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The effect of theraplay play therapy on early social behavior and temperament†

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Highlights:
- Theraplay reduced young children's fear, frustration, sadness, and shyness.
- Emotional expressiveness and affectionate behaviors increased after eight weeks of Theraplay.
- Theraplay improved attention, inhibitory control, and perceptual sensitivity in toddlers.
- Caregiver-child interactions became more positive and responsive after group Theraplay.

Abstract

This study investigated the short-term impacts of Theraplay play therapy on temperament and early positive social behaviors in infants and children. The research sample consisted of 30 caregiver-child pairs aged between 18 and 34 months. Over 8 weeks, these participants participated in weekly Theraplay group therapy sessions. The primary data collection instrument was the Early Childhood Behavior Questionnaire (ECBQ), designed for children aged 18–36 months. The study employed a mixed-methods approach, combining quantitative and qualitative data to comprehensively evaluate the therapy's effectiveness. Quantitative data were collected using a pretest-posttest control group design. The pretest scores from the ECBQ for the experimental and control groups were first compared using the Mann-Whitney U test. Following the therapy sessions, differences between pretest and posttest scores within each group were analyzed using the Wilcoxon Signed-Rank Test. Finally, posttest scores were again compared between the experimental and control groups using the Mann-Whitney U test. Qualitative data were collected through observations and reflective journal entries made during and after the therapy sessions, allowing for detailed insights into changes in children's behavior and emotional responses. The results demonstrated that the eight-week Theraplay intervention, an attachment-based play therapy, significantly impacted the behavioral and emotional development of early childhood. Specifically, there were noticeable reductions in negative temperament traits such as fear, frustration, sadness, and shyness. Furthermore, the therapy enhanced children's attention span, focus, affectionate behaviors (like hugging), and overall emotional expressiveness, particularly in physical contact behaviors.

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1. Introduction

The period between birth and 2 years of age, known as infancy, is characterized by rapid cognitive, physical, and emotional development. Addressing not only the physical needs of infants but also their cognitive and emotional requirements is crucial during this stage (Öztürk, 2002). Early cognitive stimulation and caregiver engagement significantly contribute to positive developmental outcomes (Luby et al., 2024). Additionally, early intervention programs help prevent delays in cognitive and motor skills, emphasizing the importance of timely and targeted support (Orton et al., 2024). During this phase, the bond between infants and their caregivers significantly influences cognitive and emotional development. Secure attachment has been associated with healthier socioemotional and cognitive outcomes, while insecure attachment increases the risk of future emotional and behavioral issues (Belsky, 2005; Luo et al., 2024). Supportive and responsive caregiving fosters secure attachment, promoting emotional regulation and autonomy (Yano-Nashimoto et al., 2023).

Infants who develop secure attachments are more likely to become socially and emotionally healthier individuals. Conversely, inconsistent caregiving can lead to negative attachment experiences, resulting in insecure attachment patterns (Seifer & Schiller, 1995). Secure attachment is a protective factor that promotes better emotional regulation and psychological well-being (Ginalska & Cichopek, 2024). Moreover, a meta-analysis highlights the critical role of caregiver sensitivity in fostering secure attachment, while inconsistent caregiving increases the likelihood of insecurity (Madigan et al., 2024). Disruptions in caregiving environments, such as those experienced during the COVID-19 pandemic, have negatively affected children's attachment security and emotional development, particularly in low-income communities (Li et al., 2024).

Research on attachment and parent-child relationships highlights the impact of early caregiving behaviors on children's temperament traits (McClowry, 2003; as cited in Richters, 2010). Temperament is behavioral patterns and emotional responses shaped by an individual's innate biological and physiological characteristics (Mathewson, Miskovic, & Schmidt, 2012). Temperamental traits that emerge during early childhood play a critical role in shaping a child's social interactions, emotional reactions, and cognitive processes (Essa, 2003). Recent studies confirm that the interaction between temperament and parent-child relationship quality influences various developmental outcomes, including sleep quality and emotional regulation in the later stages of childhood (Hincapie et al., 2023). Additionally, parental sensitivity and caregiving behaviors are shown to predict attachment security and emotional stability in children, reinforcing the importance of early positive interactions (Madigan et al., 2024). Children who exhibit maladaptive behaviors are more likely to experience challenges in social relationships, with temperamental characteristics playing a more pronounced role in such cases (Griggs, Gagnon, Huelsman, Kidder-Ashley, & Ballard, 2009). Moreover, findings from a longitudinal study indicate that early attachment patterns and caregiving sensitivity are critical predictors of later socioemotional outcomes (McIntosh et al., 2023).

Temperament evolves through the interaction of innate characteristics and environmental factors. The bond that parents establish with their children significantly influences temperament. Particularly in social development, fostering positive temperament traits can enable children to succeed in peer relationships (Coplan & Bullock, 2012). Temperament is closely related to children's social-cognitive development and motivation, with parent-child interactions playing a critical role in regulating these processes (Belsky, 2005). Recent studies have highlighted that the quality of parent-child interactions significantly influences the expression of temperament, with responsive caregiving fostering adaptive temperamental traits (Rudnova & Kornienko, 2023). Additionally, evidence suggests that early attachment patterns and caregiver sensitivity are critical factors in shaping children's temperament and socioemotional outcomes (Dagan et al., 2024).

