, 9. Role Reversal, 10. Bizarreness/Dissociation, 11. Global Pathology, 12. Global Insecurity, 13. Attachment Insecurity, 14. Emotional Lability/Negativity, 15. Emotion Regulation

3.4.4. Hypothesis Testing

3.4.4.1. Hypothesis 1: Attachment Security and Family Drawings

In this section, children's attachment and the themes in their drawings were examined in a multifaceted way. The first hypothesis was whether attachment security predicts higher levels of vitality/creativity and family pride/happiness and whether it predicts lower levels of vulnerability, emotional distance/isolation, tension/anger, role reversal, and bizarreness/dissociation in children's drawings.

To test the first hypothesis, multiple linear regression analyses were conducted. A separate regression model was constructed for each family drawing subscale. Based on the correlation analysis, only the demographic variables such as age, gender, and IQ that were significantly associated with each specific family drawing subscale were included as control variables in the regression model. The analyses indicated that attachment security was not a significant predictor of any family drawing theme, *p*s > .05. The R^2 values obtained were all found to be very low ranging from.001 and .005, and all regression coefficients were nonsignificant (*p*s > .05). For example, in the model for vitality/creativity, attachment security was not a significant predictor, R^2=.005.

Table 4.3. Regression Analysis for Attachment Security and Family Drawings, with controlling Gender, Age, and Intelligence

FD	Predictor	B	SE B	β	t	p	R^2
1	Attachment Security	-.022	.264	-.009	-.082	.935	.094
	Gender	-1.069	.375	-.308	-2.848	.006**	
2	Attachment Security	.086	.257	.037	.335	.739	.001
3	Attachment Security	.292	.234	.137	1.245	.217	.063
	Gender	.757	.333	.250	2.27	.026*	
4	Attachment Security	-0.105	.183	-.063	-.577	.565	.004
5	Attachment Security	.051	.243	.024	.210	.834	.054
	IQ	-.024	.012	-.232	-2.066	.042*	

6	Attachment Security	.088	.154	.061	.569	.571	.052
	Age	-.140	.066	-.229	-2.124	.037*	
7	Attachment Security	-.336	.226	-.158	-1.486	.141	.076
	Age	-.187	.097	-.206	-1.936	.056	
8	Attachment Security	-.048	.242	-.022	-.200	.842	.000

Note. * p<.05, ** p<.01, family drawings subscales are listed by numbers: 1 for vitality/creativity, 2 for family pride/happiness, 3 for vulnerability, 4 for emotional distance/isolation, 5 for tension/anger, 6 for role reversal, 7 for bizarreness/dissociation, and 8 for global pathology.

Attachment was later categorized into four types -secure, avoidant, ambivalent, and disorganized- based on the extent to which children's storytelling in the Attachment Story Completion Task resembled the four attachment categories. Using these categorical variables, analyses of variance (ANOVA) and analyses of covariance (ANCOVA) were conducted, depending on whether the dependent variable showed significant relationships with the control variables. The ANOVA results showed no significant differences between attachment categories on any of the family drawing subscales. These findings suggest that attachment prototypes were not associated with significant differences in family drawing themes (see. Table 4.4.). Similarly, the ANCOVA results showed that covariates also did not show a significant difference in drawings (see. Table 4.5.).

Table 4.4. ANOVA Results of Family Drawing Subscales based on Attachment Prototypes

Source	Type III SS	df	MS	F	p-value	η^2
Happiness/Family Pride						
Corrected Model	5.406	3	1.802	0.624	.601	.022
Intercept	777.727	1	777.727	269.442	<.001**	
Attachment Protoype	5.406	3	1.802	0.624	.601	
Error	236.687	82	2.886			
Corrected Total	242.093	85				
Emotional Distance/Isolation						
Corrected Model	5.818	3	1.939	1.366	.259	.048

Intercept	1287.432	1	1287.432	906.84	<.001**	
Attachment Protoype	5.818	3	1.939	1.366	.259	
Error	116.415	82	1.42			
Corrected Total	122.233	85				
Global Pathology						
Corrected Model	1.921	3	0.64	0.248	.863	.009
Intercept	1307.333	1	1307.333	506.338	<.001**	
Attachment Protoype	1.921	3	0.64	0.248	.863	
Error	211.719	82	2.582			
Corrected Total	213.64	85				

Note. One-way ANOVA analyses were conducted to examine differences in family drawings based on attachment prototypes (secure, avoidant, ambivalent, disorganized). * p<.05, ** p < .01.

Table 4.5. ANCOVA Results of Family Drawing Subscales based on Attachment Prototypes, controlling for Gender, Age, and Intelligence

Source	Type III SS	df	MS	F	p-value	ηp^2
Vitality/Creativity						
Corrected Model	26.172	4	6.543	2.284	.067	.101
Intercept	415.168	1	415.168	144.913	<.001**	
Gender (covariate)	24.324	1	24.324	8.49	.005**	
Attachment Prototype	2	3	0.667	0.233	.873	
Error	232.06	81	2.865			
Corrected Total	258.233	85				
Vulnerability						
Corrected Model	12.251	4	3.063	1.342	.261	.062
Intercept	680.745	1	680.745	298.33	<.001**	
Gender (Covariate)	7.741	1	7.741	3.393	.069	
Attachment Prototype	3.221	3	1.074	0.471	.704	
Error	184.83	81	2.282			
Corrected Total	197.081	85				
Tension/Anger						

Corrected Model	13.89	4	3.473	1.405	.241	.071
Intercept	65.264	1	65.264	26.398	<.001**	
IQ (Covariate)	8.488	1	8.488	3.433	.068	
Attachment Prototype	3.478	3	1.159	0.469	.705	
Error	180.481	73	2.472			
Corrected Total	194.372	77				
Role Reversal						
Corrected Model	11.251	4	2.813	2.938	.025**	.127
Intercept	62.113	1	62.113	64.875	<.001**	
IQ (Covariate)	4.945	1	4.945	5.165	.026**	
Attachment Prototype	6.918	3	2.306	2.409	.073	
Error	77.551	81	0.957			
Corrected Total	88.802	85				
Bizarreness/Dissociation						
Corrected Model	13.049	4	3.262	1.446	.226	.067
Intercept	99.143	1	99.143	43.959	<.001**	
IQ (Covariate)	10.379	1	10.379	4.602	.035**	
Attachment Prototype	2.978	3	0.993	0.44	.725	
Error	182.684	81	2.255			
Corrected Total	195.733	85				

***Note**. * p<.05, ** p<.01*

In the next step, the attachment prototype ratings were recoded into a new variable that measures attachment insecurity. By grouping avoidant, ambivalent, and disorganized attachment as insecure, a binary coding was created (0= secure, 1= avoidant, ambivalent, and disorganized). In the Pearson correlation analysis, children's insecure attachment positively correlated with role reversal (r=.240, p<.05). Lastly, attachment insecurity and family drawing themes were entered into a regression model along with relevant control variables. Eight separate linear regression analyses were conducted, one for each family drawing subscale.

