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Effectiveness of Play Therapy on Social Anxiety, Depression, and Loneliness in Children with Dyslexia

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A B S T R A C T

Purpose: The present study examines the effectiveness of play therapy on social anxiety, depression, and loneliness for children with dyslexia.

Methods and Materials: The study employed a quasi-experimental design with pretest-posttest and a control group. A sample of children with dyslexia was randomly selected and divided into experimental and control groups. The experimental group received play therapy, whereas the control group received no intervention.

Findings: The results indicated that play therapy had a positive effect on children with dyslexia. Children in the experimental group demonstrated significant improvements in reading and comprehension following the intervention. Moreover, social support was identified as a critical factor influencing the effectiveness of play therapy. Children who received greater social support showed more substantial progress in reading skills and a reduction in social anxiety.

Conclusion: Based on the findings, play therapy can be considered an effective approach to improving the performance and psychological well-being of children with dyslexia. Additionally, attention to social support plays a vital role in enhancing the effectiveness of this method.

Keywords: *Effectiveness, Play Therapy, Children, Dyslexia, Loneliness, Social Anxiety, Depression.*

1. Introduction

Children are one of the most vulnerable groups, exposed to various psychological disorders. These disorders significantly affect their academic and professional performance (Baniasadi, 2024; Goshayeshi et al., 2024; Roghani et al., 2022). One of the educational challenges faced by children is the phenomenon of dyslexia. Dyslexia is categorized as a learning disability and is, in fact, one of the most common types of learning disorders, characterized by difficulties in reading accuracy, fluency, and spelling. According to the British Psychological Society, dyslexia is associated with problems in these areas. Children with dyslexia often struggle with selective attention and concentration, which results in a limited attention span. They also face difficulties in organizing their thoughts, necessitating external assistance (Fatemeh et al., 2015; Kumari et al., 2024; Mohammadreza, 2019; Tahereh Sima et al., 2018).

A psychological characteristic of children with dyslexia that may be influenced by their challenges is social anxiety. Anxiety is a form of unease, a sense of danger, or an unpleasant fear with no identifiable source. Research indicates that students with dyslexia experience various anxiety issues, which may be either a cause or a consequence of their condition(Chen, 2024). Social anxiety is defined as a severe and persistent fear of situations where an individual is exposed to the scrutiny of others or must perform in their presence. The primary feature of social anxiety disorder is a clear and enduring fear of one or more social or performance situations where the person is exposed to unfamiliar people or possible evaluation by others (Barqi, 2015). Individuals with social anxiety disorder typically avoid anxiety-provoking situations and rarely force themselves to endure social or performance-related scenarios. If they encounter such situations, they experience severe anxiety. In other words, social anxiety disorder involves fear of social situations, including scrutiny or interaction with strangers (Fox et al., 2021; Karimzadeh Navadian, 2023). In children, social anxiety manifests as noticeable or intense fear or anxiety in peer settings, not limited to interactions with adults. When faced with such situations, children fear negative evaluation, resulting in almost always experiencing fear or anxiety during social interactions. This anxiety may manifest through tantrums, crying, freezing, clinging, or shrinking away in social settings (Abbasi, 2004). Abbasi (2004) found that students with learning disorders scored higher on social anxiety measures compared to their healthy peers (Abbasi, 2004). Besides social anxiety, psychological disorders like depression in children with dyslexia may also stem from their conditions and challenges. Studies reveal that students with dyslexia experience higher rates of depression compared to their peers, with rates ranging between 14% and 36%. The reasons why children with learning disabilities, including dyslexia, experience depression are varied. Some children may struggle to cope with the repeated failures and setbacks associated with their learning disabilities. If their despair remains unaddressed, it may lead to feelings of helplessness (Tannock et al., 2018).

The loneliness experienced by children with dyslexia may also be influenced by their conditions and challenges. Studies show that individuals with psychological issues, such as loneliness, often lack skills in perceiving their social competence (De Groot et al., 2017). Loneliness involves feelings of sadness and detachment, influencing social interactions, lifestyle, and physical and mental health in various ways (Madsen et al., 2024). According to Elhagen (2004), loneliness arises from the gap between an individual's aspirations (what they want) and their achievements (what they have attained) in relationships and intimacy. The wider this gap, the greater the feeling of loneliness. Studies show that lonely individuals often exhibit traits such as low satisfaction and happiness, low self-esteem, alienation, shyness, melancholy, emptiness, lack of appeal, withdrawal from social interactions, few friendships, pessimism, inability to express themselves, aloofness, and introversion (Arab & Rahat Dahmarde, 2021; Mehrandish et al., 2019).

