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Research Paper

The Effectiveness of Gestalt Play Therapy on Impulsivity, Adjustment, and Executive Functioning in Preschool Children with Autism Spectrum Disorder

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Abstract
The present study aimed to determine the effectiveness of Gestalt play therapy on impulsivity, adjustment, and executive functioning in preschool children with autism spectrum disorder (ASD). The study employed a quasi-experimental design with a pretest–posttest control group. The research population consisted of all preschool-aged boys and girls with autism spectrum disorder in Bukan County. Based on the experimental research design, 30 children were selected as the sample and assigned to experimental and control groups, with 15 children in each group. The research instruments included the Patton et al. (1995) Self-Report Impulsivity Questionnaire, the Biesecker et al. (2013) Psychological Adjustment Scale, and the Coolidge et al. (2002) Executive Functioning Questionnaire. The data were analyzed using univariate and multivariate analysis of covariance. The findings indicated that Gestalt play therapy was effective in reducing non-planning and cognitive impulsivity; accordingly, play therapy had a significant negative effect on impulsivity among preschool children with autism spectrum disorder ($p<0.05$). Furthermore, Gestalt play therapy was effective in improving the dimensions of experience, insight, and social integration, indicating that play therapy had a significant positive effect on adjustment among preschool children with autism spectrum disorder ($p<0.05$). Finally, the findings demonstrated that Gestalt play therapy had a significant positive effect on executive functioning in preschool children with autism spectrum disorder ($p<0.05$). Therefore, it can be concluded that Gestalt play therapy has a highly positive effect on impulsivity, adjustment, and executive functioning in preschool children with autism spectrum disorder and helps these children interact more effectively with their surrounding environment, strengthen their social skills, and achieve greater success in performing daily activities.

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Introduction

Autism is a lifelong developmental disorder that affects interaction, communication, learning, and behavior. Although the disorder cannot be cured, appropriate support can improve an individual's quality of life (*Esazadeh et al., 2022*). Children with autism have a limited understanding of environmental problems (*Abdulahi Beqrabadi, 2023*). Given the complexity of the disorder and individual differences in symptom severity, designing effective educational settings that meet the needs of all children with autism is challenging. Despite the greater vulnerability of these children, appropriately designed educational environments can improve their functioning and promote a greater sense of calm (*Esazadeh et al., 2022*). In Iran, many students with autism do not achieve the necessary adjustment to the educational environment because of communication difficulties and aggressive behaviors and are ultimately removed from the classroom (*Afrooz, 2023*). One of the core symptoms of psychological disorders such as autism is impulsivity (*Amini et al., 2023*). Impulsivity is of fundamental importance in the psychopathology of antisocial behavior, violence, pathological gambling, and suicide (*Amini et al., 2023*). This important personality characteristic affects a wide range of life domains and may contribute to self-disgust. Impulsivity encompasses immature and inappropriate behaviors and activities that may have unintended consequences. Compared with their neurotypical peers, children with autism spectrum disorder exhibit higher levels of impulsivity. Research has shown that between 40% and 80% of children with autism exhibit significant symptoms of impulsivity (*Hlavatá et al., 2018*). This difficulty can interfere with social relationships, academic functioning, and emotional regulation (*Hirota & King, 2023*). Various factors, including neurological factors, such as dysfunction of the prefrontal cortex, and environmental factors, such as stress, anxiety, and sleep deprivation, contribute to impulsivity in children with autism (*Persico et al., 2021*).

In developmental psychology, childhood is considered the optimal period for identifying potential future emotional, social, and academic problems because personality foundations are established during this developmental stage (*Kaboodi, 2022*). Many forms of maladjustment and adult disorders can be attributed to neglect of childhood needs and inappropriate behavioral guidance, which may result in difficulties adapting to the environment and the emergence of maladaptive behaviors. Adjustment can be classified into emotional, academic, psychological, social, and moral dimensions, with the emotional dimension occupying a central position. Adjustment refers to the ongoing adaptation to changes, reciprocal interaction with the environment, and pursuit of goals within sociocultural contexts. Autism spectrum disorder affects children's social development, interactions, and communication. One of the major difficulties experienced by these children is delayed or impaired speech development (*Miri et al., 2020*). Therefore, the use of psychological

interventions to improve these difficulties is essential (*Ridderinkhof et al., 2018*).