The results indicated that attachment insecurity significantly predicted role reversal, B=0.60, p=.023, such that children with insecure attachment had higher role reversal scores than securely attached children. Age was also a significant negative predictor, B =-0.15, p=.025, indicating that younger children showed higher levels of role reversal in their drawings. Attachment insecurity did not have a significant predicting effect on the other family drawing subscales. These findings indicated that attachment insecurity is associated specifically with role reversal in our sample, but not with the other family drawing subscales.

Table 4.6. Regression of Attachment Insecurity on Family Drawing Subscales, controlling for Gender, Age, and Intelligence

Outcome Variable	B	SE B	β	t	p	R^2
Vitality/Creativity	-0.26	0.447	-0.061	-0.583	.561	0.097
Gender (covariate)	-1.082	0.363	-0.312	-2.978	.040*	
Happiness/Family Pride	-0.092	0.45	-0.022	-0.203	.839	0
Vulnerability	-0.254	0.4	-0.068	-0.636	.527	0.05
Gender (covariate)	0.627	0.326	0.207	1.926	.58	
Emotional Distance /Isolation	0.335	0.318	0.114	1.054	.295	0.013
Tension/Anger	0.043	0.444	0.011	0.098	.922	0.054
WISC (covariate)	-0.023	0.012	-0.229	-1.968	.053	
Role Reversal	0.6	0.26	0.240	2.311	.023*	0.106
Age (covariate)	-0.145	0.064	-0.237	-2.280	.025*	
Bizarreness/Dissociation	-0.03	0.397	-0.008	-0.075	.940	0.052
Age (covariate)	-0.205	0.097	-0.226	-2.112	.038*	
Global Pathology	-0.031	0.423	-0.008	-0.073	.942	0

Note. Control variables were included based on their significant relationships with the dependent variables. (Gender for Vitality/Creativity and Vulnerability; IQ for Tension/Anger; Age for Role Reversal and Bizarreness/Dissociation).

3.4.4.2. Hypothesis 2: Emotion Regulation and Family Drawings

The second hypothesis was whether higher levels of emotional expression and awareness (ER) will predict higher levels of vitality/creativity and family pride/happiness and lower levels of vulnerability, emotional distance/ isolation, tension/anger, role reversal, bizarreness/dissociation, and global pathology, and whether higher levels of emotional lability/negativity (L) will predict lower levels of vitality/creativity and family pride/happiness and higher levels of vulnerability, emotional distance/isolation, tension/anger, role reversal, bizarreness/ dissociation, and global pathology. The regression analyses aimed to calculate how children's emotion regulation skills predict psychological themes emerging in their family drawings. For each family drawing subscale, a separate regression model was constructed. Based on the correlation analysis, only the demographic variables such as age, gender, and IQ, which showed a significant relationship with each specific family drawing subscale, were included in the regression model. Since the analyses were conducted for each subscale separately, control variables were selected individually for each model.

Among the models tested, only the regression model for vitality/creativity was found to be significant, with $F(3,82)=3.562$, $p=.018$, $R^2=.115$. Within this model, the emotion regulation ($p=.347$) and the emotional lability/negativity ($p=.286$), were not significant predictors. The overall model reached significance primarily due to the contribution of the gender variable, which was a significant predictor, ($B=-1.064$, $p=.005$). The remaining family drawing subscales did not yield significant models or predictors.

Table 4.7. Regression of Emotion Regulation and Emotional Lability/Negativity on Family Drawing Subscales, controlling for Gender, Age, and Intelligence

Outcome Variable	Predictors	B	SE B	β	t	p	R^2
Vitality/Creativity							
	ER	-0.389	0.411	-0.100	-0.946	.347	0.115
	L	0.488	0.455	0.113	1.075	.286	
	Gender	-1.064	0.370	-0.370	-2.878	.005	

Happiness/Family Pride							
	ER	-0.192	0.414	-0.051	-0.463	.644	0.003
	L	-0.071	0.459	-0.017	-0.155	.877	
Vulnerability							
	ER	-0.202	0.370	-0.059	-0.545	.588	0.06
	L	-0.384	0.409	-0.102	-0.937	.351	
	Gender	0.727	0.333	0.240	2.183	.032	
Emotional Distance/Isolation							
	ER	-0.118	0.295	-0.044	-0.401	.689	0.002
	L	0.049	0.326	0.017	0.151	.88	
Tension/Anger							
	ER	-0.433	0.439	-0.114	-0.986	.327	0.071
	L	-0.301	0.443	-0.077	-0.679	.499	
	WISC	-0.028	0.012	-0.269	-2.311	0.24	
Role Reversal							
	ER	-0.113	0.249	-0.049	-0.454	.651	0.054
	L	-0.133	0.273	-0.053	-0.487	.627	
	Age	-0.128	0.067	-0.209	-1.916	.059	
Bizarreness/Dissociation							
	ER	-0.032	0.370	-0.009	-0.085	.932	0.052
	L	0.081	0.406	0.022	0.199	.843	
	Age	-0.206	0.099	-0.227	-2.082	.040	
Global Pathology							
	ER	-0.078	0.390	-0.022	-0.201	.841	0.001
	L	0.103	0.432	0.026	0.238	.813	

Note. Control variables were included based on their significant relationships with the dependent variables. (Gender for Vitality/Creativity and Vulnerability; IQ for Tension/Anger; Age for Role Reversal and Bizarreness/Dissociation).