Play therapy is a supportive interaction between a child and a trained adult, using symbolic communication through play to explore ways to reduce the child's emotional distress. Creative activities involving artistic, visual, auditory, and recreational methods constitute play therapy (Roghani et al., 2022). During this interpersonal interaction with the therapist, the child experiences acceptance, emotional catharsis, reduction of distress, impulse redirection, and corrective emotional experiences. Play therapy is an effective therapeutic intervention. It is considered the most valuable method in children's educational and psychological interventions. Play therapy is a structured and theory-based approach that lays the foundation for children's natural and normative learning and communication processes (Azadimanesh et al., 2018). Play therapy indirectly enables children to resolve their problems in school and peer group settings through play. Given the critical role of play in reducing depression, social anxiety, and loneliness, it is

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necessary to determine the objectives of each game. Games can support the child's growth and development or, conversely, exacerbate issues such as anger. As discussed, the conditions and challenges faced by children with dyslexia may affect their psychological characteristics, such as social anxiety, depression, and loneliness. Therefore, any factor capable of influencing these variables and improving them can create better psychological conditions for these children and help them better adapt to their challenges. Play therapy is among the interventions that can influence social anxiety, depression, and loneliness. The main issue is not identifying these children, as their incomplete developmental symptoms eventually manifest. The primary concern is assisting these children in their growth and treatment. Psychology must leverage techniques to enhance children's learning, creativity, and social growth. Among the approaches emphasized by psychologists is play therapy. Recent evidence highlights the pivotal role of play in shaping children's personalities. Through play, children acquire various skills that contribute to their development (Bratton & Dafoe, 2018). Ultimately, our primary question is: To what extent does play therapy reduce depression, social anxiety, and loneliness in children with dyslexia in Tehran?

2. Methods and Materials

2.1. Study Design and Participants

This study is a quasi-experimental research with a pretest-posttest design and a control group (with a two-month follow-up). It was conducted to identify and address existing issues, making it an applied research in terms of its objective. The statistical population of this research included elementary school children with dyslexia during the first half of the 2021-2022 academic year. A total of 30 children were randomly selected using purposive and convenience sampling methods (with three as reserves for replacements) and were assigned to either the experimental or control group (15 participants each). Data collection for the theoretical foundations was conducted through note-taking, reviewing valid texts, books, reputable journals, and credible websites.

Inclusion criteria included the diagnosis of dyslexia by specialists, parental consent, child consent to participate, and the absence of simultaneous treatment interventions. Exclusion criteria were irregular attendance in educational sessions, failure to complete homework, and incomplete questionnaires. The experimental group underwent seven sessions of play therapy, whereas no intervention was provided to the control group.

2.2. Measures

2.2.1. Social Anxiety

The Social Anxiety Scale for Adolescents (SAS-A) was developed by La Greca (1998). This scale consists of 18 items and includes three subscales: Fear of Negative Evaluation, Social Avoidance and Distress in New Situations, and General Social Avoidance and Distress. Ostovar et al. (2003) confirmed the three-factor structure of this scale on an Iranian adolescent sample and reported satisfactory validity. The test-retest reliability of the scale, with intervals ranging from one to four weeks, was reported to be 0.88. The internal consistency reliability (Cronbach's alpha) for the subscales Fear of Negative Evaluation, Social Avoidance and Distress in New Situations, and General Social Avoidance and Distress were reported as 0.84, 0.74, and 0.77, respectively. Test-retest reliability over intervals of 3–7 days ranged from 0.89 to 0.94, and Cronbach's alpha ranged from 0.90 to 0.97. La Greca and Lopez (1998) reported Cronbach's alpha coefficients of 0.91 and 0.89 for the Fear and Avoidance subscales, respectively. Ostovar and Razaviyeh (2013) reported Cronbach's alpha and test-retest reliability coefficients of 0.93 and 0.87, respectively (Ezabadi et al., 2024).