One of the well-known theoretical perspectives for examining the relationship between brain functioning and behavior in children with autism is executive function theory (*Demetriou et al., 2019*). Executive functioning is an important structure underlying the control and regulation of behavior and plays a key role in individual adaptation and successful functioning (*Zelazo, 2020*). These functions include cognitive flexibility, planning, response inhibition, working memory, and attention, which are associated with the frontal lobe of the brain (*Gold et al., 2018*). Executive functions encompass a broad range of neuropsychological domains, including goal-directed behavior, abstract reasoning, decision-making, and social regulation, and impairments in these functions have been shown to play an important role in autism (*Demetriou et al., 2018*). These functions are essential for regulating behavior in dynamic environments (*Hajri et al., 2016*) and enable individuals to adapt flexibly to their surroundings by integrating information. The most prominent executive functioning deficits in autism include impairments in planning skills and cognitive flexibility (*Ring et al., 2018*).

Managing and educating children with autism in special-needs schools is highly complex and is directly associated with teachers' capabilities (*Jafari et al., 2017*). Accordingly, newly qualified special education teachers worldwide seek guidance and improvements in educational practices (*Fowler et al., 2019*). Because behavioral difficulties in children with autism can exacerbate impairment and conflict, appropriate interventions are essential. One of the effective approaches is play therapy based on the Gestalt approach, in which children express their emotions and attitudes through the use of their five senses (*Abdulahi Beqrabadi, 2023*). This approach was first used by Violet Oaklander to address children's difficulties (*Kim, 2017*).

Play therapy based on the Gestalt approach is a humanistic approach that assumes that human beings are born with a natural capacity for satisfying relationships but may become trapped in maladaptive patterns. Gestalt therapists believe that individuals have the inherent potential to solve their own problems but may sometimes become "stuck" and require assistance (*Amini et al., 2023*). Children with autism can learn concepts and imitate behaviors through play with typically developing peers and by modeling their behaviors. Individuals with developmental disabilities experience deficits in social behaviors, making the improvement of their social behaviors essential (*Locke et al., 2017*). Previous research has demonstrated that play therapy has significant positive effects on aggression, executive functioning, impulsivity, social behaviors, and adjustment in children with autism (*Abdulahi Beqrabadi, 2023*; *Emamiyan & Taher, 2021*; *Farsham et al., 2023*; *Kaboodi, 2022*).

Preschool children who differ significantly from their peers in terms of cognitive, physical, emotional, or social development require appropriate modifications to

educational programs, methods, content, and environments. Today, special education is recognized worldwide as a cultural and social necessity. Given the complexity and diversity of disability groups, the use of scientific and specialized approaches to managing impulsivity, adjustment, and executive functioning among these students is essential. Play therapy is considered a strategic component because of its potential to improve the quality of education and increase teaching effectiveness; however, there remains a substantial research gap concerning preschool children with autism. Therefore, the present study seeks to answer the following question: Does Gestalt play therapy affect impulsivity, adjustment, and executive functioning in preschool children with autism spectrum disorder?

Research Method

The present study was applied in terms of its purpose and employed a field-based, quasi-experimental approach for data collection. A quasi-experimental pretest–posttest design with a control group was used. The study population consisted of all preschool-aged boys and girls with autism in Bukan County, including children attending the Hidi Autism Rehabilitation Center and the School for Children with Special Needs in Bukan. All participants had a diagnosis of autism spectrum disorder and were enrolled in either a rehabilitation center or a preschool program affiliated with the State Welfare Organization. Based on the requirements of experimental research, 30 children were selected as the study sample and assigned to an experimental group and a control group, with 15 children in each group.

Criterion-based sampling was employed based on participants' fulfillment of the inclusion criteria. The inclusion criteria were a history of autism spectrum disorder and enrollment in an autism preschool program; an age between 5 and 6 years; no previous participation in similar interventions; absence of chronic diseases; willingness to participate in the study; and active attendance at the intervention sessions. The exclusion criteria included withdrawal from the study, failure to attend the intervention sessions, or failure to meet any of the aforementioned eligibility criteria.