3.4.4.3. Hypothesis 3: The Mediating Effect of Emotion Regulation on Family Drawings and Attachment

The third hypothesis was whether the children's emotion regulation capacity mediated the relationship between attachment insecurity and family drawings. Since family drawings do not provide a total score, a total Global Insecurity score was calculated following the steps in Dallaire and colleagues' (2012) research. A Principal Component Analysis (PCA) was conducted for all eight subscales. By using these categories, a new score was calculated. This new score explains 62.59% of the population. The factor loading ranged from .596 to .923, indicating that all the subscales were meaningful. Since there were two different emotion regulation mediators (emotion regulation and emotion lability/negativity), two different mediation models were tested.

Mediation analyses were conducted with the PROCESS macro for SPSS v5.0 developed by Hayes (2024), using Model 4 to test simple mediation. Attachment insecurity was not significantly associated with either emotion regulation subscale (B=-0.016, *SE*=0.047, *p*=.736), or the emotional lability/negativity subscale (B=-0.021, *SE*=0.057, *p*=.718). Additionally, neither emotion regulation (B=0.317, *SE*=0.366, *p*=.393), nor emotional lability/negativity (B=0.118, *SE*=0.333, *p*=.724), significantly predicted global insecurity.

The effect of attachment insecurity on global insecurity was significant (B=0.155, *SE*= 0.263, *p*=.558). The direct effect attachment insecurity on global insecurity, controlling the mediators, was also nonsignificant (B=0.160, *SE*=0.264, *p*=.547). Furthermore, the indirect effects tested using the bootstrap method, were not significant. As the 95% confidence intervals for the indirect effects included zero, there was no evidence of a mediating effect of attachment insecurity on global insecurity as represented in children's family drawings.

Table 4.8. Mediation Analysis Results, with controlling Gender

Path	B	SE	p	95% CI
Attachment Insecurity → ER	–0.016	0.047	.736	[–0.109, 0.077]
Attachment Insecurity → L	–0.021	0.057	.718	[–0.134, 0.092]
ER → Global Insecurity	0.317	0.366	.393	[–0.411, 1.044]
L → Global Insecurity	0.118	0.333	.724	[–0.544, 0.780]
Attachment Insecurity → Global Insecurity	0.155	0.263	.558	[–0.368, 0.677]
Direct Effect (c')	0.160	0.264	.547	[–0.366, 0.686]
Total Effect	0.155	0.263	.558	[–0.368, 0.677]
Indirect via ER_mean	–0.005	0.034	n.s.	[–0.094, 0.051]
Indirect via L_mean	–0.002	0.022	n.s.	[–0.057, 0.034]
Total Indirect Effect	–0.008	0.038	n.s.	[–0.110, 0.059]

Note. Bootstrap sampling=5000; 95% confidence intervals are bias-corrected. Some of the confidence intervals were not meaningful, since they included the value 0 (n.s.).

3.5. Discussion

This study explored the associations among attachment, family drawings, and emotion regulation capacity of children. Since children's drawings are considered an important tool for understanding their psychological world and the conditions surrounding them, the effects of attachment and emotion regulation on children's drawings are important to examine. Numerous studies associated family drawings with attachment in children (Pace et al., 2022a; Pace et al., 2022b). However, research on family drawings lacked studies on how emotion regulation played a role in the drawings. In addition, the literature emphasized that there are limited studies on family drawings in non-Western and clinical populations (Jin et al., 2017; Pace et al.,2022a). To address this gap, the current study investigated the relationship between attachment, emotion regulation, and family drawings in a clinical, non-Western population.

The results indicated that the hypothesized relationships could not be supported. There were no significant relationships between children's family drawing themes and

attachment security or emotion regulation. However, attachment insecurity had a significant relationship with one of the family drawing themes, the role reversal. In terms of emotion regulation, the model was only significant in the analysis for the vitality/creativity subscale. In the model, emotion regulation was not a significant predictor, but gender was.

3.5.1. Discussion of Findings

Concerning the first research question, the results showed that attachment insecurity had a significant relationship with only one of the family drawing themes, the role reversal. In their manual, Fury and colleagues (1997a) stated that if the mother is drawn in a way that shows the mother as weak, unreliable, and vulnerable, child's relationship with the mother might include role reversal. Role reversal is a term used to describe the children taking on parental responsibilities not appropriate for their ages and developmental stages in their parent-child relationships. This stems from the reversal of roles in the relationship due to the child's psychological or emotional needs being unmet by their parents. In family systems, the concept can be defined as the lack of boundaries within sub-systems in which children take over positions and responsibilities typically held by adults (Boszormenyi-Nagy & Spark, 1973). This finding is consistent with the internal working models proposed in the attachment theory. Insecure attachment can indicate an untrusting relationship with the caregivers for the child. Therefore, their internal working models might include a "strong, independent self" and an "incompetent caregiver/other", which might be shown by drawing the mother inattentive to the child, smaller than the child, or helpless. Hence, insecurely attached children might have a role reversal in their relationships with their caregivers, and this might be present in their drawings. Dallaire and colleagues (2012) also found that role reversal was depicted at greater levels when children were in frequent contact with their incarcerated parents.

The results of this study contradict the findings of the previous studies on family drawings and attachment. For example, in a recent meta-analysis, family drawings were concluded to be a valid tool for assessing children's attachment (Pace et al., 2022). Nevertheless,

neither attachment security, attachment prototype, nor attachment insecurity had the hypothesized significant relationships with the themes in children's family drawings. Especially, vulnerability, emotional distance/isolation, tension/anger, and global pathology, not having a significant relationship with attachment insecurity, were not expected, since these subscales are related to insecure attachment (Madigan et al., 2003; Behrens & Kaplan, 2011; Jin et al., 2017).

Different results were expected since the method for the interpretation of family drawings has been standardized in a Western community. However, this study's findings do not match with the non-Western studies either (Behrens & Kaplan, 2011; Jin et al., 2017). This may due to the current study's clinical sample since in other studies, the samples were either non-clinical or mixed. Moreover, Behrens and Kaplan (2011) collected family drawings during the mothers Adult Attachment Interview sessions. The mother talking about their own attachment might have activated the attachment patterns of children in that study. Therefore, their drawings might have had more attachment-related themes. The age range of the participants in the current study was also different than the other studies. Other studies were conducted with 6-year-olds and 7 to 9-year-olds, whereas the current study had a wider age range of 6 to 12.