2.2.2. Depression

The Beck Depression Inventory (BDI) was first developed in 1961 by Beck et al. Initially introduced in 1961 by A.T. Beck, Ward, Mendelson, Mock, and Erbaugh, the inventory underwent revisions in 1971 and was published in its updated form in 1978. Although the latter version (BDI-IA) presents items more clearly, subsequent studies indicated a high correlation (approximately 0.94) between the two versions. In 1996, Beck and colleagues revised the BDI again to cover a broader range of symptoms and align more closely with the diagnostic criteria for depressive disorders in the DSM-IV. In this revised version (BDI-II), four items were modified to reflect symptoms associated with severe depression, such as agitation, feelings of worthlessness, difficulty concentrating, and loss of energy. Additionally, two items were revised to indicate appetite and sleep changes. Other items were also rephrased for clarity. Comparisons between BDI and BDI-II show that participants tend to endorse one or two more symptoms in

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BDI-II than in the earlier version. The inventory consists of 21 items. Beck et al. reported test-retest reliability coefficients ranging from 0.48 to 0.86, depending on the time interval between administrations and the population tested. In 1996, they obtained a test-retest reliability of 0.93 over a one-week interval. The BDI also demonstrates substantial validity, with correlations exceeding 0.60 with the Hamilton Rating Scale for Depression (HRSD), Zung Self-Rating Scale, MMPI Depression Scale, Multidimensional Affective State Depression Scale, and SCL-90. Within Iran, several studies, including those by Tashakori and Mehriar in 1994, reported reliability coefficients of 0.78. Other studies, such as Partovi (1975), Vahabzadeh (1973), and Chogini (2002), reported reliability coefficients ranging from 0.70 to 0.90. Respondents must have at least a fifth- or sixth-grade reading level to comprehend the items. Responses are rated on a four-point Likert scale from 0 to 3, with total scores ranging from 0 to 63. Higher scores indicate greater levels of depression (Tayebmanesh & Saadati, 2023).

2.2.3. *Loneliness*

The Loneliness Questionnaire was developed in 1980 by Russell, Peplau, and Cutrona. It consists of 20 items presented in a 4-point Likert format, including 10 negative and 10 positive statements. The questionnaire aims to address adolescent issues. It was translated into Persian by Shekar Khan (1998). The reliability of the revised version was reported at 0.78. Using the test-retest method, Russell et al. (1978) reported a reliability of 0.89. De Tomasso and Braten (2004) evaluated the Loneliness Scale and reported Cronbach's alpha coefficients ranging from 0.87 to 0.90, indicating strong internal consistency. The Loneliness Questionnaire includes 20 items rated as follows: "Never" (1), "Rarely" (2), "Sometimes" (3), and "Always" (4). Scores for items 1, 5, 6, 9, 10, 15, 16, 19, and 20 are reverse-coded: "Never" (4), "Rarely" (3), "Sometimes" (2), and "Always" (1). Total scores range from 20 (minimum) to 80 (maximum), with a mean score of 50. Scores above 50 indicate higher levels of loneliness, while scores below 50 indicate lower levels of loneliness. Soleimani et al. (2017) evaluated the questionnaire and found a content validity score of 0.839 using Cronbach's alpha. Nadri et al. (2016) used the scale and reported an internal consistency coefficient of 0.79 using Cronbach's alpha. Anjom et al. (2016) reported split-half reliability at 0.73 and test-retest reliability at 0.76. They also found a high content validity with an internal consistency score of 0.83. Russell (1980) used Cronbach's alpha to evaluate the scale's reliability, with coefficients ranging from 0.89 to 0.94. Basharat (2000) reported a test-retest reliability coefficient of 0.92 (Asadi et al., 2023).

2.3. *Intervention*

2.3.1. *Play Therapy*

This intervention protocol was designed to implement play therapy for children with dyslexia, aimed at enhancing their psychological well-being, improving social interaction, and fostering emotional regulation. The intervention consists of seven structured sessions, each building upon the previous one to ensure skill development, engagement, and therapeutic progress. Each session includes specific activities designed to address the children's needs in a supportive and interactive environment.

Session 1: In the first session, the therapist introduces themselves to the children, establishes rapport, and creates a welcoming atmosphere. Various materials, such as sports equipment, toys, and entertainment tools, are provided to familiarize the children with the available resources. The primary goal is to build trust and create a comfortable setting for participation.

