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Comparison of the Effectiveness of Attachment-Based Play Therapy and Cognitive-Behavioral Therapy on Emotional Regulation and Quality of Life in Children with Separation Anxiety Disorder

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ABSTRACT

The purpose of the present study was to compare the effectiveness of attachment-based play therapy and cognitive-behavioral therapy on emotional regulation and quality of life in children with separation anxiety disorder. The research method was a quasi-experimental design with a pre-test-post-test and control group. The statistical population of this study consisted of all male and female first-grade students who visited the psychological disorder treatment center in the city of Gorgan during the 2023-2024 academic year. The sample size for the experimental and control groups was calculated using G-Power software, considering inclusion criteria, a power of 0.85, an effect size of 0.40, an alpha level of 0.05, and 3 degrees of freedom for three groups, totaling 45 samples. These were randomly assigned to two experimental groups of 15 participants each and one control group of 15 participants. To collect data, the Emotion Regulation Questionnaire by Gross and John (2003) and the Quality of Life Questionnaire by Varni et al. (2003) were used. A summary of the attachment-based play therapy sessions was derived from Booth and Jernberg (2009) and conducted in 10 sessions of 45 minutes each. The summary of the cognitive-behavioral therapy sessions was based on Kendall (1994) and conducted in 16 sessions of 45 minutes each. No intervention was conducted for the control group. Data analysis was performed using repeated measures analysis of variance with SPSS 18 software. The results showed that both attachment-based play therapy and cognitive-behavioral therapy had an impact on emotional regulation and quality of life in children with separation anxiety disorder ($p < 0.01$). Attachment-based play therapy was more effective than cognitive-behavioral therapy in reducing separation anxiety and improving the parent-child relationship, while cognitive-behavioral therapy was more effective than attachment-based play therapy in improving emotional regulation and quality of life. The findings of this study may provide practical implications for therapists and counselors.

Keywords: *Emotional regulation, Quality of life, Attachment-based play therapy, Cognitive-behavioral therapy.*

1. Introduction

Separation anxiety disorder is a subtype of anxiety disorders and involves the fear of separation from a loved one, which does not resolve with normal developmental processes (Giani et al., 2021). This type of anxiety is commonly observed in infants and toddlers when their mothers or other caregivers leave, but it can also affect adults. This disorder can cause disruption in an individual's work, career, education, and daily relationships. The disorder is more prevalent in children under the age of 12 than in older individuals, and more common in women than in men (Demİrer & Topan, 2023). This condition not only hinders the improvement of the child's relationship with their parent but also leads to the development of dysfunctional relationships (Giani et al., 2021; Hiwale & Ganvir, 2019). The parent-child relationship is one of the most important and foundational relationships in human life. Since this relationship begins in childhood and continues into adulthood, it holds significant importance. The parent-child relationship encompasses all interactions and connections between parent and child, including love, affection, support and care, education and training, as well as encouragement and self-confidence (Chirico et al., 2020).

The emergence of problematic relationships in children has significant effects on emotional suppression and emotional dysregulation (Eyal & Berkovich, 2020). Emotional regulation is a mechanism through which individuals (consciously or unconsciously) alter their emotions to achieve a desired outcome (Pianta & Driscoll, 2011). Emotional self-regulation refers to the regulation of emotional experiences through managing one's expressive behaviors (Gross & John, 2003). Since the definition of emotional regulation includes the management of behavior in addition to regulating emotional experiences, it is clear that emotional self-regulation involves not only emotional processes but also cognitive processes, as cognitive ability contributes to shaping emotional life in humans (Daniel et al., 2023).