As for the second research question, the results did not show a significant relationship between children's emotion regulation and family drawing themes. Only the model for vitality/creativity was found to be significant. However, emotion regulation was not a significant predictor in this model. Instead, the control variable, gender, was found to be significant. This result indicated that emotional expression and awareness did not directly affect children's family representations as much as the demographic variable of gender.

Similar to the previous results on emotion regulation skills and attachment, emotional lability/negativity also did not have a significant relationship with themes in children's family drawings. This finding suggested that children's emotional lability/negativity did not reflect on their drawings. Furthermore, the lack of studies focusing on emotion regulation and family drawings makes it difficult to interpret these results by comparing them with the existing literature. This again underlines the need for further studies examining the relationship between family drawings and emotion regulation. Contrary to

the hypothesized relationship between emotion regulation skills and family drawing themes, the drawings of children with higher emotional lability/negativity did not include higher emotional distance/isolation or bizarre themes. Therefore, the emergence of these themes might be influenced by many contextual and relational factors more than emotional ones.

It is noteworthy that role reversal did not have a significant relationship with both emotional regulation and emotional lability/negativity, as it did with attachment insecurity. Since emotion regulation and attachment are closely related, emotion regulation skills of children were also expected to have a significant relationship with the themes in the family drawings. However, this finding suggested that role reversal was more related to attachment than emotion regulation skills.

As for the third research question with the mediation analysis, it was found that children's emotion regulation skills did not show a significant mediator effect on the relationship between attachment insecurity and the global insecurity theme obtained from the family drawings. Moreover, the findings suggested that the effect of emotion regulation skills on attachment and family drawings was not significant. The mediation relationship was not statistically significant.

The mediation relationship not being statistically significant can be explained by several factors. The sample size might have hindered the ability to determine the effects. Moreover, children's emotion regulation capacities are calculated based on their mothers' reports on the Emotion Regulation Checklist (ERC), and the drawings and attachment assessment were conducted with children themselves. The differences in the source of information might have affected the results. In addition, the differences in measurement methods (projective and non-projective) might have also contributed to this effect.

The insignificant results also might stem from the age range of children and the cognitive differences based on age. Kopp (1989) stated that children's awareness and expression of complex emotions develop by age. Therefore, the negative themes emerging from attachment insecurity might not be expressed in their drawings. These findings suggest

that the projection of children's internal emotional process is complex, highlighting the need for multidimensional approaches in evaluation.

The findings of the current study indicate that attachment and emotion regulation played a more limited role in children's family representations than expected in the current sample. Especially the complex and internal structures of emotional processes may have found limited representations in this projective assessment. These findings indicate that the assessment of children's inner worlds may require multilayered methods.

3.5.2. Limitations and Future Directions

The current study had several limitations regarding its sample characteristics. The sample size of the study was limited. At the beginning of the study, the ideal sample size for the mediation analysis was calculated as 100 by using MedPower (Kenny, 2017). However, the aimed sample size could not be reached due to limited applications to the Istanbul Bilgi University Psychological Counseling Center within the time frame of data collection.

Especially in attachment insecurity, the secure and the insecure groups are not close in size. Therefore, making statistical comparisons between these groups difficult. Additionally, this imbalance in the data distribution might have affected insignificant results in regression, ANOVA, and ANCOVA analyses. The limitation in the sample size reduced the power of the statistical analyses and the effect size. Especially, the insignificant results of attachment insecurity and family drawing themes might be stemming from both imbalanced data and limited sample size.

Furthermore, children's current psychopathology was not included as a variable in this study. Since the sample consists of children who were psychologically tested in the Psychological Counseling Center, it is expected that they will potentially have clinical diagnoses. The internalizing problems, such as depression and anxiety, may affect children's representations of their family relationships. These factors not being included in the study may have limited more comprehensive analysis.

The age range in this study being wide might have led to developmental differences affecting emotional expression and performance on projective testing. Especially in younger children, limited cognitive and emotional skills might have resulted in not being able to express themselves as good as older children. Role reversal and bizarreness/dissociation in drawings were associated with age. Although the age was controlled for in the analyses, the children being at the different cognitive and emotional developmental stages due to their ages might have caused limitations in younger children in terms of expressing themselves.

In addition, the attachment assessment and family drawings are both projective methods, whereas the emotion regulation checklist is a scale. Hence, the difference in methods of assessment might be causing the disconnection. Furthermore, the emotion regulation scale was administered to the mothers, thus the children's own perception of their emotion regulation was not considered. The discrepancy of the assessment methods might have complicated the analysis for the expected relationships.

Another important limitation concerns the coding of the family drawings. Although the researcher obtained the coding manual from the second author, she was not provided with any training materials. The literature stated that the coding manual was easy to understand and apply. However, not having reference codes complicated the coding process for both coders of the current study.

The manual and the family drawing task that children were given in this study did not completely match. In the manual, it was certain that children were provided with colored pencils and the drawings not being colorful was considered an avoidant attachment predictor, because it indicated low investment in the task. Since colorful drawings were usually associated with investment, non-colorful drawings were considered low on vitality/creativity in Fury and colleagues' (1997a) manual. The drawings in this study were not rated on colorfulness, the scores were rounded up to benefit of the children.

The coders noticed some repeating themes in the drawings, such as the child and the other family members being indistinguishable. Especially in subscales emotional distance/isolation (between mother and child) and role reversal, the relationship between

the mother figure and the child figure was examined. When the two figures were indistinguishable from each other (or the other family members, causing confusion on which figure was the mother), we decided to rate that scale as 4 “Moderate/neutral,” since the rating indicated a difficulty in making a judgment on the dyad’s relationship.

Another topic we have discussed was that, during the pilot study, we thought the order of coding for the drawings might change how we evaluated the following drawings. This situation might have brought possible limitations such as rater bias and order effect with it.