Session 2: During the second session, the children are introduced to the proper use of each type of material (e.g., sports equipment, toys, and entertainment tools). The therapist explains how to engage with these resources effectively, and the children practice using them under guidance. This session serves as a foundation for the upcoming therapeutic activities.

Session 3: This session introduces the first therapeutic activity, "Landmine Game." Instructions and rules for this game are provided, and the children participate actively. The game aims to promote problem-solving skills, improve focus, and encourage teamwork.

Session 4: In the fourth session, the focus shifts to "Finger Painting," a creative and expressive activity. The therapist guides the children in using finger paints to create artwork, helping them explore self-expression, enhance fine motor skills, and reduce anxiety through tactile engagement.

Session 5: The fifth session involves the "Imaginative Play" activity. Children engage in role-playing or storytelling scenarios, guided by the therapist. This activity fosters creativity, improves communication skills, and encourages emotional expression in a safe and playful context.

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Session 6: In this session, the children participate in "Bubble Play," a lighthearted and sensory-focused activity. The act of creating and interacting with bubbles helps to reduce stress, enhance coordination, and promote mindfulness through engaging sensory experiences.

Session 7: The final session features the "Tactile Box" activity. The children explore various objects hidden in a sensory box by using their sense of touch. This activity aims to develop sensory awareness, improve focus, and enhance problem-solving skills while providing a calming and engaging experience.

2.4. Data Analysis

Data were analyzed using multivariate analysis of covariance (MANCOVA) to assess the effectiveness of the intervention while controlling for pretest scores. Descriptive statistics, including means and standard deviations, were calculated for each variable. Assumptions of homogeneity of variance and covariance were tested using Levene's test and M-Box test, respectively. Eta-squared was used to determine the effect size, and post-hoc comparisons were conducted where necessary. All analyses were performed using SPSS software (version 24).

3. Findings and Results

According to Table 1, in the intervention group, the mean scores for social anxiety (M = 13.14) and depression (M = 66.39) showed a decreasing trend, while loneliness (M = 49.81) demonstrated an increasing trend. Similarly, in the control group, the mean scores for social anxiety (M = 16.9) and depression (M = 71.39) also showed a decreasing trend, whereas loneliness (M = 48.67) exhibited an increasing trend. These findings indicate that the play therapy protocol had a notable impact on the research variables.

Table 1

Descriptive findings of primary outcomes before and after the intervention among participants

Group	Variable	Test Type	Mean	SD	Shapiro-Wilk Test	p-value
Intervention	Social Anxiety	Pretest	20.13	9.20	0.171	0.043
		Posttest	13.14	17.80	0.162	0.031
	Depression	Pretest	84.43	7.15	0.102	0.027
		Posttest	66.39	32.24	0.167	0.021
	Loneliness	Pretest	57.32	7.29	0.217	0.053
		Posttest	49.81	32.16	0.381	0.077
Control	Social Anxiety	Pretest	22.47	7.11	0.181	0.037
		Posttest	16.9	8.67	0.209	0.067
	Depression	Pretest	44.2	11.04	0.361	0.013
		Posttest	71.39	6.67	0.108	0.070
	Loneliness	Pretest	53.23	7.21	0.213	0.023
		Posttest	48.67	47.39	0.179	0.071

The results of the M-Box test for covariance homogeneity indicated that the assumption of homogeneity of covariance was met for the variables of social anxiety ($P > 0.05$, BOX'S M = 2.77), depression ($P > 0.05$, BOX'S M = 2.13), and loneliness ($P > 0.05$, BOX'S M = 2.43). Given the assumption of homogeneity of regression slopes ($P > 0.05$), multivariate analysis of covariance (MANCOVA) was used to control for pretest effects. Additionally, the test for equality of variances showed that the variances of the experimental and control groups in the posttest stage were equal for social anxiety ($F = 4.67$, $P > 0.05$), depression ($F = 1.28$, $P > 0.05$), and loneliness ($F = 1.28$, $P > 0.05$) within the population.