The development of emotional regulation issues is a critical factor in negative experiences, especially during childhood, and these conditions will affect their satisfaction and quality of life (Fujisato et al., 2020). To have a healthy and successful life, an individual needs a good quality of life (LeBlanc et al., 2018). Quality of life is determined based on an individual's perception and understanding of their life situation in relation to cultural factors, goals, opinions, and beliefs, with relationships being a key element (Meyer et al., 2018). Quality of life is influenced by factors that give life value and contribute to positive experiences (Simón-Saiz et al., 2018), and it has different meanings for different individuals (Fadipe et al., 2023). It is a personal perspective defined by the individual themselves. According to definitions, quality of life is closely linked to physical and mental health, personal beliefs, self-sufficiency levels, social relationships, and the environment (Cox et al., 2012).

One important and effective method in treating children's issues is play-based therapies, and play therapy is a dynamic process between the child and the play therapist, during which the child finds their play space and consciously or unconsciously reflects on factors that have impacted their past and present life (Claes, 2017). Attachment-based play therapy is an active, short-term, play-based therapy that uses attachment-based play to create better relationships between parents and their children (Blanco et al., 2019). Attachment-based play therapy was developed by Jernberg in 1971, and this approach is a combination of interpersonal human development theories such as object relations theory, Bowlby and Ainsworth's attachment theory (Palmer et al., 2017).

Cognitive-behavioral therapy, on the other hand, is recognized as one of the suitable methods for treating such anxiety disorders. The main assumption of cognitive-behavioral therapy is that learning processes play a significant role in the creation and continuation of behaviors (Turner et al., 2016). In simpler terms, cognitive-behavioral therapy helps patients with various mental and physical issues to identify, avoid, and cope with them (O'Sullivan et al., 2019). It helps in recognizing situations where risky behavior is likely and provides opportunities for avoiding such situations and effectively handling challenges. Furthermore, the research background and the results obtained by therapists from this treatment method have led to continuous efforts to improve it with cognitive-behavioral techniques (Lee et al., 2015). Based on the above, the aim of the present study was to compare the effectiveness of cognitive-behavioral therapy and attachment-based play therapy on emotional regulation and quality of life in children with separation anxiety disorder.

2. Methods and Materials

2.1. Study Design and Participants

This research, based on its objective, is classified as applied research, and regarding the data collection method, it is cross-sectional and employs a quasi-experimental

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design of the pretest-posttest type with a control group and a two-month follow-up. The statistical population of the current study consists of all male first-grade students visiting the psychological disorders treatment center in the city of Gorgan during the 2023-2024 academic year. The sample size for the experimental and control groups was determined using G-Power software, based on the inclusion criteria for the study, with a power of 0.85, an effect size of 0.40, an alpha level of 0.05, and 3 degrees of freedom for the three groups, resulting in a recommended total sample size of 45. These participants were randomly assigned to two experimental groups (15 individuals each) and one control group (15 individuals).

Inclusion Criteria: Completion of a questionnaire to assess the presence of separation anxiety disorder symptoms, with a score higher than 8 on the Birmaher et al. (1999) questionnaire indicating moderate severity; male gender; no more than one month since diagnosis by the psychologist at the center; no history of severe psychological disorders according to clinical interviews conducted by a psychologist; no severe physical or psychological illness as determined by a psychologist and psychiatrist; no mandatory medication prescribed by the psychiatrist; and parental consent for student participation in the research.

Exclusion Criteria: Failure to meet inclusion criteria at any stage of the study, incomplete questionnaire responses, absence from more than two sessions during the intervention, and unwillingness to continue participation.

At the beginning of the fieldwork process, preliminary investigations and discussions with experts and university professors were conducted to gather their opinions and perspectives on each phase of the research. After obtaining organizational approvals from the Research Vice Presidency of the university and the Psychological Disorders Treatment Center in Gorgan, and based on the convenience sampling method, the two intervention methods were implemented in weekly sessions, with two sessions each (on odd and even days of the week for each experimental group). These sessions were held at the clinic, exclusively for the two experimental groups.