This study contributed to the current literature by investigating the relationship between attachment, emotion regulation, and family drawings. Although the study had some limitations, the study also provided original contributions to the field. This study was one of the limited number of studies investigating the relationship between emotion regulation and children’s family drawings. The relationship between these two constructs were examined in a clinical and non-Western population.

Future research focusing on emotion regulation and family drawings should include different methods of assessment and different samples. Including different sources of information assessing children’s emotion regulation capacities, such as teacher reports, father reports, and self-report items of children may also be important. Although the findings of this study were not significant, more research on the topic with larger samples can lead to different results.

The results of this study provide important implications for clinical practice in terms of role reversal and attachment insecurity. Especially attachment insecurity being predictive of role reversal in family drawings indicated that signs for children’s relationships with their caregivers can be detected in projective methods. Based on these results, it is recommended that attachment-focused interventions should focus on role reversal in family dynamics and strengthening of the caregiver-child interactions.

The assessment of role reversal allows clinicians to detect whether children assume roles aimed at regulating their parents. In therapeutic interventions, the goal is to help both the

parents and the child recognize this dynamic and provide the child with the opportunity to return to an age-appropriate, dependent role.

In such cases, psychodynamic play therapy and attachment-focused interventions can be particularly effective. These approaches enable the child to reclaim the dependent position they are meant to hold within the caregiving relationship. Through the therapist's consistent and reliable presence as an independent adult figure, the child can begin to feel safe being vulnerable and dependent within the therapy room. This shift can be further supported through regular parent sessions, which are essential in addressing the broader parent-child relationship. It is particularly important for caregivers to become aware of the regulatory and caregiving roles their child has taken on, and to actively work toward restructuring these patterns. Parent work facilitates this process by helping adults reattune to their child's developmental needs and establish age-appropriate expectations and limits. Additionally, since role reversal reflects deeper disruptions in family dynamics, incorporating family therapy may also be beneficial to address systemic factors that sustain the pattern.

CONCLUSION

The present study aimed to focus on a topic that has been addressed only briefly in the literature by investigating the relationship between the themes emerging in children's family drawings and children's attachment representations and emotion regulation skills using a clinical non-Western sample. In this context, attachment theory and emotion regulation literature are studied.

The results showed that attachment insecurity had a significant relationship with role reversal, indicating that the responsibilities that children undertake in family relationships can be reflected through projective evaluations. However, the other family drawing themes were not significantly correlated with attachment, contrary to the current literature. Moreover, the findings of the emotion regulation and family drawing themes analysis were also not meaningful, contrary to expectations. These findings suggest that projective assessment methods are useful in attachment assessment, but suggests that direct reflection of internal processes such as emotion regulation may be limited.

This study provides valuable information about the importance of the utilization of multifaceted approaches in the assessment of children's inner worlds. In addition, it underlines that future research, including larger sample sizes, different cultural backgrounds, and children's psychopathologies, should expand the literature. It is noteworthy to mention that although these results were obtained from a limited sample and hypotheses are not supported, these findings add to the family drawings literature.

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APPENDICES

Appendix A. Result of the Evaluation by the Ethics Committee

Ethics Board Approval is available in the printed version of this dissertation.

Appendix B. Consent Form

ÇOCUK/ERGEN TEST ONAY FORMU

Bu yazıyla psikolojik değerlendirme/test süreciyle ilgili size bilgi vermek ve karşılıklı hak ve sorumluluklarımızı bildirmek istemekteyiz.

- Psikolojik değerlendirme süreci çocuğunuzun zihinsel ve duygusal süreçleriyle ilgili bilgiler vermeyi amaçlamaktadır.
- Test süreci dört ila beş görüşmeden oluşur. Ebeveynlerle yapılan görüşmeler sonrasında çocukla yapılacak test oturumlarına geçilir. Son oturumdan sonraki bir ay içerisinde aileye geribildirim verilir.
- Test sürecindeki bulgular, bir rapor şeklinde düzenlenerek istenirse aile ve okulla paylaşılır.
- Test sürecini tamamlayacak olan terapist, mesleki konsültasyon amacıyla, çocuğunuzun ve sizin kimliğinizi saklı tutarak, bilgileri Psikolojik Danışmanlık Merkezi'ndeki süpervizörleriyle paylaşacaktır.
- Görüşmeye gelmemeniz/çocuğunuzu görüşmeye getirmemeniz söz konusu olduğunda, 24 saat önce randevuyu iptal etmeniz beklenir.
- Psikolojik değerlendirme için belirlenen ücreti terapistiniz tarafından sizle bilgileri paylaşılan üniversite hesabına ilk test oturumundan önce yatırmış olmanız beklenmektedir. Açıklama kısmına "PDM Test Ücreti" yazıp ödemeyi yaptıktan sonra dekontu terapistinize iletmeniz gerekmektedir.

- **Kayıt İzni**:

  Seansların kayda almasına izin verdiğiniz takdirde bu kayıtlar sadece eğitim ve araştırma çalışmaları doğrultusunda kullanılacak, bu kayıtların kullanımında kişisel bilgileriniz saklanarak gizliliğiniz korunacaktır. Aynı zamanda bu izni verdikten sonra istediğiniz zaman fikrinizi değiştirebilir ve izninizi geri çekerek kayıtların silinmesini talep edebilirsiniz. Kayda izin vermeniz veya vermemeniz kesinlikle size sunulan terapi servislerinin kalitesini etkilemeyecektir. Araştırma için ayrı bir onay vermediğiniz takdirde kayıtlar terapi sürecinin sonlanmasıyla birlikte silinecektir. Bu izni vererek, kayıtlar üzerindeki tüm hak ve ilgilerimi Psikolojik Danışmanlık Merkezine devredersiniz.

Bu formda belirtilen kurallar çerçevesinde çocuğumun terapi sürecinde yapılan görüşmelerin:

- **Görüntülü ve sesli kayıt altına alınmasını:** ☐ Kabul ediyorum ☐ Kabul etmiyorum
- **Sadece Sesli kayıt altına alınmasını:** ☐ Kabul ediyorum ☐ Kabul etmiyorum

. Ayrıca araştırmaya katılmanız durumunda, sizinle ve çocuğunuzla yapılacak seanslar görüntülü kayıt altına alınacaktır. Görüntülü kayıtlardan elde edilen veriler yazılı hale getirilecek ve bu şekilde tamamen gizli tutularak Psikolojik Danışmalık Merkezi'nde saklanacaktır.