Table 2

Results of ANCOVA for the role of play therapy in children's social anxiety

Variable	Source	SS	df	MS	F	Cohen's d	p-value
Social Anxiety	Pretest	21.15	1	21.15	4.67	0.14	0.020
	Group	4.15	1	4.15	57.50	0.66	0.011
	Error	13.84	22	0.74			
	Total	100.10	24				

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According to Table 2, the results of ANCOVA indicate that the significance levels for all tests allow the use of multivariate ANCOVA. The findings demonstrate a significant difference between the study groups (Cohen's d = 0.66, F = 57.50, p = 0.011), and the eta-squared results confirm that the overall difference between the groups is statistically significant. Thus, play therapy has a significant impact on reducing social anxiety in children with dyslexia.

Table 3

Results of ANCOVA for the role of play therapy in children's depression

Variable	Source	SS	df	MS	F	Cohen's d	p-value
Depression	Pretest	16.40	1	16.40	24.10	0.11	0.023
	Group	117.11	1	117.11	7.40	0.58	0.001
	Error	31.63	22	1.44			
	Total	634.71	24				

According to Table 3, ANCOVA results reveal significant differences between the study groups (Cohen's d = 0.58, F = 7.40, p = 0.001). The eta-squared results confirm that the overall group differences are statistically significant. Therefore, play therapy significantly reduces depression in children with dyslexia.

Table 4

Results of ANCOVA for the role of play therapy in children's loneliness

Variable	Source	SS	df	MS	F	Cohen's d	p-value
Loneliness	Pretest	322.179	1	794.207	11.604	0.211	0.002
	Group	716.442	1	722.74	29.113	0.437	0.001
	Error	704.442	22	361.14			
	Total	1392.81	24				

As shown in Table 4, ANCOVA results demonstrate significant differences between the groups (Cohen's d = 0.437, F = 29.113, p = 0.001). The eta-squared results indicate that the differences between groups are statistically significant. Thus, play therapy significantly reduces loneliness in children with dyslexia.

4. Discussion and Conclusion

Based on the results, multivariate covariance analysis showed significant differences between the studied groups, with the eta-squared results confirming meaningful differences. These findings indicate that play therapy has a significant impact on reducing social anxiety in children with dyslexia. This finding aligns with many similar studies (Egbe et al., 2022; Egbe et al., 2023; Ezabadi et al., 2024; Fallahi et al., 2021; Hamidi Fard et al., 2023; Mahmoodi et al., 2022; Mahmoudi et al., 2022; Obiweluozo et al., 2021; Roghani et al., 2022).

Explaining these findings, it can be noted that techniques employed in play therapy sessions—such as behavioral techniques (e.g., systematic desensitization, evocative imagery, dependency management, shaping, extinction, modeling, self-monitoring, and activity planning), cognitive methods (e.g., thought recording, cognitive restructuring, and adaptive thinking), and role-playing—enable students to reduce social anxiety (Egbe et al., 2023). Additionally, play therapy helps children dismantle barriers to awareness, thereby enhancing personal insight and reducing negative behaviors and thoughts like social anxiety.

The multivariate covariance analysis results also showed significant differences between the groups, with eta-squared findings confirming that play therapy significantly reduces depression in children with dyslexia. This finding is consistent with previous research (Amini et al., 2016; Kim & Han, 2016; Kim, 2014; Knell & Dasari, 2016; Roghani et al., 2022).

These findings suggest that during play, children temporarily distance themselves from depressive states. Reducing depressive episodes during specific hours lessens the time spent in depression overall. As humans naturally seek pleasure, play introduces children to joyful activities, helping them remember that play is more gratifying than depressive states. Play also serves as a therapeutic tool, offering children opportunities to resolve internal issues

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through their own activities. This process enables them to express distressing emotions, thereby alleviating depression.

The results further revealed significant group differences in loneliness, with eta-squared results confirming that play therapy significantly reduces loneliness in children with dyslexia. This finding is consistent with prior studies (Amini et al., 2016; Farzaneh, 2015; Hadi Pour & Akbari, 2017; Kaboodi, 2022; Roghani et al., 2022).

Explaining these findings, loneliness in children often creates challenges for both the child and their parents. These children may feel rejected and face difficulties making friends or maintaining peer relationships. Children who think and learn differently are not alone in experiencing loneliness—they often feel separated from others. Persistent loneliness can have detrimental effects on physical, mental, and emotional health (Sadeghian, 2010). Play therapy is a structured, theory-based approach that establishes natural learning and communication processes, fostering child well-being. Its therapeutic potential is applied in various ways, effectively reducing loneliness in children.

