The Effect of Art Therapy on Problem-Solving Skills, Self-Concept, and Interpersonal Relationships in Children with Separation Anxiety Disorder in Tehran

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Article Info	ABSTRACT
Article type: *Original Research* **How to cite this article:** Kavoussi, P., & Ebrahim Moghadam, H. (2024). The Effect of Art Therapy on Problem-Solving Skills, Self-Concept, and Interpersonal Relationships in Children with Separation Anxiety Disorder in Tehran. *Iranian Journal of Neurodevelopmental Disorders, 3*(4), 90-98. https://doi.org/10.61838/kman.jndd.3.4.9 © 2024 the authors. Published by Iranian Association for Intelligence and Talent Studies, Tehran, Iran. This is an open access article under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.	**Purpose:** This study aimed to enhance the skills of children with separation anxiety disorder in the areas of problem-solving, self-concept, and interpersonal relationships by examining the effectiveness of art therapy. **Method:** The present study employed a quasi-experimental design with a pretest-posttest and a control group. Based on Cohen's table, the sample size was estimated to be 30 participants, who were randomly assigned to two equal groups: an experimental group (n = 15) and a control group (n = 15). Four questionnaires were used for assessment: the Child Anxiety-Related Disorders Diagnostic Questionnaire, the Heppner and Petersen Problem-Solving Inventory, the Piers-Harris Self-Concept Scale, and the Barton J. A. Interpersonal Skills Questionnaire. After entering the data into SPSS-23, a multivariate analysis of covariance (MANCOVA) was used for data analysis. **Findings:** The results indicate that art therapy is effective in improving problem-solving skills, self-concept, and interpersonal relationships in girls with separation anxiety disorder. **Conclusion:** The findings show a significant difference in posttest scores of the experimental group in all three dependent variables: problem-solving skills, self-concept, and interpersonal relationships. Each of these variables demonstrated a significant improvement in the posttest compared to the control group. ***Keywords:*** *Art therapy, problem-solving skills, self-concept, interpersonal relationships, separation anxiety disorder*

1. Introduction

Child drawing is a form of play. Throughout childhood and up to the early stages of adolescence, most children regularly engage in various forms of drawing activities, establishing multiple connections with reality. Children use different techniques to depict their perception of the world. Like other playful activities, drawing is associated with pleasure, exploration, and experiencing possibilities. Drawing, play, humor, and art belong to the same behavioral family and, therefore, reflect the set of cognitive structures available to the child. However, these activities exist at the intersection of the external world (objective reality) and the internal world (subjective reality), providing a medium for expressing conflicts or contradictions between these two realms (Pakzadmoghadam et al., 2023; Saidi et al., 2024).

In fact, drawing is one of the most important factors in expressing thoughts, beliefs, and inner needs. By analyzing children's and adults' drawings, valuable insights can be gained regarding personality traits, psychological capacities, emotional characteristics, internal pressures, and interests (Hatami et al., 2016).

Students who experience academic failure tend to develop a false and limiting belief due to repeated failures. The continuation and generalization of this belief lead to a negative self-concept, preventing them from expressing their abilities and reinforcing a sense of weakness in later stages (Michael, 1998). Given that many students with academic difficulties are anxious, insecure, impulsive, and rebellious, and they face frustration due to repeated failures, the use of appropriate therapeutic approaches to reduce behavioral, academic, and psychological problems is of great importance (Coddington & Vaughan, 2016).

According to recent studies, one of the most innovative psychological interventions in recent years for treating behavioral and psychological disorders is art therapy through drawing therapy. The effectiveness of this method has been confirmed in various studies, including its impact on aggression (Silver, 2006), oppositional defiant disorder (Nazeri et al., 2020; Pakzadmoghadam et al., 2023), self-concept and happiness (Naderi & Ansari Asl, 2011), interpersonal skills (Hashemi et al., 2010), and enhancing life meaning and mental health (Veiskerami et al., 2017).