Araştırma sırasında bize verdiğiniz bilgiler isminiz kullanılmadan değerlendirilecektir. Kişisel bilgileriniz ve kayıtlarınız araştırmacılar dışında kimse tarafından görülmeyecek ve tamamen gizli tutulacaktır.

- **Bu koşullarda söz konusu araştırmaya katılmayı** ☐ Kabul ediyorum ☐ Kabul etmiyorum

Acil bir durumda aranabilecek kişi ve tel: _____

Bu formda belirtilen kurallar çerçevesinde PDM'de psikolojik değerlendirme hizmeti almayı

☐ Kabul ediyorum ☐ Kabul etmiyorum

Ad-Soyad: Tarih:

TC Kimlik No:

İmza:

Appendix C. Family Drawing Post Drawing Interrogation Questions (in Turkish)

Araçlar: En az 1 adet beyaz A4 kağıt, 2 adet kurşun kalem (1 tanesi yedek)

“Bana bir aile resmi çizer misin?”

Çocuk aileyi çizdikten sonra aşağıdaki sorular sorulur:

1. Bu ailedekiler kim?

2. Resimde ne yapıyorlar?

3. Bu ailenin birlikte yapmaktan hoşlandığı 3 şey nedir?

4. Bu aileyi mutlu eden 3 şey nedir?

5. Bu aileyi mutsuz eden 3 şey nedir?

6. Bu aileyi kızdıran 3 şey nedir?

7. Bu aileyi korkutan 3 şey nedir?

8. Bu ailedekiler birbirleriyle anlaşırlar mı? Birbirlerine kızarlar mı? (Cevap evet ise “Kim

kime kızar?” gibi detayları öğrenin.)

9. Eğer değiştirebilseydin bu ailede değiştirmek isteyeceğin 3 şey ne olurdu?

“Hikaye anlatmak ister misin bu çocukla ilgili/aileyle ilgili?” sorusunu da sorabilirsiniz

eğer çocuk çok yorulmadıysa ve konuşmaya istekliyse.

Appendix D. Developmental Background Form (in Turkish)

GELİŞİMSEL TARİHÇE FORMU

ID No: **Doğum Tarihi:**

Öğrencinin Adı Soyadı: **Yaşı:**

Cinsiyeti: **Sınıfı:**

Aile Bilgileri

Medeni Durum: ☐ Evli ☐ Bekar/Boşanmış/Ayrı/Dul

Annenin Adı Soyadı:

Anne Yaşı:

Annenin Eğitimi: ☐ Okula Gitmedi ☐ İlkokul ☐ Ortaokul ☐ Lise ☐ Üniversite (2 yıllık)
☐ Üniversite (4 yıllık) ☐ Mastır/Doktora

Anne Çalışıyor mu? ☐ Evet ☐ Hayır

Annenin Mesleği:

Babanın Adı Soyadı:

Baba Yaşı:

Babanın Eğitimi: ☐ Okula Gitmedi ☐ İlkokul ☐ Ortaokul ☐ Lise ☐ Üniversite (2 yıllık)
☐ Üniversite (4 yıllık) ☐ Mastır/Doktora

Baba Çalışıyor mu? ☐ Evet ☐ Hayır

Babanın Mesleği:

Kardeşi var mı? ☐ Evet ☐ Hayır

Kardeşlerin yaşları:

Appendix E. Attachment Story Completion Task Manual

Karşılıklı oturun.

"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 oyuncağı 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."

Her hikaye anlatımı sonunda, **"X (çocuğun verdiği isim) ne düşündü?"**, **"X ne hissetti?"** diye sorun.

<u>Doğum Günü Öyküsü (Isınma Oyunu)</u>:

"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."

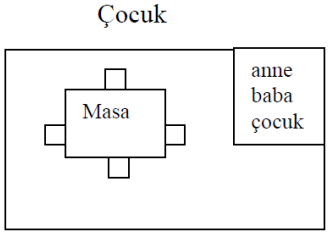
(Anne figürü oynatılarak) <u>Anne:</u> **"Büyükanne, baba, X** *(çocuğun verdiği isim)***. Hadi gelin. Doğum günü partisi yapalım."**

"Hadi bakalım sen bu öykünün gerisini oynat."

1) <u>Kazara Dökülen Meyve Suyu Öyküsü</u>:

Araçlar: Çocuk, anne, baba, masa, tabaklar

"Tamam, aklıma yeni bir hikaye geldi." *(Büyükanneyi alın ve yeni figürleri aşağıda gösterildiği gibi yerleştirin, masadan uzaklaştırın.)*



(İçinde sofra 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.)*

"Şimdi ne olduğunu bana göster."

(Hikaye bittikten sonra, sırasıyla) **"Çocuk ne düşünmüş?"**, **"Çocuk nasıl hissetmiş?"**

Yardımlar

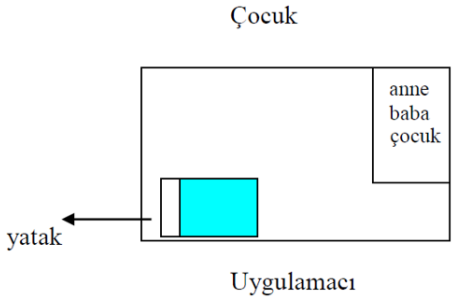
- *(Katılımcı kendiliğinden söze başlamazsa)* **"Meyve suyu dökülünce neler yapmışlar?"**
- *(Katılımcı sadece tek bir tepki verirse)* **"Sonra ne olmuş?"**; **"Başka bir şey?"**
- *(Katılımcı figürlerle belirsiz hareketler yapıyorsa)* **"Ne yapıyorlar?"**
- *(Katılımcı figürler hakkında konuşurken hangi figürü kastettiği belirsizse)* **"Kim yapıyordu?"**
- *(Katılımcı büyükanneye ne olduğunu sorarsa)* **"Bu öyküde o yok, daha sonra onunla tekrar oynayacağız."**
- Terapist katılımcının söylediklerini tasdik etmek için, katılımcının cümlelerini soru formunda tekrar edebilir. Örn: **"Anne meyve suyunu silmiş ve sonra ne olmuş?"**

NOT: Bu yardımlar katılımcının aklına belli fikirleri getirmek için hazırlanmamıştır. Bu konuda tek istisna, eğer katılımcı asıl konudan söz etmiyorsa, katılımcının dikkatini asıl konuya (dökülen meyve suyuna) odaklamak için yapılan yardımlardır.