- Instruments

Barratt Impulsiveness Scale

The Barratt Impulsiveness Scale developed by *Patton et al. (1995)* was used to assess impulsivity. The questionnaire is completed by parents and consists of 30 items rated on a four-point Likert scale ranging from 1 (*never*) to 4 (*always*). It assesses three factors: non-planning impulsivity, motor impulsivity, and cognitive impulsivity. Patton et al. (1995) reported an overall reliability coefficient of 0.86, with reliability coefficients of 0.92, 0.90, and 0.82 for the three components, respectively.

Psychological Adjustment

The Psychological Adjustment Scale (PAS), developed by *Biesecker et al. (2013)*, was used in the present study. This parent-report version consists of 20 items and assesses individuals' adjustment across three

components: *experience, insight,* and *social integration*. The items are rated on a five-point Likert scale. *Biesecker et al. (2013)* reported satisfactory scale validity, with coefficients above 0.80. In the study by *Chiniforoushan et al. (2020)*, Cronbach's alpha coefficient was 0.95 for the overall scale and ranged from 0.86 to 0.94 across the factors. The composite reliability coefficients for the factors ranged from 0.87 to 0.93, while the overall ordinal theta coefficient was 0.94.

Coolidge Executive Functioning Questionnaire for Children

The *Coolidge et al. (2002)* Executive Functioning Questionnaire consists of 19 items completed by parents. This questionnaire was derived from the 200-item Coolidge Neuropsychological and Personality Inventory, which was designed to assess neuropsychological and behavioral disorders in children and adolescents aged 5 to 17 years. The questionnaire was developed based on the criteria of the American Psychiatric Association and was normed on 329 children aged 5 to 7 years. The instrument assesses deficits in executive functioning and uses a four-point rating scale ranging from 0 (*never*) to 3 (*always*), with the response options *never* (0), *sometimes* (1), *usually* (2), and *always* (3). Items 1–8 assess decision-making and planning, items 9–16 assess organization, and items 17–19 assess inhibition. Cronbach's alpha reliability was reported as 0.84, and test–retest reliability was 0.81. *Alizadeh and Zahedipour (2004)* reported an internal consistency coefficient of 0.91.

Gestalt Play Therapy

The content and implementation protocol for the group-based play therapy intervention based on the Gestalt approach were derived from *Bloom (2019) Gestalt Play Therapy*. For the other group, the intervention content focusing on impulsivity, adjustment, and executive functioning was selected from a practical guide for the treatment of behavioral problems in children.

Table 1. Bloom (2019) Gestalt Play Therapy Training Program

Session	Objectives	Activities and Exercises
1	Establishing rapport with the therapist and with one another	Happy introductions; introducing oneself through gestures and imitation; finding similarities; drawing; and giving gifts to one another
2	Identifying emotions, developing social skills, and increasing awareness of bodily responses	Emotion card game; Zip-Zap game; exaggeration exercise; and sharing a personal memory using 12 emotion stickers
3	Releasing anger and impulsivity; developing social skills	Drawing a disliked person on a balloon and expressing anger calmly; group "Make Me Laugh" game
4	Strengthening empathy	Emotion dice game (talking about an emotion or memory); group drawing on an A3 sheet of paper
5	Projecting thoughts; controlling anger and emotions	Crowning game (expressing wishes); emotion balloon activity (inflating the balloon, releasing it suddenly, and then releasing it calmly)

6	Recognizing the layers of emotions; developing social skills and friendship-building skills	Peeling an onion and creating an artwork representing the layers of emotions; musical chairs game in groups of five
7	Externalizing introjections	Empty-chair technique (playing the role of the person who is upset and then taking on the role of the other person)
8	Focusing on the expression of emotions and feelings	Magic wand technique (expressing wishes); emotional tone-of-voice game using emotion cards
9	Teaching appropriate behavior; externalizing internal pressures	Role-playing (drama and pantomime); bad-dream drawing technique followed by destroying the paper (tearing, crumpling, scribbling on, and throwing it away)
10	Strengthening empathy and friendship; administering the posttest	Performing preferred activities (Zip-Zap and musical chairs); giving a reward to both groups

- Data Analysis

To examine the homogeneity of demographic characteristics between the two study groups, the chi-square test and independent-samples *t*-test were used. To test the research hypotheses, univariate and multivariate analysis of covariance (ANCOVA and MANCOVA) were employed. Prior to conducting the covariance analyses, their underlying assumptions were examined. Given that the data were normally distributed, parametric tests were used to evaluate the research hypotheses. The hypotheses were tested using multivariate analysis of covariance (MANCOVA) and its univariate counterpart, analysis of covariance (ANCOVA). All statistical analyses were performed using SPSS version 27.