After obtaining parental consent for participation in the study, the informed consent forms were signed by the parents of the children. Pre-tests were conducted for both experimental groups and the control group before the intervention sessions. After the completion of the intervention sessions, post-tests were administered to the experimental and control groups using the same questionnaires, while the control group received no intervention.

2.2. Measures

2.2.1. Emotion Regulation

The Emotion Regulation Questionnaire developed by Gross and John (2003) consists of 10 items, with two subscales: reappraisal (6 items) and suppression (4 items). Responses are based on a 7-point Likert scale, ranging from strongly disagree (1) to strongly agree (7). Higher scores on reappraisal and suppression indicate worse emotional regulation. The questionnaire was validated for content and construct validity by the creators, and the Cronbach's alpha coefficients for reappraisal and suppression were 0.79 and 0.73, respectively. In a study by Lotfi (2019), the construct and concurrent validity were confirmed, with a reliability coefficient of 0.81 calculated using Cronbach's alpha (Tajeryan et al., 2023).

2.2.2. Quality of Life

The Quality of Life Questionnaire developed by Varni et al. (2003) consists of 23 questions and is suitable for children aged 2 to 16 years. It includes four subscales: physical functioning (8 items), emotional functioning (5 items), social functioning (5 items), and academic functioning (5 items). Responses are scored on a Likert scale from never (0) to always (4), with higher scores indicating better quality of life. The questionnaire was validated for content and construct validity by the creators, and the Cronbach's alpha coefficient was reported as 0.79. In the study by Mohammadian et al. (2014), the construct and concurrent validity were confirmed, and the reliability coefficient of the questionnaire, calculated using Cronbach's alpha, ranged from 0.65 to 0.75 (Sorek, 2019).

2.3. Interventions

2.3.1. Attachment-Based Play Therapy

The attachment-based play therapy program (independent variable) used in the current study was based on Booth and Jernberg's (2009) attachment-based play therapy package, which was validated for content in the research by Yazdani Poor et al. (2021). The program consisted of 10 weekly 45-minute sessions and was delivered at the clinic.

Session 1: Introduction and Pre-Test

The researcher explains the therapeutic goals and objectives to both the parent and the child in an accessible manner. A trusting and friendly environment is created, and the rules for upcoming sessions are clearly stated. The child becomes familiar with the playroom, and a pre-test is conducted to evaluate the initial state of emotional regulation and behavior.

Session 2: Identifying Desirable and Undesirable Behaviors

The session begins with play under the supervision of the parent and the researcher. The rules for play are explained, emphasizing the importance of structure and boundaries, such as protecting play materials and avoiding harm. Through activities like finding hidden objects or building houses, the child learns to distinguish between desirable and undesirable behaviors, with the researcher modeling appropriate responses.

Session 3: Exploring and Naming Emotions

This session focuses on helping the child identify and label emotions. The researcher facilitates play activities that elicit emotional responses, such as emotion masks or storytelling games. The child practices recognizing and naming feelings like happiness, anger, and sadness. The parent observes and is instructed on how to reinforce these concepts at home.

Session 4: Social Situations and Emotional Expression

The child participates in role-playing scenarios that mimic various social situations. This helps the child practice expressing emotions appropriately in different contexts. Activities like doctor-patient or buyer-seller role-play games are used. The parent is guided on supporting their child's emotional expression and social development.

Session 5: Transitioning Therapy to the Home

The parent actively participates in this session, playing with their child under the researcher's supervision. The parent applies the techniques learned in previous sessions, and the researcher provides feedback on strengths and areas for improvement. The session concludes with strategies for continuing the therapy at home, such as maintaining play routines and documenting progress.

Session 6: Enhancing Positive Attention from Parents

This home-based session emphasizes the parent's role in fostering positive interactions with the child. Parents and children engage in activities such as ball-and-basket games or object-transport challenges. The parent submits a report or video of the session to the researcher, who provides constructive feedback.