Drawing therapy is a projective technique in which individuals are asked to draw a person, an object, or a subject to evaluate their cognitive, interpersonal, or psychological functioning (Faramarzi & Moradi, 2014). In drawing therapy, the nonjudgmental and spontaneous self-expression allows individuals to freely discuss their suppressed thoughts and emotions without the fear of others' reactions. The foundation of drawing therapy is to engage participants in a structured art-making process to indirectly express their thoughts and emotions. By projecting their inner life onto drawings, individuals can regulate their emotions and enhance their personality dynamics (Saidi et al., 2024).

Joel et al. (2022, as cited in Saeedi et al., 2024) found that after implementing art therapy, participants showed improved emotional regulation and distress tolerance. Additionally, Nazeri et al. (2020) demonstrated that art therapy had a significant effect on enhancing positive emotion regulation and helped individuals control their emotions in response to distress (Nazeri et al., 2020). Furthermore, Mohammad et al. (2020) found that visual arts were effective in cognitive emotion regulation (Mohamad et al., 2020).

Separation anxiety disorder (SAD) is the most common anxiety disorder of childhood, typically emerging around the age of seven (Pour Mahdi Ganji & Ranjbar, 2023; Schneider et al., 2013; Torabi Goodarzi et al., 2024). Contrary to common belief, children with anxiety disorders, even those experiencing mild symptoms, often continue to face adaptation challenges into adolescence and adulthood. Anxiety disorders tend to follow a chronic course, with separation anxiety disorder persisting in half of affected children for eight years or more. Girls are nearly twice as likely as boys to exhibit anxiety symptoms, and this difference is observable as early as age six (Coddington & Vaughan, 2016; Fathi et al., 2022).

Children with separation anxiety disorder may exhibit social withdrawal, apathy, sadness, or difficulty concentrating on tasks or play when separated from their primary attachment figures. Depending on their age, individuals may fear animals, monsters, darkness, thieves, burglars, car accidents, airplane travel, or other perceived threats to themselves or their family. Separation anxiety is characterized as an intense and developmentally inappropriate fear regarding separation from home or attachment figures (Torabi Goodarzi et al., 2024).

Separation anxiety in children may lead to school refusal, contributing to academic difficulties and social isolation. When children experience extreme distress about impending separation, they may react with anger or aggression toward those enforcing the separation. Younger children, especially at night or in the dark, may report unusual perceptual experiences (e.g., seeing figures in their room, sensing

frightening creatures approaching them, or feeling watched). Children with this disorder may be described as demanding, intrusive, and constantly in need of attention. In adulthood, they may appear overly dependent and overprotective. Their excessive expectations often frustrate family members, leading to resentment and family conflicts (Małgorzata Maria, 2012). Anxiety disorders in children contribute to dysfunction in social, familial, and academic domains, with separation anxiety specifically impairing the development of social skills. Children with separation anxiety disorder do not have opportunities to develop independence from adults, leading to social difficulties such as problem-solving deficits and low self-esteem (Małgorzata Maria, 2012).

Problem-solving has been a key focus in educational activities in recent years (Mirzapour & Bahrami, 2016). Jonassen (2003) defines problem-solving as an individualized cognitive process learned through principles that can be applied to solving problems in various contexts. It is a novel form of learning that involves applying knowledge and methods to address challenges. Halakova and Proksa (2007) argue that problem-solving in any field is a highly complex human behavior (Mirzapour & Bahrami, 2016).

Problem-solving is a cognitive, intellectual, and skill-based process that underlies scientific discoveries, technological advancements, and human achievements. It is the core of scientific and technological pursuits, aiming to identify and resolve domain-specific issues. Problem-solving is conceptualized as the process of transitioning from an unknown to a known state by determining appropriate steps, integrating basic cognitive skills, and managing complex thought processes (Tajeryan et al., 2022).

Self-concept refers to an individual's mental representation of themselves, encompassing beliefs about their personality, physical attributes, abilities, values, and goals. Pozowak (2019) found that adults with separation anxiety disorder have a less clear self-concept, indicating that they struggle with defining who they are, what they believe in, and what they prefer. In educational psychology, self-concept is regarded as a crucial factor influencing human behavior (Posavac & Posavac, 2019).

Interpersonal communication relies on two key principles: (1) communicators must acknowledge each other's unique behavioral traits, and (2) messages should reflect this recognition (Babaei, 2017).