In early childhood, temperament is considered a key determinant of emotional states and social behaviors (McClowry, 2003). Temperament traits have a significant influence on the quality of social relationships, peer interactions, and emotional responses (Coplan & Bullock, 2012). Hence, interventions to support children's social and emotional development should occur early in life. Recent research highlights the effectiveness of structured intervention programs in promoting social-emotional development, particularly in early childhood education settings (Martikainen et al., 2023). Furthermore, preventive interventions in early childhood have demonstrated the potential to foster positive behavioral and emotional outcomes, underscoring the importance of high-quality environments (Ortelbach et al., 2022). Additionally, targeted interventions in poverty-stricken areas have significantly improved social-emotional competencies, offering scalable models for supporting vulnerable populations (Xu et al., 2023).

Studies have demonstrated that early interventions benefit children's social and emotional development. Play therapies, in particular, are commonly used methods to support children's emotional and social development. These therapies provide a suitable environment for children to express themselves, regulate their emotions, and develop social skills (Teke, 2019). Among such interventions, Theraplay group therapy is one method applicable in early childhood that has been examined in this study.

Social development is a lifelong process through which individuals learn to adapt to society, establish positive relationships, and express emotions. Beginning at birth, social development is initially nurtured within the family, which forms the first social environment for the individual (Kandır, 2003). During preschool, interactions with the social environment reinforce this development and foster the ability to conform to societal norms (Başal, 2007). Socialization is the process by which an individual integrates with their social surroundings and adapts to its expectations (Kağıtçıbaşı, 1996). Social development can be explained through various theoretical frameworks, including social cognitive theory, psychosocial development theory, and ecological systems theory. Social behaviors develop from birth, with the relationship established with the mother often forming the foundation of social bonds. Interactions within the family and play activities contribute to children's social skills development. These skills are further reinforced during the preschool years through play, leading to the acquisition of social competence. Social competence refers to an individual's capacity to effectively align with societal expectations and utilize social opportunities (Evirgen, 2010). This competence is associated with adopting social norms, developing empathy, and engaging in cooperative behaviors, all of which contribute to future social success (Denham, 2002). Among social development theories, psychosocial development theory is noteworthy for its focus on the interplay between the id, ego, and superego. These three components shape behavior, with socially acceptable behaviors gradually internalized over time (Akman & Erden, 2018). Social learning theory, on the other hand, posits that individuals learn and reinforce social behaviors by modeling those around them (Değer, 2010).

Positive social behaviors facilitate harmonious interactions with the social environment and include traits such as altruism, empathy, and sharing. Negative social behaviors, such as aggression and antisocial tendencies, are often associated with underdeveloped social problem-solving skills but can be transformed into positive social behaviors over time (Bredekamp, 2015). Recent research has highlighted that early interventions focusing on the development of empathy and compassion can effectively promote positive social behaviors in young children (Kappelmayer et al., 2022). Moreover, structured intervention programs in preschool settings have significantly improved social competence and peer interactions, reducing aggression and antisocial behaviors (Dong et al., 2023). Additionally, school-based interventions fostering prosocial behavior have demonstrated increased empathy and reduced social exclusion in early childhood (Swit et al., 2023). In addition to social development theories, the influence of temperament on social development is significant. Temperament, defined as innate characteristics that determine emotional responses and interactions with the social environment, is shaped by parental attitudes and influences children's social development (Rothbart, 2007). Temperament plays a crucial role in children's development of social skills, particularly during early childhood. Parental attitudes and environmental factors shape temperament and contribute to developing social skills as a component of social development (Putnam, 2022).

Play is a pivotal tool in children's social development. It fosters problem-solving, sharing, and cooperation, all essential social skills. Play therapy serves as an important method for enhancing these social skills. Initiated by Freud's contributions to the concept of play, play therapy aids children in resolving social and emotional challenges (Freud, as cited in Halmatov, 2017). Theraplay play therapy was developed in 1967 by Ann Jernberg to strengthen parent-child relationships among preschool children from low socio-economic backgrounds (Uysal, 2020). Theraplay employs physical contact, eye contact, and shared play activities to support children's social and emotional development. These techniques foster secure attachment between children and their caregivers, enhancing children's self-confidence and self-esteem (Booth & Jernberg, 2021). Theraplay has been the focus of numerous studies due to its positive effects on temperament and social behaviors during early childhood. This study evaluates the short-term effects of Theraplay play therapy on infants and young children. This research investigates the effect of group Theraplay sessions on the development of positive social behaviors and temperament in infants and children aged 18–34 months.

2. Method

This study employed the group format of Theraplay play therapy to examine its effects on early positive social behaviors and temperament traits in infants and young children. The research focused on

observing the development of social skills and changes in temperament within this critical stage of early childhood education and developmental therapies. In this context, play therapies are vital in supporting children's emotional, social, and cognitive development. The study's methodology aimed to analyze changes in temperament traits through the application of Theraplay play therapy.

2.1. Research Design

This study employed a mixed-methods research design to examine the effects of the group format of Theraplay play therapy on early positive social behaviors and temperament traits in infants and children aged 18–36 months. A mixed-methods approach combines qualitative and quantitative data collection methods to provide a comprehensive understanding of the research problem (Creswell, 2017). An explanatory sequential design was employed, wherein quantitative data were collected first, followed by qualitative data to provide an explanation for the findings (Creswell, 2019). Quantitative data were obtained using an experimental design of a pretest-posttest control group. This model, frequently applied in the social sciences, assesses the effects of experimental interventions by comparing pre-test and post-test results across experimental and control groups (Köse, 2020). For qualitative data collection, the case study method was adopted. This approach focuses on answering "how" and "why" questions, allowing for an in-depth analysis of events and phenomena beyond the researcher's control (Yıldırım & Şimşek, 2013). The case study method is widely used in educational research, enabling researchers to conduct direct observations of participants.