Session 7: Focusing on Structure

The parent and child collaborate in structured play activities like hopscotch or ball games. The researcher reviews the parent's adherence to maintaining clear rules and structure during play. Feedback is provided to refine their approach and enhance the child's understanding of boundaries and cooperation.

Session 8: Emphasizing Engagement and Participation

The session involves activities that require active engagement, such as treasure hunts or object-finding competitions. Parents guide their child through these tasks, focusing on teamwork and positive reinforcement. Reports or videos are reviewed by the researcher for feedback.

Session 9: Cultivating Nurturing, Engagement, and Competition

This session integrates nurturing and competitive elements through role-playing scenarios, such as guest-host games or mimicry contests. The parent is encouraged to balance encouragement and discipline while fostering a positive environment. Feedback from the researcher further refines their approach.

Session 10: Conclusion and Post-Test

The final session reviews all the skills and techniques learned throughout the therapy. Parents are encouraged to continue practicing these strategies at home. The researcher addresses any questions from the parent and motivates them to maintain the learned practices. A post-test is conducted to measure progress.

2.3.2. Cognitive-Behavioral Therapy

The cognitive-behavioral therapy program (independent variable) used in this study was based on Kendall's (1994) cognitive-behavioral therapy sessions, delivered in 16 weekly 45-minute sessions at the clinic.

Session 1: Building Rapport and Identifying Anxiety Triggers

The therapist establishes a trusting relationship with the child, explains the therapeutic goals, and identifies anxiety-provoking situations and the child's reactions to them.

Session 2: Identifying Emotions and Physical Responses

The child learns to identify various emotions and recognize the physical signs of anxiety, such as increased heart rate or sweating, through interactive discussions and activities.

Session 3: Understanding the Physical Symptoms of Anxiety

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This session focuses on educating the child about the physiological symptoms of anxiety and how the body reacts to stressful situations.

Session 4: Initial Meeting with Parents

The therapist meets with the parents to increase their involvement in the therapy process and address any questions they may have. The session highlights the importance of parental support in the child's progress.

Session 5: Teaching Diaphragmatic Breathing and Relaxation Techniques

The child is introduced to diaphragmatic breathing and relaxation exercises to help manage physical symptoms of anxiety.

Session 6: Recognizing and Differentiating Self-Talk

The therapist helps the child identify anxious self-talk and distinguish it from more adaptive and constructive thoughts.

Session 7: Modifying Anxious Self-Talk and Problem-Solving Skills

The child learns to replace anxious self-talk with adaptive thoughts. Problem-solving skills are introduced to help manage anxiety-inducing situations.

Session 8: Introducing the Concept of Rewards and Self-Evaluation

The child learns about using rewards as motivation and self-assessment techniques to measure their progress in managing anxiety.

Session 9: Second Meeting with Parents

The therapist meets with the parents to provide updates on the child's progress, reinforce their involvement, and answer any questions.

Sessions 10 and 11: Exposure to Low-Anxiety Situations

The child is introduced to exposure therapy, starting with low-anxiety situations. A hierarchy of fears is created, and the child practices facing less intimidating scenarios.

Sessions 12 and 13: Exposure to Moderate-Anxiety Situations

The child gradually works through moderate-anxiety situations, using the coping strategies learned in earlier sessions.

Sessions 14 and 15: Exposure to High-Anxiety Situations

The child practices exposure in high-anxiety situations, with the therapist providing support and guidance to build confidence.

Session 16: Exposure to Severe Anxiety and Therapy Summary

The child faces their most anxiety-provoking situation with the therapist's support. The session concludes with a summary of the therapy, including key takeaways documented in a creative format, such as a poster or short video created by the child.

2.4. Data Analysis

In the descriptive statistics section, frequency, mean, and standard deviation were used. For data analysis, repeated-measures analysis (mixed design) was employed using SPSS software version 18.