2) Yatak Odasındaki Canavar Öyküsü:

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

“Ailemizi yeni oyun için hazırlayabilir misin?” *(Eğer katılımcı bu şekilde düzenlemezse, oyuncakları aşağıda görüldüğü gibi yerleştirin. Ailenin geri kalanının yatak odasındaki yataktan en az 30 cm uzak olması oldukça önemlidir.)*



“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.)*

“X üst kattaki odasına gidiyor, gidiyor.”

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

“Şimdi ne olduğunu bana göster.”

(Hikaye bittikten sonra, sırasıyla) **“Çocuk ne düşünmüş?”**, **“Çocuk nasıl hissetmiş?”**

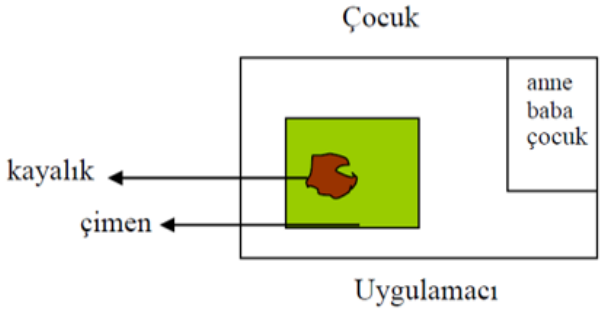
Yardımlar

- *(Katılımcı kendiliğinden söze başlamazsa)* **“Çocuk seslenince neler yapmışlar?”**
- *(Katılımcı bitirmiş gibi görünüyorsa ya da öyküyü tekrar etmeye başlamışsa)* **“Hazırsan yeni bir tanesine geçelim.”**
- Diğer yardımlar için ‘Kazara dökülen meyve suyu öyküsü’ne bakılabilir.

3) Yaralı Diz Öyküsü:

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

"Tamam, Şimdi başka bir öyküm var. Ben bunları toplarken, sen ailemizi oraya koy ve yeni öykü için hazırla." *(Uygulamacı masanın köşesini gösterir. Öyküde kayalığa tırmanan çocuk dışında ailenin geri kalanının kayalıktan en az 30 cm uzak olması önemlidir.)*



"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)*

"Şimdi ne olduğunu bana göster."

(Hikaye bittikten sonra, sırasıyla) **"Çocuk ne düşünmüş?"**, **"Çocuk nasıl hissetmiş?"**

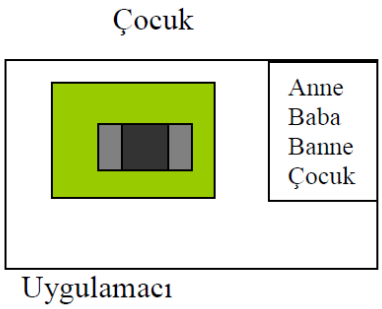
Yardımlar

- *(Katılımcı kendiliğinden söze başlamazsa)* **"Dizi yaralanınca neler yapmışlar?"**
- *(Katılımcı bitirmiş gibi görünüyorsa ya da öyküyü tekrar etmeye başlamışsa)* **"Hepsi bu kadar. Hadi gel şimdi bunları kaldıralım ve başka bir tanesini yapalım."**
- Diğer yardımlar için 'Kazara dökülen meyve suyu öyküsü'ne bakılabilir.

4) Ayrılık Öyküsü:

Araçlar: Çocuk, anne, baba, büyükanne, çimen ve araba için bir kutu

“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 olası 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.”**

“Şimdi ne olduğunu bana göster.”

ÖNEMLİ NOT: Uygulamacı, katılımcının figürleri arabaya yerleştirmesine ve arabayla uzaklaştırmasına izin vermelidir. Eğer katılımcı arabayla uzaklaşmalarını sağlayamazsa, sadece bu durumda uygulamacı karışır. Eğer katılımcı çocukları da arabaya yerleştirirse, **“Hayır, sadece anne ve baba gidiyorlar.”** denir. Çocuk arabayı uzaklaştırdıktan sonra (zorunlu olduğu taktirde uygulamacı), uygulamacı arabayı masanın altına alır ve gözden uzaklaştırır. Eğer katılımcı arabayı bulup getirmek isterse, **“Hayır, onlar henüz geri gelmediler.”** denir.

“Ve uzaklara gittiler.” *(Araba masanın altına alınır.)*

“Şimdi ne olduğunu bana göster.”

(Hikaye bittikten sonra, sırasıyla) **“Çocuk ne düşünmüş?”**, **“Çocuk nasıl hissetmiş?”**

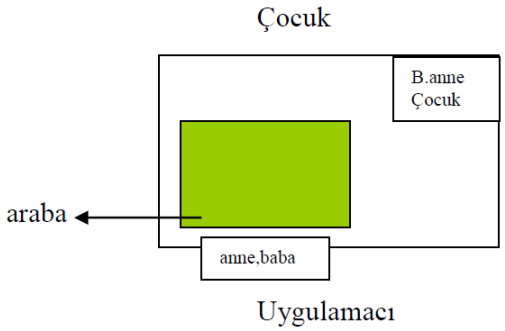
Yardımlar

- *(Katılımcı kendiliğinden söze başlamazsa)* **"Anne ve babası gidince çocuk ne yapmış?"**

5) Yeniden Bir Araya Gelme Öyküsü:

Araçlar: Çocuk, anne, baba, büyükanne, çimen ve araba için bir kutu

Araba içindeki iki ebeveynle beraber masanın altından geri getirilir. Çocuktan uzak olacak şekilde masanın üzerine yerleştirilir. (Örneğin, katılımcının ulaşmasını ve arabayı sürmesini engelleyecek şekilde uygulamacının yakınına konulur.) Eğer bir önceki oyunda katılımcı çocuklar ve büyükanneyi masanın ortasına yaklaştırmışsa, geri gelen araba ve çocuk figürleri arasında mesafe oluşturacak şekilde bu figürler katılımcıya yakın bir yere geri koyulur.