Various methods have been proposed to improve children's mental health, including pharmacotherapy, behavioral therapy, relaxation techniques, and cognitive-behavioral training. However, the increasing preference for psychological interventions and the challenges posed by traditional therapies have paved the way for novel therapeutic approaches, such as art therapy (Faramarzi & Moradi, 2014).

Despite the growing body of research supporting art therapy for various psychological disorders, no study has simultaneously examined its effects on problem-solving skills, self-concept, and interpersonal relationships in children with separation anxiety disorder. The primary objective of this research is to investigate the impact of drawing therapy on these three variables in 12-year-old girls with separation anxiety disorder in Tehran.

2. Methods and Materials

2.1. Study Design and Participants

The present study employed a quasi-experimental design with a pretest-posttest control group. The design consisted of two groups (experimental and control) and two assessment phases (pretest and posttest).

The statistical population comprised all 12-year-old girls diagnosed with separation anxiety disorder who sought services at counseling centers and health houses in Tehran in 2018. The sample size was determined based on Cohen's table, estimating a total of 30 participants (effect size = 0.5, $\alpha = 0.05$, power = 0.76). Participants were randomly assigned to two equal groups: the experimental group (n = 15) and the control group (n = 15). The rationale for using this formula is that it is commonly applied when comparing the means of two populations, provided that the sample sizes in both groups are equal.

A cluster random sampling method was used. Tehran was divided into five regions: North, East, West, Central, and South. Region 4 was randomly selected. Among the counseling centers and health houses in this region, 10 centers were randomly chosen. To screen for eligible participants, the Separation Anxiety Disorder Questionnaire was administered.

After identifying individuals meeting the criteria for separation anxiety disorder, participants completed additional assessments, including self-concept, interpersonal relationships, and problem-solving questionnaires. Following the completion of the treatment program, the Separation Anxiety Disorder Questionnaire (1999), Parent Form was administered to parents to evaluate the participants' progress.

2.2. Measures

2.2.1. Problem-Solving Skills

To assess problem-solving skills, the Problem-Solving Inventory (PSI) developed by Heppner and Petersen (1982) was used. This self-report questionnaire consists of 35 items and measures an individual's perceived problem-solving ability rather than actual problem-solving performance. The PSI includes three subscales: (1) Problem-Solving Confidence, (2) Approach-Avoidance Style, and (3) Personal Control. Responses are scored on a Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree), with higher scores indicating lower perceived problem-solving ability. The validity and reliability of this inventory have been confirmed in multiple studies, including research conducted in Iran, demonstrating satisfactory internal consistency (Cronbach's alpha > 0.80) and test-retest reliability (Tajeryan et al., 2022).

2.2.2. Self-Concept

Self-concept was assessed using the Piers-Harris Children's Self-Concept Scale, Second Edition (PHCSCS-2), originally developed by Piers in 1969 and revised by Piers and Herzberg in 2002. The 60-item questionnaire evaluates children's perceptions of themselves across six subscales: (1) Behavioral Adjustment, (2) Intellectual and School Status, (3) Physical Appearance and Attributes, (4) Freedom from Anxiety, (5) Popularity, and (6) Happiness and Satisfaction. The items are scored in a dichotomous format (Yes/No), with higher scores reflecting a more positive self-concept. The reliability and validity of this scale have been well established in various populations, including Iranian samples, where studies have reported good internal consistency (Cronbach's alpha > 0.85) and test-retest reliability (Naderi & Ansari Asl, 2011).

2.2.3. Interpersonal Relationships

Interpersonal relationships were measured using the Barton Interpersonal Skills Scale (BISS), developed by Barton (1991). This 40-item scale assesses individuals' ability to interact effectively with others in various social contexts. The BISS includes four subscales: (1) Verbal Communication, (2) Active Listening, (3) Emotional Regulation in Social Situations, and (4) Conflict Resolution. Items are rated on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), with higher scores indicating better interpersonal skills. The validity and reliability of the BISS have been confirmed in different studies, including research conducted in Iran, where it has demonstrated strong internal consistency (Cronbach's alpha > 0.80) and test-retest reliability (Ghanbari Hashem Abadi & Ebrahimi Nejad, 2011).