2.2. Participants and Procedure

The study population comprised infants and children aged 18 to 34 months and their caregivers residing in Lüleburgaz, Kırklareli Province. Participation was voluntary, and informed consent was obtained from all caregivers. The experimental group consisted of three subgroups, each with 10 caregiver-child pairs, totaling 30 pairs who attended eight sessions of Group Theraplay conducted at a specialized center. Similarly, the control group included 30 caregiver-child pairs who did not participate in the intervention during the same period. Among all participants, 70% were female children and 30% were male, with a mean age of 25.6 months.

A Mann-Whitney U test was conducted on the Early Childhood Behavior Questionnaire (ECBQ) pre-test scores to assess baseline comparability between the experimental and control groups. The analysis revealed no statistically significant differences between the groups in several key temperament subscales, including Attention Focusing, Discomfort, Fear, Frustration, Impulsivity, Inhibitory Control, Low-Intensity Pleasure, Motor Activation, Perceptual Sensitivity, Shyness, Sociability, and Soothability ($p > 0.05$). These results indicate that the experimental and control groups were largely homogeneous regarding temperament characteristics at the beginning of the study, thus supporting the validity of subsequent comparisons following the intervention.

The children in the study group ranged in age from 19 to 32 months, with a mean age of 25.66 months. The mothers in the study group had a mean age of 29.63 years, while the fathers' mean age was 31.63 years. Details regarding the personal characteristics of the children are presented in Table 1. According to Table 1, the experimental group comprised 11 female and 10 male children, while the control group included 10 female and five male children. Regarding socio-economic status, one caregiver in the experimental group was identified as middle-class, and 14 as upper-class. In the control group, seven caregivers identified as middle-class, and eight as upper-class. Regarding educational background, the mothers in the experimental group included 3 with high school diplomas and 12 with bachelor's degrees. In the control group, four mothers had high school diplomas, 3 had associate degrees, and 8 had bachelor's degrees. Among the fathers in the experimental group, 2 had high school diplomas, 2 had associate degrees, 10 had bachelor's degrees, and 1 held a master's degree. In the control group, three fathers had high school diplomas, 3 had associate degrees, and 9 had bachelor's degrees. In terms of birth type, one child in the experimental group was born via vaginal delivery, while 14 were delivered via cesarean section. In the control group, four children were born via vaginal delivery, and 11 were delivered via cesarean section. All children in the experimental group were born at term, whereas in the control group, two children were born prematurely, and 13 were born at term. Finally, 12 children in the experimental group participated in play activities, while three did not. In contrast, all children in the control group participated in play activities.

Table 1. Frequency and percentage distribution of personal characteristics of the study group

Personal Characteristics		Experimental	Control
		f	*f*
Gender	Female	11	10
	Male	4	5
Socio-Economic Status	Lower	0	0
	Middle	1	7
	Upper	14	8
Mother's Education Level	High School	3	4
	Associate Degree	0	3
	Bachelor's Degree	12	8
Father's Education Level	High School	2	3
	Associate Degree	2	3
	Bachelor's Degree	10	9
	Master's Degree	1	0
Birth Type	Vaginal	1	4
	Cesarean	14	11
Birth Timing	At Term	15	13
	Preterm	0	2
Participation in Play Group	Participated	12	15
	Did not participate	3	0

2.3. Measures

The data collection process spanned nine weeks, during which Theraplay sessions were conducted. These sessions were structured into three phases: an acclimation phase, a middle phase, and a closure preparation phase. The researchers collected the data through pretest and posttest applications, and the results were analyzed. At the beginning and end of the study, the Early Childhood Behavior Questionnaire (ECBQ) was administered to both the experimental and control groups, and the results were compared. Additionally, qualitative data collection tools, including Observation and Reflective Journal Reports, were used to examine changes in children and caregivers in detail. The Personal Information Form and the Early Childhood Behavior Questionnaire (ECBQ) were utilized during the data collection phase. Additionally, the researcher developed Observation and Reflective Journal Reports as qualitative data collection instruments.

2.3.1. Personal Information Form

The Personal Information Form, developed by the researcher, was used to gather fundamental demographic data about the participating infants, children, and their caregivers. The form included the child's gender, age, birth type, and whether the child was born prematurely. It also collected details about the caregivers, including their educational background, ages, and the family's socio-economic status. This data facilitated a comprehensive analysis of the overall profile of the study group.

2.3.2. Early Childhood Behavior Questionnaire (ECBQ)

The Early Childhood Behavior Questionnaire (ECBQ), developed by Putnam, Gartstein, and Rothbart (2006), is a parent-report instrument designed to assess temperament characteristics in children aged 18–36 months. The questionnaire includes 201 items grouped into 18 subscales, such as Activity Level, High-Intensity Pleasure, Sociability, Positive Anticipation, Soothability, Shyness, Sadness, Impulsivity, Discomfort, Fear, Perceptual Sensitivity, Motor Activation, Frustration, Inhibitory Control, Attention Shifting, Low-Intensity Pleasure, Cuddliness, and Attention Focusing. Items are rated on a 7-point Likert scale ranging from 1 ("never") to 7 ("always"), with an option for "not applicable (NA)." In this study, the ECBQ was used to assess temperament traits in children through both caregiver reports and researcher observations. The children themselves did not complete the questionnaire. Instead, researchers conducted systematic observations and recorded behaviors per the ECBQ criteria. This approach was adopted for the young age group (18–34 months) to ensure consistency in behavioral interpretation. The Turkish adaptation of the ECBQ followed a rigorous translation and back-translation protocol. A reduced version of 52 items was utilized, focusing on core subscales such as Perceptual Sensitivity, Inhibitory Control, Attention Focusing, and Attention Shifting. Parents responded on a 5-point Likert scale (1 = never, 5 = always). Items that were