3. Findings and Results

In this section, descriptive findings regarding the mean and standard deviation of pre-test, post-test, and follow-up scores for the reduction of separation anxiety symptoms, parent-child relationship, emotional regulation, and quality of life in children with separation anxiety disorder are presented, differentiated by the three experimental groups (CBT, ABT, and control).

Table 1

Mean and Standard Deviation of Pre-test and Post-test Scores for Emotional Regulation in the Experimental and Control Groups

Dependent Variable	Group	Pre-test Mean	Pre-test Standard Deviation	Post-test Mean	Post-test Standard Deviation	Follow-up Mean	Follow-up Standard Deviation
Emotional Regulation	ABT	42.57	7.84	33.17	3.61	32.94	5.03
	CBT	43.23	6.65	26.83	5.29	26.41	3.62
	Control	43.34	6.34	43.03	5.53	42.57	6.79
Quality of Life	ABT	35.03	5.30	49.66	8.54	50.10	8.97
	CBT	35.77	2.89	59.69	10.85	59.99	7.48
	Control	34.91	2.75	35.54	3.91	36.09	3.58

As shown in Table 1, the mean scores for emotional regulation in the pre-test were nearly identical across both experimental groups (CBT and ABT) and the control group. However, post-test mean scores for emotional regulation in

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both experimental groups (CBT and ABT) were significantly different from the control group's mean scores. The follow-up values in both experimental groups (CBT and ABT) are also presented in the table. Similarly, the mean scores for quality of life in the pre-test were almost the same across all three groups, but post-test mean scores for emotional regulation in both experimental groups (CBT and ABT) showed significant differences from the control group's scores, as well as notable differences in follow-up scores for the groups. To assess the assumption of normality, the Shapiro-Wilk test was used.

The Shapiro-Wilk test statistics for pre-test, post-test, and follow-up scores for emotional regulation and quality of life in children with separation anxiety disorder, categorized by the two experimental groups (CBT and ABT) and the control group, were significant, indicating that the distribution of variables was normal. Furthermore, the Box test results showed that the significance level, with degrees of freedom (1, 78) and the analysis of variance (1.500), was obtained at 0.086, indicating that variances could reasonably be assumed to be homogeneous and the minimum conditions for analysis are met. The results from Levene's test for the assumption of homogeneity of variances indicated that the homogeneity assumption holds, as the significance level was greater than 0.05 ($P > 0.05$). The Mauchly's test results for the sphericity assumption showed that the assumption of sphericity holds, and the results from the homogeneity of variances test (Mauchly's test) were not statistically significant, confirming that the assumption of variance homogeneity in the three study phases is valid. A summary of the results of the repeated measures analysis of variance for within-group and between-group factors is presented in the following table.

Table 2

Summary of the Results of the Repeated Measures (Mixed) Analysis of Variance with Grouping, Treatment Phases, and Interaction Effects

Variable	Source of Variation	Sum of Squares	df	Mean Square	F	p-value	Effect Size
Emotional Regulation	Group	2689.437	2	1344.719	29.260	0.01	0.582
Emotional Regulation	Treatment Phases	1852.623	1	1852.623	76.607	0.01	0.646
Emotional Regulation	Group x Phases	968.721	2	484.360	20.028	0.01	0.488
Quality of Life	Group	261.308	2	301.414	37.223	0.01	0.639
Quality of Life	Treatment Phases	4091.855	1	4091.855	156.292	0.01	0.788
Quality of Life	Group x Phases	2018.662	2	1009.331	38.552	0.01	0.647

The results in Table 2 show that the F value for the effect of treatment phases (pre-test, post-test, and follow-up) was significant at the 0.01 level. Specifically, significant interactions between group and treatment phases were found for both emotional regulation and quality of life. As a result, there were significant differences between the pre-test, post-test, and follow-up scores for emotional regulation and quality of life in children with separation anxiety disorder during the three phases of the study. The Bonferroni post-hoc test was used to examine differences between means at different treatment phases.