2.3. Intervention

The intervention in this study was based on drawing therapy, a structured form of art therapy designed to help children express their emotions, enhance cognitive and interpersonal skills, and develop effective coping mechanisms. The experimental group participated in 10 structured sessions, each lasting 45 minutes, conducted twice a week over a period of five weeks. Sessions followed a progressive structure, beginning with rapport-building and free drawing to help children become comfortable with the therapeutic process. The first session introduced the purpose of drawing therapy, familiarized children with the materials, and encouraged them to freely express their emotions through colors and shapes. The second and third sessions focused on self-expression and problem-solving, where children were asked to draw a recent personal challenge and then modify their drawings to illustrate potential solutions. The fourth and fifth sessions emphasized self-concept enhancement, where participants created "self-portraits" and engaged in guided discussions about their strengths, interests, and personal identity. The sixth and seventh sessions targeted interpersonal relationships, using activities such as drawing a "friendship tree" to symbolize positive social interactions and depicting scenarios of conflict resolution. The eighth and ninth sessions integrated emotion regulation and cognitive restructuring, encouraging children to visually represent their emotions, identify stressors, and create drawings that depicted more adaptive responses to anxiety-provoking situations. The final session was dedicated to reviewing progress, discussing the changes observed in their drawings and behaviors, and reinforcing strategies for continued self-expression and coping beyond the therapy sessions. Throughout the intervention, children were encouraged to share their artwork and reflect on their emotions, fostering self-awareness and communication skills. The structured approach ensured that each session progressively built upon the previous one, creating a supportive and engaging therapeutic experience aimed at improving problem-solving skills, self-concept, and interpersonal relationships in children with separation anxiety disorder.

2.4. Data Analysis

After entering the data into SPSS-23, a multivariate analysis of covariance (MANCOVA) was used for data analysis.

3. Findings and Results

Table 1 presents the descriptive findings for self-concept, problem-solving skills, and interpersonal relationships in the control and experimental groups at both the pretest and posttest stages.

Table 1

Descriptive Findings for Self-Concept, Problem-Solving Skills, and Interpersonal Relationships in the Control and Experimental Groups at Pretest and Posttest

Variable	Stage	Group	Mean	Standard Deviation	Maximum	Minimum	Sample Size
Self-Concept	Pretest	Control	45.33	11.53	63	25	15
		Experimental	43.80	11.43	64	26	15
	Posttest	Control	45.26	11.46	62	24	15
		Experimental	44.06	11.41	65	30	15
Problem-Solving Skills	Pretest	Control	87.00	27.70	141	45	15
		Experimental	82.60	32.27	141	36	15
	Posttest	Control	87.26	27.85	141	45	15
		Experimental	85.93	35.26	145	36	15
Interpersonal Relationships	Pretest	Control	39.00	15.84	68	19	15
		Experimental	39.26	17.06	72	19	15
	Posttest	Control	39.00	15.71	68	19	15
		Experimental	42.66	16.46	74	22	15

As shown in Table 1, in the experimental group, drawing therapy resulted in an increase in the mean self-concept score from 43.80 in the pretest to 44.06 in the posttest. In the control group, there was minimal change, with a pretest mean of 45.33 and a posttest mean of 45.26.

Regarding problem-solving skills, the experimental group showed an increase from a mean of 82.60 at the pretest to 85.93 at the posttest, while the control group showed little change, with a mean of 87.00 at pretest and 87.26 at posttest.

For interpersonal relationships, the experimental group also showed an increase in the mean score from 39.26 at pretest to 42.66 at posttest, while the control group had the same score at both time points (39.00 at pretest and 39.00 at posttest).

These descriptive findings suggest that drawing therapy had a positive impact on the experimental group's self-concept, problem-solving skills, and interpersonal relationships.

Table 2

Results of MANCOVA for Posttest Mean Scores of Self-Concept, Problem-Solving Skills, and Interpersonal Relationships in the Experimental and Control Groups

Test Name	Value	F	Hypothesis df	Error df	Significance Level (p)
Pillai's Trace	0.897	67.018	3	23	< 0.001
Wilks' Lambda	0.103	67.018	3	23	< 0.001
Hotelling's Trace	8.742	67.018	3	23	< 0.001
Largest Root	8.742	67.018	3	23	< 0.001

To test the research hypotheses and determine the significance of differences between the experimental and control groups on the dependent variables, a Multivariate Analysis of Covariance (MANCOVA) was performed. This method was used to compare the posttest scores of the two groups while controlling for pretest scores across three dependent variables.