culturally or linguistically inconsistent were revised or removed (e.g., one item from Perceptual Sensitivity and four from Attention Shifting). Internal consistency analyses reported acceptable reliability coefficients for Turkish children: Cronbach's alpha values were .65 for Perceptual Sensitivity, .87 for Inhibitory Control, .82 for Attention Focusing, and .67 for Attention Shifting (Köksal, Ertekin, & Çolakoğlu, 2014). Additional subscales reported in the current study include Activity Level (α = .725), Motor Activation (α = .754), Inhibitory Control (α = .669), Attention Focusing (α = .713), Fear (α = .777), and Sadness (α = .745). These values demonstrate that the adapted ECBQ maintains adequate psychometric properties for use in the Turkish context. Subscales such as Activity Level and Motor Activation reflect extraversion; Inhibitory Control and Attention Focusing measure effortful control; while Fear and Sadness assess negative affectivity.

2.3.3. Observation and Reflective Journal Reports

To collect qualitative data for the study, the behaviors, verbal expressions, and emotional responses exhibited by children and caregivers during Theraplay play therapy sessions were observed and documented using Observation and Reflective Journal Reports. These tools were employed to examine the effects of the sessions closely and to analyze changes in the participants over time. The qualitative data were analyzed using content analysis. After transcription of the observation notes and caregiver reflections, two independent coders conducted open coding to identify meaningful data units. These codes were then grouped into categories and subsequently into overarching themes, such as "emotional expression," "physical interaction," and "attention focus." The coding process involved iterative comparison, and discrepancies between coders were resolved through discussion and consensus to ensure reliability. To further enhance the trustworthiness of the qualitative findings, sample participant expressions were included to support the thematic structures. For example, caregivers reported, "my child started looking at my face more often," and "he hugs more frequently now," reflecting increased emotional connectedness and physical affection. These illustrative quotations validated the emerging themes and provided depth to interpreting behavioral change following the Theraplay intervention.

2.4. Data Analysis

Quantitative data collected for this study were analyzed using the SPSS software for Windows. The Mann-Whitney U Test compared Pretest scores from the Early Childhood Behavior Questionnaire (ECBQ) for the experimental and control groups. Subsequently, the Wilcoxon Signed-Rank Test evaluated differences between pretest and posttest scores within each group. Finally, posttest scores for the experimental and control groups were compared again using the Mann-Whitney U Test. A statistical significance level of 0.05 was set for all analyses. Qualitative data were analyzed using content analysis methods (Yıldırım & Şimşek, 2013). Observations and reflective journal entries from caregivers were categorized and interpreted to provide detailed insights.

2.5. Validity, Reliability, and Ethical Considerations

To ensure the validity and reliability of the study, standardized measurement tools such as the ECBQ were employed, and statistical methods were applied to verify internal consistency. The research design incorporated multiple data sources to enhance triangulation and credibility. Ethical approval was obtained before the study commenced. Informed consent was secured from all caregivers, ensuring participants were fully aware of the study's purpose, procedures, and potential benefits. Confidentiality and anonymity were maintained throughout the research process, and all data were securely stored and used solely for academic purposes. The study adhered to ethical guidelines for research involving human participants. This study was conducted with the ethical approval of Istanbul Kent University, dated 13.09.2023, with approval number E-10420511-050-25556.

3. Results

This section presents the analyses and results from the data collected during the study. The evaluations highlight the effects of Group Theraplay play therapy on the social, emotional, and behavioral development of young children. The findings were obtained by comparing the pretest and posttest results of the experimental and control groups. These findings were interpreted in depth based on the observed differences between the groups, and the impacts of the therapy intervention were examined in detail.

3.1. Experimental and Control Groups' Findings

The results of the Mann-Whitney U Test, conducted to evaluate whether there were significant differences in the pretest scores of the Early Childhood Behavior Questionnaire (ECBQ) between the experimental and control groups, are presented in Table 2. The table reveals no significant differences in the mean ranks for subscales such as Attention Focusing, Discomfort, Fear, Frustration, Impulsivity, Inhibitory Control, Low-Intensity Pleasure, Motor Activation, Perceptual Sensitivity, Shyness, Sociability, and Soothability ($p > 0.05$). However, significant differences were observed between the experimental and control groups in the pretest mean ranks for the Activity Level, Attention Shifting, Cuddliness, High-Intensity Pleasure, Positive Anticipation, and Sadness subscales.