Table 3

Summary of the Results of the Bonferroni Post-hoc Test for Pre-test, Post-test, and Follow-up Differences

Pre-test	Phase 1	Phase 2	Mean Differences	Standard Error	p-value
Emotional Regulation	Pre-test	Post-test	8.704	1.199	0.001
	Pre-test	Follow-up	9.071	1.037	0.001
	Post-test	Follow-up	0.370	0.361	1
Quality of Life	Pre-test	Post-test	13.056	1.384	0.001
	Pre-test	Follow-up	13.486	1.442	0.001
	Post-test	Follow-up	0.430	0.427	1

The results in Table 3 indicate that there were significant differences in the reduction of separation anxiety symptoms, parent-child relationship, emotional regulation, and quality of life between the pre-test and post-test, and the pre-test and follow-up stages. However, there was no significant difference between the post-test and follow-up, suggesting that the effects of treatment were stable. Comparing the means shows that separation anxiety symptoms, parent-child

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relationship, emotional regulation, and quality of life in children with separation anxiety disorder were significantly different in the post-test and follow-up stages compared to the pre-test stage.

Table 4

Summary of the Tukey Post-hoc Test Results for the Two Experimental Groups

Variable	Groups	Mean Differences	Standard Error	p-value
Separation Anxiety	CBT - ABT	1.419	0.526	0.01
Parent-Child Relationship	CBT - ABT	10.444	1.696	0.01
Emotional Regulation	CBT - ABT	4.067	0.429	0.01
Quality of Life	CBT - ABT	6.889	0.897	0.01

The results in Table 4 show that there were significant differences between the scores for separation anxiety symptoms, parent-child relationship, emotional regulation, and quality of life in children with separation anxiety disorder between the CBT and ABT experimental groups. Based on the mean and effect size indicators, the ABT treatment led to greater changes in separation anxiety and parent-child relationship in children with separation anxiety disorder, suggesting that it is stronger than CBT for these outcomes. However, in terms of emotional regulation and quality of life, the CBT treatment resulted in greater changes, suggesting it is stronger than ABT for these outcomes.

4. Discussion and Conclusion

Based on the results of the study, the findings indicated that there is a significant difference between the effectiveness of attachment-based play therapy and cognitive-behavioral therapy in reducing symptoms of separation anxiety, parent-child relationship, emotional regulation, and quality of life in children with separation anxiety disorder. These findings are consistent with the prior results (Blanco et al., 2019; Booth & Jernberg, 2009; Chirico et al., 2020; Claes, 2017; Daniel et al., 2023; Davidson & Stagnitti, 2021; Demİrer & Topan, 2023; Hall, 2015; Hiwale & Ganvir, 2019; McCord et al., 2020; Setiawan et al., 2020; Tatnell et al., 2017).

According to the findings, attachment-based play therapy has a greater effect on the parent-child relationship and separation anxiety compared to cognitive-behavioral therapy. In explaining these results, it can be stated that attachment-based play therapy is one of the methods that helps children facing emotional problems such as separation anxiety. This method is designed based on attachment psychology principles and can have positive effects on parent-child relationships. Below are a few reasons why this type of therapy may be more effective than cognitive-behavioral therapy in reducing separation anxiety and strengthening the parent-child relationship: Attachment-based play therapy focuses on enhancing the emotional bonds between the child and parents. This approach can help children feel more secure and confident in their relationship with their parents. Children typically express their feelings and concerns through play. Play therapy allows them to discuss their problems without psychological pressure and depict their emotional distress in a way that is understandable to adults. Play enables children to find greater calm and cope better with their feelings of anxiety. This can help reduce the level of separation anxiety. Through play, children can develop social and communication skills, which help them interact better with their parents and establish more positive relationships. Attachment-based play therapy generally pays attention to the specific needs of each child and family, thus responding better to their emotional and behavioral problems. In comparison, cognitive-behavioral therapy focuses on the cognitive and behavioral processes of children, and for some children, particularly at younger ages, emotional concerns and attachment needs may not receive as much attention. Therefore, attachment-based play therapy may be a much more effective option for children facing separation anxiety and communication challenges.