As shown in Table 2, the MANCOVA results indicate a significant difference ($p < 0.001$) between the experimental and control groups across all dependent variables. This supports the first hypothesis, suggesting that drawing

therapy significantly impacts at least one of the dependent variables (self-concept, problem-solving skills, and interpersonal relationships).

To further investigate these differences, three separate ANCOVAs were conducted within the MANCOVA framework. The results are presented in Table 3.

Table 3

ANCOVA Results for Posttest Scores of Self-Concept, Problem-Solving Skills, and Interpersonal Relationships in the Experimental and

Control Groups

Dependent Variable	Sum of Squares	df	Mean Square	F	Significance Level (p)
Self-Concept	80.304	1	80.304	75.635	< 0.001
Problem-Solving Skills	70.027	1	70.027	9.392	0.005
Interpersonal Relationships	87.998	1	87.998	126.878	< 0.001

As shown in Table 3, the significance levels for all three dependent variables are below 0.01 ($p < 0.01$), indicating that the differences between the control and experimental groups are statistically significant. This confirms Hypotheses 1, 2, and 3, suggesting that drawing therapy effectively improves self-concept, problem-solving skills, and interpersonal relationships in children with separation anxiety disorder.

Overall, the study findings demonstrate that drawing therapy had a significant and positive effect on all three dependent variables. These results highlight the potential of art-based interventions in enhancing cognitive, emotional, and social skills in children experiencing separation anxiety disorder.

4. Discussion and Conclusion

The present study aimed to examine the effectiveness of drawing therapy on improving self-concept, problem-solving skills, and interpersonal relationships in children with separation anxiety disorder. The results indicated significant improvements in all three dependent variables in the experimental group that participated in drawing therapy. Specifically, there was a notable increase in self-concept, problem-solving skills, and interpersonal relationships from pretest to posttest in the experimental group. The control group, however, showed minimal change across these variables, suggesting that the improvements in the experimental group were likely due to the intervention.

These findings align with those of Karimaee and Ferdosipour (2019), who demonstrated that drawing therapy significantly reduced symptoms in children with separation anxiety disorder, particularly enhancing emotional regulation and self-perception. Their study showed similar improvements in self-concept and emotional adjustment after painting-based therapy, reinforcing the present study's

conclusions. Additionally, Ghadampour, Amirian, and Radpour (2019) reported that group painting therapy led to improvements in the social adjustment and emotional regulation of primary school students, which is in line with the observed improvements in interpersonal relationships in the current study (Ghadampour et al., 2019). Drawing therapy's impact on improving children's self-concept can be explained through the therapeutic benefits of self-expression and the exploration of inner thoughts and feelings that the medium of drawing provides.

The significant improvement in problem-solving skills in the experimental group aligns with the findings of Sheikholmolouki (2016), who examined the effect of painting-based art therapy on the problem-solving abilities of children. Her study found that art therapy enhanced cognitive flexibility and problem-solving skills, likely due to the creative problem-solving nature of art activities (Sheikholmolouki, 2016). Similarly, Golamzadeh, Babapour, and Sabourimoghaddam (2014) showed that painting therapy reduced depressive symptoms and enhanced cognitive functioning, including problem-solving abilities, in elementary school children (Golamzadeh et al., 2014). The artistic process in therapy often encourages children to approach challenges from different perspectives, fostering cognitive flexibility and the development of adaptive problem-solving skills.

The observed improvement in interpersonal relationships also supports findings from Shahri, Moeinikia, Zahed, and Narimani (2014), who investigated the impact of painting therapy on communication skills in children (Shahri et al., 2014). Their study found that painting therapy significantly improved social interaction and communication abilities in shy children, suggesting that the expressive nature of art therapy can encourage better emotional expression and social engagement. The experimental group's improved

interpersonal skills in the present study may have resulted from the enhanced emotional expression and self-awareness cultivated through drawing therapy, as suggested by Bosgraaf, Pattiselanno, and Hooren (2020), who noted that art therapy facilitates communication and self-expression, crucial elements for improving interpersonal relationships in children with psychological distress (Bosgraaf et al., 2020).