Table 2. Mann-Whitney U test results for pretest scores in the early childhood behavior questionnaire: experimental vs. control groups

Subscale	Group	n	Mean Rank	Sum of Ranks	U	z	p
Activity Level	Experimental	15	19,10	286,50	58,500	-2,244	,023*
	Control	15	11,90	178,50			
Attention Focusing	Experimental	15	12,70	190,50	70,500	-1,751	,081
	Control	15	18,30	274,50			
Attention Shifting	Experimental	15	9,23	138,50	18,500	-3,911	,000*
	Control	15	21,77	326,50			
Cuddliness	Experimental	15	9,23	138,50	18,500	-3,906	,000*
	Control	15	21,77	326,50			
Discomfort	Experimental	15	17,20	258,00	87,000	-1,063	,305
	Control	15	13,80	207,00			
Fear	Experimental	15	16,40	246,00	99,000	-,562	,595
	Control	15	14,60	219,00			
Frustration	Experimental	15	15,20	228,00	108,000	-,187	,870
	Control	15	15,80	237,00			
High-Intensity Pleasure	Experimental	15	11,30	169,50	49,500	-2,626	,008*
	Control	15	19,70	295,50			
Impulsivity	Experimental	15	16,20	243,00	102,000	-,437	,683
	Control	15	14,80	222,00			
Inhibitory Control	Experimental	15	13,43	201,50	81,500	-1,290	,202
	Control	15	17,57	263,50			
Low-Intensity Pleasure	Experimental	15	13,63	204,50	84,500	-1,165	,250
	Control	15	17,37	260,50			
Motor Activation	Experimental	15	17,47	262,00	83,000	-1,226	,233
	Control	15	13,53	203,00			
Perceptual Sensitivity	Experimental	15	15,17	227,50	107,500	-,208	,838
	Control	15	15,83	237,50			
Positive Anticipation	Experimental	15	10,37	155,50	35,500	-3,201	,001*
	Control	15	20,63	309,50			
Sadness	Experimental	15	18,90	283,50	61,500	-2,122	,033*
	Control	15	12,10	181,50			
Shyness	Experimental	15	17,50	262,50	82,500	-1,251	,217
	Control	15	13,50	202,50			
Sociability	Experimental	15	15,83	237,50	107,500	-,208	,838
	Control	15	15,17	227,50			
Soothability	Experimental	15	13,77	206,50	86,500	-1,084	,285
	Control	15	17,23	258,50			

An examination of Table 3 reveals that for children in the experimental group who participated in Theraplay, there were no significant changes in the Activity Level, Discomfort, High-Intensity Pleasure, Impulsivity, Low-Intensity Pleasure, Motor Activation, and Positive Anticipation subscales of the Early Childhood Behavior Questionnaire (ECBQ) before and after the intervention ($p>0.05$). However, significant increases were observed in posttest scores for positive temperament traits such as Attention Focusing, Attention Shifting, Inhibitory Control, Perceptual Sensitivity, Sociability, and Soothability ($p< 0.05$). Additionally, significant reductions were found in negative temperament traits, including Fear, Frustration, Sadness, and Shyness, when compared to pretest scores ($p < 0.05$). These findings suggest that Theraplay effectively reduces negative temperament traits while enhancing positive temperament traits in children.

Table 3. Wilcoxon signed-rank test results for early childhood behavior questionnaire scores before and after the Theraplay play therapy in the experimental group

Subscale	Posttest - Pretest	n	Mean Rank	Sum of Ranks	z	p
Activity Level	Negative Rank	11	7,36	81,00	-1,793	,073
	Positive Rank	3	8,00	24,00		
	Ties	1				
Attention Focusing	Negative Rank	1	2,00	2,00	-3,296	,001*
	Positive Rank	14	8,43	118,00		
	Ties	0				
Attention Shifting	Negative Rank	1	2,50	2,50	-3,275	,001*
	Positive Rank	14	8,39	117,50		
	Ties	0				
Cuddliness	Negative Rank	3	7,33	22,00	-2,163	,031*
	Positive Rank	12	8,17	98,00		
	Ties	0				
Discomfort	Negative Rank	11	6,41	70,50	-1,133	,257
	Positive Rank	3	11,50	34,50		
	Ties	1				
Fear	Negative Rank	12	9,08	109,00	-2,790	,005*
	Positive Rank	3	3,67	11,00		
	Ties	0				
Frustration	Negative Rank	11	9,36	103,00	-2,447	,014*
	Positive Rank	4	4,25	17,00		
	Ties	0				
High-Intensity Pleasure	Negative Rank	1	11,00	11,00	-1,959	,050
	Positive Rank	10	5,50	55,00		
	Ties	4				
Impulsivity	Negative Rank	7	7,14	50,00	-,866	,386
	Positive Rank	5	5,60	28,00		
	Ties	3				
Inhibitory Control	Negative Rank	1	1,00	1,00	-3,353	,001*
	Positive Rank	14	8,50	119,00		
	Ties	0				
Low-Intensity Pleasure	Negative Rank	5	6,00	30,00	-1,710	,087
	Positive Rank	10	9,00	90,00		
	Ties	0				
Motor Activation	Negative Rank	10	7,30	73,00	-1,289	,197
	Positive Rank	4	8,00	32,00		
	Ties	1				
Perceptual Sensitivity	Negative Rank	1	10,50	10,50	-2,645	,008*
	Positive Rank	13	7,27	94,50		
	Ties	1				
Positive Anticipation	Negative Rank	1	10,50	10,50	-1,856	,063
	Positive Rank	13	7,27	94,50		
	Ties	1				
Sadness	Negative Rank	13	7,96	103,50	-3,211	,001*
	Positive Rank	1	1,50	1,50		
	Ties	1				
Shyness	Negative Rank	13	7,77	101,00	-3,051	,002*
	Positive Rank	1	4,00	4,00		
	Ties	1				
Sociability	Negative Rank	3	4,17	12,50	-2,519	,012*
	Positive Rank	11	8,41	92,50		
	Ties	1				
Soothability	Negative Rank	1	4,00	4,00	-3,054	,002*
	Positive Rank	13	7,77	101,00		
	Ties	1				

*p<.05

An examination of Table 4 indicates no significant changes in the mean scores across any subscales of the Early Childhood Behavior Questionnaire (ECBQ) for children in the control group between the pretest and posttest assessments.