In conclusion, play therapy reduces social anxiety, depression, and loneliness in children with dyslexia. This method can be used as an effective supplementary treatment for children with dyslexia.

This study faced several limitations that should be considered when interpreting the findings. The sample size was relatively small, which may restrict the generalizability of the results to larger populations. Additionally, the study was limited to children with dyslexia within a specific age range and geographic location, which might not fully represent the diversity of experiences in other groups or settings. The reliance on self-reported measures and parental feedback may also introduce biases, as these perspectives may not capture the complete spectrum of the children's emotional and behavioral changes. Finally, the short duration of the intervention and follow-up period limits the understanding of long-term effects of play therapy on psychological outcomes.

Future studies should consider expanding the sample size and including diverse populations across various age groups, socioeconomic backgrounds, and geographic locations to enhance generalizability. Longitudinal research is recommended to evaluate the long-term impacts of play therapy on psychological and educational outcomes in children with dyslexia. Incorporating a mixed-methods approach that combines quantitative measures with qualitative insights, such as interviews or observations, could provide a more comprehensive understanding of therapy outcomes. Additionally, comparing the effectiveness of different play therapy modalities or integrating play therapy with other psychological interventions could offer insights into optimizing treatment strategies for children with dyslexia.

Practitioners and educators working with children with dyslexia should consider incorporating play therapy into their intervention programs, as it has demonstrated effectiveness in reducing social anxiety, depression, and loneliness. Training programs for therapists and educators could include techniques and methodologies derived from play therapy to equip them with practical tools for addressing the emotional and social challenges faced by these children. Policymakers should also advocate for the inclusion of therapeutic play-based interventions in educational and clinical settings, providing resources and funding to ensure these methods are accessible and sustainable. By prioritizing play therapy, stakeholders can contribute to the holistic development and well-being of children with dyslexia.

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

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. Each participant received an informed consent form to understand the study's objectives.

References

Abbasi, M. (2004). Comparing social well-being and social anxiety in students with and without learning disabilities. *Learning Disability Quarterly*, *5*(2), 74-91. https://jld.uma.ac.ir/article_393.html?lang=en

Amini, K., Neshatdoost, H., Mazaheri, M. A., & Nadi, M. A. (2016). Effectiveness of group play therapy on depression and loneliness in 7-11 years old children with post-traumatic stress disorder (PTSD) caused by sexual abuse in Tehran. *Iran Journal of Health Education and Health Promotion*, *4*(2), 130-138. https://doi.org/10.18869/acadpub.ihepsaj.4.2.130

Arab, A., & Rahat Dahmarde, T. (2021). The relationship between loneliness and fear of negative social evaluation with problematic use of mobile phones among students.

Asadi, L., Seirafi, M., & Ahadi, M. (2023). Evaluation of the effectiveness of painting therapy on health anxiety, loneliness and death anxiety in the elderly. *Applied Family Therapy Journal (AFTJ)*, *4*(2), 395-413. https://doi.org/10.61838/kman.aftj.4.2.25

Azadimanesh, P., Hossein Khan Zadeh, A., & Hakim Javad, M. (2018). The effectiveness of puppet play therapy on improving social skills in children with Attention Deficit Hyperactivity Disorder (ADHD). *Disability Studies*, *8*(44), 1-9. https://jdisabilstud.org/browse.php?a_id=549&sid=1&slc_lang=en

Baniasadi, T. (2024). Comparison of Executive Function and Working Memory among Children with High and Low Levels of Physical Activity. *International Journal of Education and Cognitive Sciences*, *5*(3), 9-15. https://doi.org/10.61838/kman.ijeas.5.3.2

Barqi, E. (2015). Social Anxiety Disorder. National Conference on Psychology and Management of Social Injuries,

Bratton, S., & Dafoe, E. (2018). *Play Therapy*. New York: Taylor & Francis.