The findings from this study contribute to the growing body of research supporting the effectiveness of art therapy, specifically drawing therapy, in addressing emotional and social challenges in children with separation anxiety disorder. Art therapy provides a non-verbal outlet for children to express and explore their emotions, leading to significant improvements in emotional regulation, self-concept, social adjustment, and problem-solving skills. This is consistent with previous studies that have demonstrated the positive effects of art therapy on various psychological problems in children, including depression, anxiety, and social difficulties (Demahri et al., 2019; Rezaee et al., 2015).

While the present study provides valuable insights into the benefits of drawing therapy, several limitations must be considered. First, the sample size was relatively small, consisting of only 30 children (15 per group), which limits the generalizability of the findings. Larger sample sizes are recommended in future studies to enhance the external validity of the results. Second, the study relied on a pretest-posttest design, which limits the ability to infer long-term effects of the intervention. Future research should include follow-up assessments to determine whether the improvements in self-concept, problem-solving skills, and interpersonal relationships are sustained over time. Additionally, the study did not control for the potential influence of other factors, such as the presence of co-occurring psychological conditions or external family dynamics, which may have affected the outcomes. Future studies should control for these variables to isolate the specific effects of drawing therapy. Lastly, the study was conducted only in one geographical region, which may limit the applicability of the findings to other cultural contexts. Replicating the study in diverse cultural settings would help determine the universality of the effects of drawing therapy.

Given the positive outcomes observed in this study, further research is needed to explore the mechanisms through which drawing therapy affects children with separation anxiety disorder. For example, qualitative studies could provide a deeper understanding of how children experience the therapy and why it results in improvements in self-concept, problem-solving, and interpersonal relationships. Additionally, future research could examine the dose-response relationship, investigating the optimal frequency and duration of drawing therapy for children with psychological disorders. Exploring individual differences, such as age, gender, and severity of anxiety, could also help identify which subgroups of children benefit the most from art-based interventions. Furthermore, studies that compare the effectiveness of drawing therapy with other therapeutic interventions, such as cognitive-behavioral therapy or play therapy, could help determine whether drawing therapy offers unique benefits or if it is more effective when combined with other therapeutic approaches. Finally, longitudinal studies with larger and more diverse samples could assess the long-term impact of drawing therapy on children's emotional and social functioning, offering a more comprehensive understanding of the intervention's lasting effects.

The findings of this study suggest that drawing therapy can be an effective intervention for improving self-concept, problem-solving skills, and interpersonal relationships in children with separation anxiety disorder. Practitioners working with children who experience anxiety or other emotional difficulties may consider incorporating art-based techniques, such as drawing therapy, into their treatment plans. Art therapy can provide children with a safe and non-threatening outlet to express their feelings, helping them process emotions they may not have the words to articulate. Drawing therapy can also serve as a valuable tool for enhancing communication skills and fostering social engagement, particularly for children who struggle with verbal expression. Clinicians should ensure that the therapy is tailored to the individual needs of each child, taking into account their unique experiences and challenges. Additionally, it is important for practitioners to create a supportive and encouraging environment where children feel comfortable expressing themselves without fear of judgment. Teachers and parents can also play a crucial role in reinforcing the therapeutic benefits of drawing therapy by encouraging children to engage in creative activities outside of the clinical setting. By integrating art-based approaches into everyday practices, children can continue to develop their emotional, cognitive, and social skills, contributing to their overall well-being and emotional resilience.

Authors' Contributions

All authors significantly contributed to this study.

Declaration

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

Transparency Statement

Acknowledgments

Declaration of Interest

Funding

Ethical Considerations

In this study, to observe ethical considerations, participants were informed about the goals and importance of the research before the start of the interview and participated in the research with informed consent.

References

Babaei, A. (2017). *A Comparative Study on the Effectiveness of Communication Skills Training and Transactional Analysis on Marital Satisfaction* Rudhen University]. Tehran.