Table 4. Wilcoxon signed-rank test results for early childhood behavior questionnaire scores before and after Theraplay play therapy in the control group

Subscale	Posttest - Pretest	n	Mean Rank	Sum of Ranks	z	p
Activity Level	Negative Rank	0	,00	,00	,000	1,000
	Positive Rank	0	,00	,00		
	Ties	15				
Attention Focusing	Negative Rank	0	,00	,00	,000	1,000
	Positive Rank	0	,00	,00		
	Ties	15				
Attention Shifting	Negative Rank	0	,00	,00	,000	1,000
	Positive Rank	0	,00	,00		
	Ties	15				
Cuddliness	Negative Rank	3	2,00	6,00	-1,604	,109
	Positive Rank	0	,00	,00		
	Ties	12				
Discomfort	Negative Rank	0	,00	,00	,000	1,000
	Positive Rank	0	,00	,00		
	Ties	15				
Fear	Negative Rank	0	,00	,00	,000	1,000
	Positive Rank	0	,00	,00		
	Ties	15				
Frustration	Negative Rank	1	1,50	1,50	-1,000	,317
	Positive Rank	1	1,50	1,50		
	Ties	13				
High-Intensity Pleasure	Negative Rank	0	,00	,00	,000	1,000
	Positive Rank	0	,00	,00		
	Ties	15				
Impulsivity	Negative Rank	0	,00	,00	,000	1,000
	Positive Rank	0	,00	,00		
	Ties	15				
Inhibitory Control	Negative Rank	0	,00	,00	,000	1,000
	Positive Rank	0	,00	,00		
	Ties	15				
Low-Intensity Pleasure	Negative Rank	0	,00	,00	,000	1,000
	Positive Rank	0	,00	,00		
	Ties	15				
Motor Activation	Negative Rank	0	,00	,00	,000	1,000
	Positive Rank	0	,00	,00		
	Ties	15				
Perceptual Sensitivity	Negative Rank	0	,00	,00	,000	1,000
	Positive Rank	0	,00	,00		
	Ties	15				
Positive Anticipation	Negative Rank	0	,00	,00	,000	1,000
	Positive Rank	0	,00	,00		
	Ties	15				
Sadness	Negative Rank	0	,00	,00	,000	1,000
	Positive Rank	0	,00	,00		
	Ties	15				
Shyness	Negative Rank	0	,00	,00	-1,414	,157
	Positive Rank	2	1,50	3,00		
	Ties	13				
Sociability	Negative Rank	0	,00	,00	,000	1,000
	Positive Rank	0	,00	,00		
	Ties	15				
Soothability	Negative Rank	0	,00	,00	,000	1,000
	Positive Rank	0	,00	,00		
	Ties	15				

For subscales where equivalence was not achieved in the pretests—Activity Level, Attention Shifting, Cuddliness, High-Intensity Pleasure, Positive Anticipation, and Sadness—posttest mean ranks were not examined. Additionally, the results of the Mann-Whitney U Test, assessing whether there were significant differences in the posttest mean scores of the Early Childhood Behavior Questionnaire (ECBQ) between the experimental and control groups, are presented in Table 5.

An analysis of Table 5 indicates no significant differences between the experimental and control groups in subscales such as Attention Focusing, Discomfort, Fear, Frustration, Impulsivity, Inhibitory Control, Low-Intensity Pleasure, Motor Activation, Perceptual Sensitivity, Shyness, and Soothability (p

>0.05). However, a significant difference was found in the Sociability subscale, with the mean rank of the experimental group (20.83) being significantly higher than that of the control group (10.17) ($p < 0.05$). This finding indicates that children in the experimental group who participated in Theraplay demonstrated a meaningful improvement in sociability compared to those in the control group.

Table 5. Mann-Whitney U Test results for the early childhood behavior questionnaire posttest scores of the experimental and control groups

Subscale	Group	n	Mean Rank	Sum of Ranks	U	z	p
Attention Focusing	Experimental	15	17,73	266,00	79,000	-1,394	,174
	Control	15	13,27	199,00			
Discomfort	Experimental	15	14,77	221,50	101,500	-,460	,653
	Control	15	16,23	243,50			
Fear	Experimental	15	13,07	196,00	76,000	-1,516	,137
	Control	15	17,93	269,00			
Frustration	Experimental	15	13,30	199,50	79,500	-1,372	,174
	Control	15	17,70	265,50			
Impulsivity	Experimental	15	15,27	229,00	109,000	-,146	,902
	Control	15	15,73	236,00			
Inhibitory Control	Experimental	15	17,77	266,50	78,500	-1,413	,161
	Control	15	13,23	198,50			
Low-Intensity Pleasure	Experimental	15	14,30	214,50	94,500	-,750	,461
	Control	15	16,70	250,50			
Motor Activation	Experimental	15	16,03	240,50	104,500	-,333	,744
	Control	15	14,97	224,50			
Perceptual Sensitivity	Experimental	15	17,20	258,00	87,000	-1,059	,305
	Control	15	13,80	207,00			
Shyness	Experimental	15	15,10	226,50	106,500	-,250	,806
	Control	15	15,90	238,50			
Sociability	Experimental	15	20,83	312,50	32,500	-3,341	,000*
	Control	15	10,17	152,50			
Soothability	Experimental	15	17,83	267,50	77,500	-1,459	,148
	Control	15	13,17	197,50			

3.2. Qualitative Findings from Reflective Journals and Group Theraplay Observations

The reflective journal reports and observations revealed significant insights into the behavioral, emotional, and social progress of the children participating in Group Theraplay Play Therapy sessions. While children initially struggled with transitions between activities, they were observed to gradually support one another through physical gestures and verbal expressions as routines for starting and ending games were established. Group games and activities requiring cooperation also encouraged increased interaction between children and peers of the opposite gender.