Chen, S. (2024). Cognitive Behavior Therapy for Social Anxiety Disorder. *Lecture Notes in Education Psychology and Public Media*, *37*(1), 72-77. https://doi.org/10.54254/2753-7048/37/20240506

De Groot, B. J., Van den Bos, K. P., Van der Meulen, B. F., & Minnaert, A. E. (2017). Rapid naming and phonemic awareness in children with or without reading disabilities and/or ADHD. *Journal of Learning Disabilities*, *50*(2), 168-179. https://doi.org/10.1177/0022219415609186

Egbe, C., Tochukwu, L. U., & Ede, M. (2022). Cognitive behavioural play therapy for social anxiety disorders (SADs) in children with speech impairments. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, *41*(5). https://doi.org/10.1007/s10942-022-00442-6

Egbe, C. I., Ugwuanyi, L. T., Ede, M. O., Agbigwe, I. B., Onuorah, A. R., Okon, O. E., & Ugwu, J. C. (2023). Cognitive Behavioural Play Therapy for Social Anxiety Disorders (SADs) in Children with Speech Impairments. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, *41*(1), 24-44. https://doi.org/10.1007/s10942-022-00442-6

Ezabadi, Z., Behjati Ardakani, F., & Shiravi, E. (2024). Effectiveness of cognitive-behavioral play therapy on social anxiety and academic self-concept in students with stuttering. *Scientific-Research Quarterly of Psychology for Exceptional Individuals*, *13*(52), 121-147. https://jpe.atu.ac.ir/article_17251.html?lang=en

Fallahi, P., Dehghani, F., & Asadi, S. (2021). Effectiveness of cognitive-behavioral play therapy on alexithymia in children with social anxiety disorder. Second National Conference on Psychological Pathology,

Farzaneh, S. D. (2015). *Effectiveness of cognitive-behavioral play therapy on hopelessness and loneliness in 9- to 12-year-old girls in Mashhad's semi-family welfare centers* Allameh Tabataba'i University, Faculty of Educational Sciences and Psychology. https://elmnet.ir/doc/10862291-24199

Fatemeh, K., Seyyed Moosa Khafi, M., Mahnaz Khosrow, J., & Mahnaz, F. (2015). The effectiveness of the Davis method for correcting dyslexia on the reading performance of male students with dyslexia. *Child Psychological Progress*, *2*, 41-53. http://childmentalhealth.ir/article-1-39-en.html

Fox, N. A., Buzzell, G. A., Morales, S., Valadez, E. A., Wilson, M., & Henderson, H. A. (2021). Understanding the Emergence of Social Anxiety in Children With Behavioral Inhibition. *Biological Psychiatry*, *89*(7), 681-689. https://doi.org/10.1016/j.biopsych.2020.10.004

Goshayeshi, M., Samadieh, H., & Tanhaye Reshvanloo, F. (2024). Risk and Protective Factors of Oppositional Defiant Disorder in Children with Stuttering: Unraveling Familial Dynamics. *International Journal of Education and Cognitive Sciences*, *5*(2), 31-37. https://doi.org/10.61838/kman.ijeas.5.2.5

Hadi Pour, S., & Akbari, B. (2017). Effectiveness of cognitive-behavioral play therapy on self-efficacy and loneliness in elementary school students with learning disabilities. *Journal of Disability Studies*, *7*(64). https://jdisabilstud.org/browse.php?a_id=741&slc_lang=en&sid=1&printcase=1&hbnr=1&hmb=1

Hamidi Fard, S., Dasht Bozorgi, Z., & Hafezi, F. (2023). Effectiveness of play therapy based on a cognitive-behavioral approach on social anxiety and self-harming behaviors in children with autism spectrum disorder. *Psychiatric Nursing*, *11*(3), 70-80. https://ijpn.ir/browse.php?a_id=2217&sid=1&slc_lang=en

Kaboodi, M. (2022). The effect of group play therapy on social adjustment, control of anger, and loneliness of children between 11-12. *Journal of Psychological Science*, *21*(119), 2199-2212. https://doi.org/10.52547/JPS.21.119.2199

Karimzadeh Navadian, T. (2023). Prediction of adolescent social anxiety based on parents' parenting styles. *Journal of Adolescent and Youth Psychological Studies (JAYPS)*, *4*(6), 128-136. https://doi.org/10.61838/kman.jayps.4.6.13

Kim, K.-H., & Han, S. (2016). The Effects of Sandplay Therapy on Depression and Stress From Child Rearing in Mothers With Disabled Children. *Journal of Symbols & Sandplay Therapy*, *7*(2), 69-86. https://doi.org/10.12964/jsst.160009