"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."**

"Şimdi ne olduğunu bana göster." *(Katılımcının arabayı eve yaklaştırmasına izin verilir ve gerekiyorsa yardımcı olunur.)*

(Hikaye bittikten sonra, sırasıyla) **"Çocuk ne düşünmüş?"**, **"Çocuk nasıl hissetmiş?"**

Yardımlar

- *(Katılımcı kendiliğinden söze başlamazsa)* **"Anne ve baba eve döndüklerinde neler olmuş?"**

Appendix F. Draw A Family Test Manual

Araçlar: En az 1 adet beyaz A4 kağıt, 2 adet kurşun kalem (1 tanesi yedek)

“Bana bir aile resmi çizer misin?”

Çocuk aileyi çizdikten sonra aşağıdaki sorular sorulur:

1. Bu ailedekiler kim?

2. Resimde ne yapıyorlar?

3. Bu ailenin birlikte yapmaktan hoşlandığı 3 şey nedir?

4. Bu aileyi mutlu eden 3 şey nedir?

5. Bu aileyi mutsuz eden 3 şey nedir?

6. Bu aileyi kızdıran 3 şey nedir?

7. Bu aileyi korkutan 3 şey nedir?

8. Bu ailedekiler birbirleriyle anlaşırlar mı? Birbirlerine kızarlar mı? (Cevap evet ise “Kim

kime kızar?” gibi detayları öğrenin.)

9. Eğer değiştirebilseydin bu ailede değiştirmek isteyeceğin 3 şey ne olurdu?

“Hikaye anlatmak ister misin bu çocukla ilgili/aileyle ilgili?” sorusunu da sorabilirsiniz

eğer çocuk çok yorulmadıysa ve konuşmaya istekliyse.

Appendix G. Emotion Regulation Scale

Lütfen aşağıdaki cümleleri okuyun ve çocuğunuz için en uygun olan sayıyı daire içine alın. Cevaplarınızı çocuğunuzun son 6 ay içindeki davranışlarını göz önüne alarak veriniz. **Eksiksiz doldurduğunuzdan emin olunuz.** Teşekkürler.

	Nadiren/ Neredeyse Hiç	**Bazen**	**Sık Sık**	**Her Zaman**
1. Neşeli bir çocuktur.	**1**	**2**	**3**	**4**
2. Duygu hali çok değişkendir. (Çocuğun duygu durumunu tahmin etmek güçtür çünkü olumlu bir duygu halinden olumsuz bir duygu haline çabucak geçer.)	**1**	**2**	**3**	**4**
3. Yetişkinlerin arkadaşça veya nötr yaklaşımlarına olumlu karşılık verir.	**1**	**2**	**3**	**4**
4. Bir faaliyetten diğerine kolaylıkla geçer; sinirlenmez, endişelenmez, sıkıntı duyma ya da aşırı derecede heyecanlanmaz.	**1**	**2**	**3**	**4**
5. Üzüntülü ya da sıkıntılı durumların çabucak üstesinden gelebilir. (Örneğin, duygusal sıkıntı yaratan olaylardan sonra surat asmaz, endişeli veya üzgün durmaz.)	**1**	**2**	**3**	**4**
6. Kolayca hüsrana uğrar.	**1**	**2**	**3**	**4**
7. Yaşıtlarının arkadaşça veya nötr yaklaşımlarına olumlu karşılık verir.	**1**	**2**	**3**	**4**
8. Kolayca sinir krizi/öfke nöbeti geçirmeye eğilimlidir.	**1**	**2**	**3**	**4**
9. Hoşuna giden bir şeye ulaşmayı erteleyebilir. (Örneğin, kendi sırasını bekleyebilir.)	**1**	**2**	**3**	**4**
10. Başkalarının sıkıntılarından keyif duyar. (Örneğin, başka biri incindiğinde ya da cezalandırıldığında güleri başkalarıyla alay etmekten zevk alır.)	**1**	**2**	**3**	**4**

11. Heyecanıyla başa çıkabilir. (Örneğin, çok hareketli oyunlarda kontrolü kaybetmez ya da uygun olmayan durumlarda aşırı heyecanlanmaz.)	**1**	**2**	**3**	**4**
12. Mızmız ve yapışkandır.	**1**	**2**	**3**	**4**
13. Her an ortalığı karıştıran enerji patlamaları ve büyük heyecanlar yaşayabilir.	**1**	**2**	**3**	**4**
14. Yetişkinlerin sınır koymalarına sinirlenir.	**1**	**2**	**3**	**4**
15. Üzüldüğünü, kızdığını veya korktuğunu söyleyebilir.	**1**	**2**	**3**	**4**
16. Üzgün ve sıkıntılı görünür.	**1**	**2**	**3**	**4**
17. Başkalarını oyuna katmaya çalışırken aşırı enerjiktir.	**1**	**2**	**3**	**4**
18. Duygularını göstermez. (Yüzü ifadesizdir.)	**1**	**2**	**3**	**4**
19. Yaşıtlarını arkadaşça veya nötr yaklaşımlarına olumsuz karşılık verir (örneğin, kızgın bir ses tonuyla konuşabilir ya da korku gösterebilir.)	**1**	**2**	**3**	**4**
20. Dürtülerine kapılarak davranır.	**1**	**2**	**3**	**4**
21. Başkalarıyla empati kurar. (Örneğin, başkaları üzgün ya da sıkıntılı olduğunda ilgi gösterir.)	**1**	**2**	**3**	**4**
22. Başkalarının rahatsızlık verici bulacağı kadar enerjik ve heyecanlı davranır.	**1**	**2**	**3**	**4**
23. Yaşıtlarının düşmanca saldırgan veya müdahaleci davranışlarına karşı uygun olumsuz duyguları (kızgınlık, korku, öfke, sıkıntı) gösterir.	**1**	**2**	**3**	**4**
24. Başkalarını oyuna katmaya çalışırken olumsuz duygular gösterir.	**1**	**2**	**3**	**4**