Throughout eight sessions, children who initially avoided touching sensory materials, such as cream, feathers, foam, and satin fabric, due to discomfort began to demonstrate acceptance and engage with these materials. The caregiver-child dynamic influenced the entire group, with children using these materials to tickle their peers, initiate peek-a-boo games, or engage in playful activities such as applying cream or foam to their faces and bodies to make others laugh.

Children who were initially reluctant to join group circles became more involved as sessions progressed. This was facilitated by peers holding their hands, playing in front of them, or forming circles around them, encouraging their inclusion step by step. Additionally, children began using affectionate gestures such as Eskimo, butterfly, elephant, and heart-shaped kisses to express love toward one another. Non-verbal children effectively communicated warnings to their peers about potential environmental hazards. For example, one child simulated rolling and standing, indicating the need to jump over a door threshold. At the same time, another mimicked touching a radiator and pulling back their hand, saying "ouch" to signal that it might cause burns. These observations highlighted their ability to communicate effectively with visual and physical cues.

Children who initially exhibited aggressive behaviors, such as hitting, biting, or crying, gradually stopped these behaviors as the sessions progressed. Moreover, they began comforting and helping peers who exhibited similar behaviors by offering hugs, kisses, or assistance. Furthermore, children who initially needed their mothers' assistance to enter or exit the therapy room eventually participated independently, showing increased confidence and adaptability. Feeding activities yielded significant insights. Children who previously refused certain fruits and vegetables began to try to eat them when presented playfully by

their peers. This peer modeling approach successfully transformed feeding into an enjoyable and interactive activity. Lastly, routine activities such as entering the room with significant steps, following established rules, engaging in feeding routines, and singing lullabies like "Twinkle Stars" became internalized by the children. These structured routines contributed to noticeable advancements in their language development as they engaged more actively with the sessions and their peers.

Additional sample participant expressions and behaviors were recorded to further enhance the trustworthiness of the qualitative findings. For example, one child gently touched the caregiver's cheeks during the mirroring activity and whispered, "I see you, mommy," indicating a growing emotional connection and eye contact. In another session, a child spontaneously extended their hand toward a peer and said, "Let us do it together," showcasing increased willingness for peer interaction and cooperation. During physical play, a child laughed and shouted "Boom! Big fall!" after knocking down a stack of foam blocks, demonstrating emotional expression and motor engagement. Another child imitated their caregiver's soothing voice during the nurturing task, softly saying, "Shh, baby is sleeping," while rocking a doll—an example of emerging empathy and symbolic play. Finally, a child who had previously avoided physical closeness hugged their caregiver tightly during the fourth session, whispering, "Stay with me," a gesture that symbolized emotional security and attachment development.

4. Discussion and Conclusion

This study evaluated the effects of Theraplay's group therapy format on children's behavior and temperament characteristics in early childhood. Theraplay, an attachment-based play therapy model, was examined in this study to understand its contribution to children's emotional and social development. The study used various tests on experimental and control groups, and the results were analyzed statistically. The findings indicate that Theraplay has a positive impact on children's attention processes, emotional responses, and social behaviors. Studies indicate that Theraplay supports the psychological well-being of children during mourning by reducing their introversion and expressive problem behaviors (Sepehrtaj et al., 2021). Additionally, Theraplay has been shown to strengthen parent-child interactions and improve children's emotional regulation skills. A pilot study found that children who participated in Theraplay showed improvements in their interactions with their parents and exhibited decreases in both internalized and externalized psychiatric symptoms (Salo et al., 2020). Furthermore, Theraplay has been found to promote children's social and emotional development. A study on integrating play therapy methods into early childhood mental health services demonstrates that such approaches support emotional and social growth by increasing parents' trust in their children (Farley et al., 2020). This study concludes that Theraplay has a significant impact on enhancing early childhood emotional regulation, social skills, and behavioral development. The findings align with existing literature emphasizing the impact of play-based intervention models on children's psychosocial development. Incorporating therapeutic play models into educational and clinical practices can be an effective tool for supporting healthy developmental processes.

Children in the experimental group showed a significant improvement in their ability to focus and transfer attention after the therapy. This finding suggests that Theraplay enhances children's attention processes and improves their ability to focus. It was observed that Theraplay effectively reduced children's internalized and externalized behavioral problems, which was positively reflected in attention processes (Sepehrtaj et al., 2021). The literature emphasizes that attention processes are critical for children's academic success and social adaptation (Rothbart & Gartstein, 2009). Especially in early childhood, attention development is thought to form the basis of cognitive and emotional regulation skills (France et al., 2023). At this point, the positive effect of Theraplay on attention processes may make a long-term contribution to children's future academic and social success. Indeed, research shows that Theraplay improves children's attention skills and social interaction (Chang et al., 2021). However, it is stated that Theraplay practices should be supported by more comprehensive research in the context of individual and group therapies (Money et al., 2020).