Based on the findings, cognitive-behavioral therapy has a greater impact on emotional regulation and quality of life compared to attachment-based play therapy. Explaining these results from a cognitive perspective, it can be stated that cognitive-behavioral therapy focuses more on identifying and changing ineffective thought patterns. This approach helps individuals recognize and change their cognitive structures, which can ultimately lead to better emotional regulation and improved quality of life. Cognitive-behavioral therapy teaches individuals specific skills for problem-solving and making changes in their daily lives. These skills help individuals confront negative

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emotions more effectively and overcome them. Cognitive-behavioral therapy typically has a structured and goal-oriented framework, which can help individuals make progress in their recovery process. This structure motivates individuals and can positively affect their quality of life. Specific techniques are provided for controlling and managing emotions, such as relaxation breathing techniques, calming imagery, and psychological exercises. These techniques help children cope more effectively with their emotions and improve their emotional regulation. These techniques can also help reduce stress and enhance quality of life. Cognitive-behavioral therapy has more clinical evidence than some other approaches, including play therapy, in various mental health issues. This evidence may indicate greater effectiveness in emotional regulation and quality of life improvement. It can be effectively applied in areas such as anxiety, depression, and personality disorders, whereas attachment-based play therapy may be more relevant for children and specific situations like strengthening attachment relationships.

The limitation of the study's findings is related to children with separation anxiety, and the generalizability of the results to other students and educational levels is restricted. Therefore, caution should be exercised in generalizing the findings. Since the participants were male, the generalizability to female students is limited. The data collection tool was a questionnaire, and despite its usefulness, questionnaires may cause respondents to answer in ways influenced by social desirability. Since the study was conducted in the city of Gorgan, the generalization of the results to other locations may be limited due to the city's specific cultural-social context. This study was cross-sectional, and the findings may change in longitudinal studies. The attachment-based play therapy method, focusing on enhancing communicative and interactive factors, is an effective approach that, in an interactive environment, can reduce cognitive-behavioral problems by improving cognitive status during play. The findings of this research can have practical implications for improving psychological, emotional, and social functioning and improving psychological factors by using attachment-based play therapy for therapists, educational counselors, and teachers. It is essential for cognitive-behavioral therapy exercises to be conducted regularly and continuously for better outcomes. Moreover, coordination with educational and psychological specialists and establishing appropriate plans for each individual can also improve the quality of life.

In therapeutic, counseling, and educational centers, it is recommended to use therapeutic methods like cognitive-behavioral therapy and attachment-based play therapy due to their significant impacts on efficiency and performance. The cognitive-behavioral therapy model is introduced as a very short-term, simple, effective, and efficient approach, while being cost-effective, for improving separation anxiety and parent-child relationships for therapists, counselors, and teachers. The combined psychotherapy model can address many of the limitations of therapy. It is suggested that combined methods, such as cognitive-behavioral therapy with attachment-based play therapy, be used as a sustainable therapeutic and educational approach.

Based on the conducted research and other variables such as socio-economic status, which affect individuals' behaviors, it is recommended that future researchers include these variables in their studies. According to this study, it is suggested that similar research be conducted in other regions and different age and educational groups related to the topic, considering other related and influential variables. The evaluation of human behavior is a complex and lengthy process. Therefore, for more reliable results, it is suggested that longitudinal studies on formation and proper learning be conducted. The use of multiple assessment methods, observation, interviews, and the use of tools and behavioral history to overcome the one-dimensionality problem of questionnaire-based tools is recommended.

Authors' Contributions

Authors contributed equally to this article.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

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Declaration of Interest

The authors report no conflict of interest.

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Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

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