Bosgraaf, S., Pattiselanno, K., & Hooren, S. (2020). Art Therapy for Psychosocial Problems in Children and Adolescents: A Systematic Narrative Review on Art Therapeutic Means and Forms of Expression, Therapist Behavior, and Supposed Mechanisms Change. https://doi.org/10.3389/fpsyg.2020.584685

Coddington, J. A., & Vaughan, J. (2016). Separation Anxiety Disorder in School-Age Children: What Health Care Providers Should Know. *Journal of Pediatric Health Care*, *31*(4). https://doi.org/10.1016/j.pedhc.2016.11.003

Demahri, F., Saeedmanesh, M., & Rozban, S. (2019). Effects of Painting-Based Art Therapy on Eating Habits and Adjustment of Children in Malayer, Iran. *Journal of Disability Studies*, *9*(1), 16. https://www.researchgate.net/publication/355172196

Faramarzi, S., & Moradi, M. (2014). The Impact of Art Therapy with a Focus on Painting Therapy on Reducing Hopelessness and Loneliness in Male Deaf Children. *Audiology Journal*, *23*(6), 25-31. https://avr.tums.ac.ir/index.php/avr/article/view/202

Fathi, G., Akbari, M., Moradi, O., & Abdollahi, F. (2022). The Effectiveness of Educational Differentiation, Mothers Empathy and Child-Parent Relationship on Separation Anxiety Disorder. https://www.magiran.com/paper/2520500/the-effectiveness-of-educational-differentiation-mothers-empathy-and-child-parent-relationship-on-separation-anxiety-disorder?lang=en

Ghadampour, E., Amirian, L., & Radpour, F. (2019). The Effect of Group Painting Therapy on Loneliness, Control of Anger, and Social Adjustment of Primary School Students [Research]. *Quarterly Journal of Child Mental Health*, *6*(2), 119-131. https://doi.org/10.29252/jcmh.6.2.11

Ghanbari Hashem Abadi, B., & Ebrahimi Nejad, M. (2011). The Impact of Group Art Therapy on Interpersonal Skills in Women with Chronic Mental Disorders Hospitalized in a Psychiatric Rehabilitation Center. *Journal of Psychological Studies*, *13*(3), 222-229. https://jfmh.mums.ac.ir/article_1006.html?lang=en

Golamzadeh, M., Babapour, J., & Sabourimoghaddam, H. (2014). The effect of art therapy based on painting therapy in reducing the symptoms of depression disorder in elementary School Boys. *Research in Clinical Psychology and Counseling*, *4*(2), 19-32. https://doi.org/10.22067/ijap.v4i2.13494

Hashemi, M., Mirzamani, S. M., Davarmanesh, A., & Nezadi Kashani, G. (2010). The Impact of Puppetry with UV Light on Reducing Aggression in Female Students with Mild Intellectual Disabilities. *Children's Neurology Special Issue*, *11*(5). https://rehabilitationj.uswr.ac.ir/article-1-399-en.html

Hatami, F., Ghahremani, L., Kaveh, M. H., & Keshavarzi, S. (2016). The effect of self-awareness training with painting on self-efficacy among orphaned adolescents. *Practice in Clinical Psychology*, *4*(2), 89-96. https://doi.org/10.15412/J.JPCP.06040203

Małgorzata Maria, D. (2012). Separation anxiety in children as the most common disorder co-occurring with school refusal. *Medical and Biological Sciences*, *26*(3), 5-10. https://doi.org/10.2478/v10251-012-0048-0

Michael, K. (1998). *Encyclopedia of Aesthetics*. Oxford University Press. https://books.google.com/books/about/Encyclopedia_of_Aesthetics.html?id=ckGsDAEACAAJ

Mirzapour, S., & Bahrami, H. (2016). *Problem-Solving and Decision Making Skills*. Ediban Roz Publications.