The Theraplay intervention led to an increase in children's behaviors that involve emotional and physical contact, such as hugging. This suggests that Theraplay has a positive impact on children's emotional attachment, trust, and social relationships. Booth and Jernberg (2010) stated that Theraplay supports children's attachment and self-regulation skills. Numerous studies also support that Theraplay enhances children's attachment styles and improves their self-regulation (France et al., 2023). It was observed that Theraplay boosted children's emotional expression through increased parent-child interaction. A pilot study found that the internalized and externalized behavioral problems of children who received Theraplay decreased, and the quality of parent-child interaction improved (Salo et al., 2020). Additionally, the literature emphasizes that physical contact and hugging behaviors increase children's

sense of security and help strengthen their social bonds (Yoshida & Funato, 2021). Hugging and other forms of physical contact can make children more confident in social relationships, fostering warmer and more reassuring connections with parents and peers. It has been shown that Theraplay, when applied in early childhood, helps children build stronger social bonds later in life (Chang et al., 2021).

Significant reductions were observed in the levels of fear, frustration, sadness, and shyness among children in the experimental group after therapy. This demonstrates that Theraplay effectively reduces negative emotional reactions. The literature indicates that early intervention programs and play therapies improve children's emotional regulation skills and lessen negative temperament traits (Gutteling et al., 2005). It is also emphasized that Theraplay effectively enhances children's social and emotional skills and diminishes negative traits like shyness and fear (France et al., 2023). Furthermore, many studies mention that early intervention programs and play therapies significantly improve emotional regulation skills and decrease adverse emotional responses in children (Mistry-Patel et al., 2024).

Theraplay application also provided significant increases in children's positive temperament traits. Positive changes were observed in the children in the experimental group, particularly in temperament traits such as sociability, agreeableness, inhibitory control, and perceptual sensitivity, following the therapy. Studies have shown that Theraplay increases children's emotional regulation skills and social adjustment (France et al., 2023). In particular, increases in sociability and agreeableness indicate that children can adapt more quickly to group settings and improve their ability to cope with emotional stress (Vaughan & Teglasi, 2022). Research has shown that developing positive temperament traits, mainly inhibitory control and perceptual sensitivity, increases children's success in social settings (Mistry-Patel et al., 2024). It is reported that Theraplay enhances children's social interaction and communication skills, while also strengthening positive temperament traits in a sustainable manner (Chang et al., 2021). Play-based therapies, especially in early childhood, have been shown to have long-term positive effects on children's development (Salo et al., 2020).

There was no significant difference in the scores of the children in the control group before and after the therapy. This suggests that the study's results were specific to the Theraplay intervention and that the observed effects were not due to the natural developmental process. Research has shown that Theraplay makes specific contributions to children's developmental processes and that such developments do not occur naturally in children without intervention (Jorabian et al., 2024). In a randomized controlled trial, Theraplay was evaluated in groups of students, and the changes observed in the control group were minimal (Jamshidi et al., 2020). This finding suggests that the positive effects of Theraplay were only valid for the children who received the intervention and that it provided an improvement independent of the natural developmental process. Similarly, in another study, it was found that Theraplay resulted in significant reductions in children's internalized and externalized problems by enhancing parent-child interaction. However, no such improvements were found in the control group (Salo et al., 2020). These results support that Theraplay provides specific contributions to children's development and that these improvements are not due to natural processes. It also highlights the need for more randomized controlled trials to determine the impact of similar intervention programs (Money et al., 2020).

The study's findings align with those of similar studies in the literature. Siu's (2009) Group Theraplay application has been shown to improve children's internalizing problems. Salisbury's (2018) study also revealed the positive effects of Theraplay on children with social, emotional, and behavioral problems. Jernberg (1979) reported that children with anxiety and shyness benefited from Theraplay's nurturing and challenge-oriented activities. Studies conducted by Tucker and colleagues (2017) revealed that Theraplay practices in the preschool period strengthened children's social skills and increased their adaptation in the classroom. These findings suggest that Theraplay has a positive impact on children's emotional and social development.

Limitations of this study include the relatively small sample size and limited generalizability of the results. In addition, the study only evaluated short-term effects and did not provide information about long-term effects. Future studies should examine longer-term effects with a larger sample group. In addition, the fact that only mothers participated as caregivers and the effects of other people in the parental role (especially fathers) could not be examined, which can be considered another study limitation.

This study's findings reveal that Theraplay has a positive impact on children's emotional regulation, social skills, and attention processes. Theraplay should be integrated into early childhood education programs and preschool education institutions in line with the study's results. Especially for children with difficulties in social interaction, high anxiety levels, or attention problems, such structured play therapies can be included in the education system and made a part of early intervention programs. Considering the

positive effect of parental involvement in Theraplay practices, it is recommended that families be actively involved in this process.

To evaluate the long-term effects of Theraplay on children's emotional and social development, larger-scale and long-term follow-up studies should be conducted. The fact that studies only examine short-term effects provides limited information about the long-term gains of the intervention. Therefore, long-term follow-up studies should be conducted in different age groups to investigate the permanence of Theraplay and the sustainability of its effects. Increasing the sample size, among the study's limitations, and conducting evaluations on different socio-economic and cultural groups will enhance the generalizability of the findings. In addition, by conducting comparative studies with different attachment-based play therapy models, the effectiveness of therapy compared to other types of play therapy can be evaluated more comprehensively.

Further research on the adaptability of Theraplay for different age groups in individual and group therapy settings is recommended. This will help develop the most effective application models, especially for children with special needs such as childhood traumas, attention deficit hyperactivity disorder (ADHD), and autism spectrum disorder (ASD). Spreading therapy methods that support children's psychosocial development in educational and clinical environments will be an important step in enhancing their emotional and social adaptation skills.

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