Kim, S.-o. (2014). The Effects of Sandplay Therapy on Improving the Self-Differentiation, Depression, and Mother-Child Relationship of Mothers With Teenage Children. *Journal of Symbols & Sandplay Therapy*, *5*(1), 1-6. https://doi.org/10.12964/jsst.130011

Knell, S. M., & Dasari, M. (2016). Cognitive-behavioral play therapy for anxiety and depression. In *Empirically based play interventions for children, 2nd ed.* (pp. 77-94). American Psychological Association. https://doi.org/10.1037/14730-005

Kumari, P., Deepa, S., & Vijayalakshmi, B. (2024). Effect of brain gym and web-based cognitive training intervention on visual

E-ISSN: 3041-8828

attention span and working memory in children with dyslexia. *Journal of Research Administration*, *6*(1).

Madsen, K. R., Damsgaard, M. T., Petersen, K., Qualter, P., & Holstein, B. E. (2024). Bullying at School, Cyberbullying, and Loneliness: National Representative Study of Adolescents in Denmark. *International journal of environmental research and public health*, *21*, 414. https://doi.org/10.3390/ijerph21040414

Mahmoodi, A., Mashayekh, M., Zam, F., Shahnazari, M., & Peymani, J. (2022). The effectiveness of group play therapy with cognitive-behavioral approach on anxiety and self-esteem of deaf students. *Journal of Sabzevar University of Medical Sciences*, *29*(1), 115-130. https://jsums.medsab.ac.ir/article_1479.html
https://jsums.medsab.ac.ir/article_1479_f16e3ba6303a8c93701af0b13b298b97.pdf

Mahmoudi, A., Moshayekh, M., Zam, F., Shah Nazari, M., & Paimani, J. (2022). Effectiveness of group play therapy with a cognitive-behavioral approach on anxiety and social skills of deaf students. *Scientific-Research Journal of Alborz University of Medical Sciences*, *12*(1), 23-34. https://doi.org/10.61186/aums.12.1.23

Mehrandish, N., Salimi Bajestani, H., & Ismaili, M. (2019). Components of loneliness related to friends in teenage girls: A phenomenological study. *Clinical Psychology and Counseling Research*, *9*(1), 18-34. https://doi.org/10.29252/jcr.18.70.4

Mohammadreza, M. (2019). Treatment of dyslexia in a bilingual second-grade student: A case study. First International Conference on New Research in Psychology, Counseling, and Behavioral Sciences,

Obiweluozo, P. E., Ede, M. O., Onwurah, C. N., Uzodinma, U. E., Dike, I. C., & Ejiofor, J. N. (2021). Impact of cognitive behavioural play therapy on social anxiety among school children with stuttering deficit: a cluster randomised trial with three months follow-up. *Medicine*, *100*(19). https://doi.org/10.1097/MD.0000000000024350

Roghani, F., Jadidi, M., & Peymani, J. (2022). The Effectiveness of Floortime Play Therapy on Improving Executive Functions and Cognitive Emotion Regulation in Children with Attention Deficit / Hyperactivity Disorder (ADHD). *International Journal of Education and Cognitive Sciences*, *2*(4), 30-44. https://doi.org/10.22034/injoeas.2022.160686

Tahereh Sima, S., Reza Nili, P., Talieh, Z., & Zahra Sadat, Q. (2018). *Developmental dyslexia in Persian language*. Persian Script.

Tannock, R., Frijters, J. C., Martinussen, R., White, E. J., Ickowicz, A., Benson, N. J., & Lovett, M. W. (2018). Combined modality intervention for ADHD with comorbid reading disorders: A proof of concept study. *Journal of Learning Disabilities*, *51*(1), 55-72. https://doi.org/10.1177/0022219416678409

Tayebmanesh, L., & Saadati, N. (2023). Effectiveness of Integrating Quality of Life-Based Therapy and Phototherapy on Emotion Regulation, Depression, and Anxiety in Psychosomatic Patients. *KMAN Counseling & Psychology Nexus*, *1*(2), 37-43. https://doi.org/10.61838/kman.psychnexus.1.2.7

E-ISSN: 3041-8828