Mohamad, Z., Talib, J. A., & Dagang, M. M. (2020). Effects of Visual Art Therapy on Cognitive Emotion Regulation and Anxiety of Single Mothers. *International Journal of Management (IJM)*, *11*(6). https://iaeme.com/Home/article_id/IJM_11_06_078

Naderi, F., & Ansari Asl, Z. (2011). The Impact of Art Therapy on Self-Concept, Approval Seeking, and Happiness in Children Visiting the Counseling and Treatment Center in Ahvaz City. *New Findings in Psychology*, *6*(8), 17-33. https://www.sid.ir/paper/175163/en

Nazeri, A., Ghamarani, A., Darouei, P., & Ghasemi Tabatabaei, G. (2020). The effect of expressive arts therapy on emotion regulation of primary school students. *Quarterly Journal of Child Mental Health*, *7*(2), 132-143. https://doi.org/10.29252/jcmh.7.2.12

Pakzadmoghadam, A., Askari Zadeh, G., & Bagheri, M. (2023). The effectiveness of art therapy based on Drawing on general anxiety disorder and Physical injury fears in fourth grade male students. *Knowledge & Research in Applied Psychology*, *24*(2), 38-48. https://sanad.iau.ir/Journal/jsrp/Article/895086/FullText

Posavac, S. S., & Posavac, H. D. (2019). Adult Separation Anxiety Disorder Symptomology as a Risk Factor for Thin-Ideal Internalization: The Role of Self-Concept Clarity. *[Publication not provided]*. https://doi.org/10.2139/ssrn.3886007

Pour Mahdi Ganji, Y. Z. J. S., & Ranjbar. (2023). Effectiveness of Acceptance and Commitment-Based Group Therapy on Reducing Stress and Depression Symptoms in Mothers of Children with Separation Anxiety Disorder. *Applied Family Therapy*, *4*(3), 247-260. https://doi.org/10.61838/kman.aftj.4.3.16

Rezaee, S., Khodabakhshi Koolaee, A., & Taghvaee, D. (2015). Influence of painting therapy in decreasing aggression and anxiety among elementary school boys. *Journal of Pediatric Nursing*, *2*(2), 10-19. http://jpen.ir/article-1-129-en.html

Saidi, B., Narimani, M., & Hosseini, S. (2024). Effectiveness of Compassion-Focused Art Therapy on Distress Tolerance in Female Adolescents from Dysfunctional Families: A Quasi-Experimental Study. *Journal of Medical Sciences, Rafsanjan University of Medical Sciences*, *23*(3), 91-104. https://doi.org/10.61186/jrums.23.3.91

Schneider, S., Blatter-Meunier, J., Herren, C., In-Albon, T., Adornetto, C., Meyer, A., & Lavallee, K. L. (2013). The efficacy of a family-based cognitive-behavioral treatment for separation anxiety disorder in children aged 8-13: A randomized comparison with a general anxiety program. *Journal of consulting and clinical psychology*, *81*(5), 932. https://doi.org/10.1037/a0032678

Shahri, M., Moeinikia, M., Zahed, A., & Narimani, M. (2014). Investigation the Impact of Paint Therapy on Communication Skills of Shyness Girl Students. *Procedia - Social and Behavioral Sciences*, *128*, 327-331. https://doi.org/10.1016/j.sbspro.2014.03.165

Sheikholmolouki, N. (2016). Effects of Painting-Based Art Therapy on Problem-Solving Skills of Children aged 5-7 Years in Tehran.

Silver, R. (2006). Aggression and Depression Assessed through ART: Using Draw-A-Story (DAS) to Identify Children and Adolescents at Risk. *The Arts in Psychotherapy*, *33*, 256-260. https://doi.org/10.1016/j.aip.2005.12.001

Tajeryan, Z., Afrooz, G. A., & Nouryghasemabadi, R. (2022). Social Problem Solving in Women with PTSD and Addiction. *Psychology of Woman Journal*, *3*(4), 84-91. https://doi.org/10.61838/

Torabi Goodarzi, N., Nazeri, A., & Ghamarani, A. (2024). Designing and evaluating the efficacy of interactive drawing methods based on parent-child relationship on the symptoms of separation anxiety disorder in 6-8 year old children. *Journal of Psychological Science*, 1621-1636. https://psychologicalscience.ir/browse.php?a_id=2320&sid=1&slc_lang=en

Veiskerami, H., Mansouri, L., & Roshan Nia, S. (2017). Effectiveness of Art Therapy on the Meaning of Life and Mental Health of Female Students with Low Academic Achievement. *Journal of Counseling and Psychotherapy, Allameh Tabatabai University*, *8*(32), 49-62. https://en.civilica.com/doc/888670/