Findings

A total of 30 students with autism spectrum disorder participated in the study. In the experimental group, 6 participants were 5 years old and 9 were 6 years old. In the control group, 7 participants were 5 years old and 8 were 6 years old. The mean age and standard deviation of the participants in the experimental group were 5.60 ± 0.57 years, respectively, whereas the mean age and standard deviation of the participants in the control group were 5.53 ± 0.51 years, respectively. In terms of gender, the experimental group consisted of 11 boys and 4 girls, while the control group consisted of 9 boys and 6 girls.

For the inferential analysis of the data, univariate analysis of covariance was employed. Before conducting the analysis, its assumptions were examined, including homogeneity of variances using Levene's test, normality of the data using the Kolmogorov–Smirnov test, and homogeneity of regression slopes. The results indicated that, given the nonsignificant Levene's test results for impulsivity ($p = 0.140$), adjustment ($p = 0.104$), and executive functioning ($p = 0.758$), the assumption of homogeneity of variances was satisfied. The results of the Kolmogorov–Smirnov test also indicated that the assumption of normality was met. Furthermore, the observed F values for impulsivity ($F = 11.609$, $p = 0.115$), adjustment ($F = 1.780$, $p = 0.995$), and executive functioning ($F = 1.725$, $p = 0.098$) indicated that the assumption of homogeneity of regression slopes was also satisfied.

Therefore, the use of univariate analysis of covariance was justified.

- Main Hypothesis

Gestalt play therapy has a significant effect on impulsivity, adjustment, and executive functioning in preschool children with autism spectrum disorder.

Table 2. Results of the Analysis of Covariance for the Main Hypothesis

Variable	Source	Sum of Squares	df	Mean Square	*F*	*p*	Eta Squared (η^2)	Observed Power
Impulsivity	Constant	392.79	1	392.79	96.235	0.001	0.749	1.000
	Error	120.04	25	4.082	—	—	—	—
Adjustment	Constant	133.33	1	133.33	93.994	0.001	0.790	1.000
	Error	88.12	25	3.525	—	—	—	—
Executive Functioning	Constant	375.89	1	375.89	33.285	0.001	0.561	1.000
	Error	282.33	25	11.293	—	—	—	—

The results presented in Table 2 indicate that the significance levels for all three variables impulsivity, adjustment, and executive functioning were below 0.05. Therefore, it can be concluded, with a 99% confidence level, that Gestalt play therapy training has a statistically significant effect on impulsivity, adjustment, and executive functioning in children. Furthermore, the eta-squared coefficients indicate that the play therapy intervention accounted for 74.9% of the variance in impulsivity, 79.0% of the variance in adjustment, and 56.1% of the variance in executive functioning among preschool children with autism spectrum disorder.

- Hypothesis 1

Gestalt play therapy has a significant effect on executive functioning in preschool children with autism spectrum disorder.

Prior to analyzing the data, Levene's test was used to examine the homogeneity of variances of the study variables. Table 3 presents the results of Levene's test for the homogeneity of variances across the dependent variables of the study.

Table 3. Results of the Analysis of Covariance for Hypothesis 1

Variable	Source	Sum of Squares	df	Mean Square	*F*	*p*	Eta Squared (η^2)	Observed Power
Executive Functioning	Constant	502.725	1	502.725	132.459	0.001	0.831	1.000
	Error	102.474	27	3.795	—	—	—	—

The results presented in Table 3 show that the significance level was $p = 0.001$, which is below 0.05. Therefore, it can be concluded, with a 99% confidence level, that the Gestalt play therapy training program has a statistically significant effect on the executive functioning of children. Furthermore, the eta-squared coefficient indicates that the play therapy intervention explains 83.1% of the variance in executive functioning among

preschool children with autism spectrum disorder.

- Hypothesis 2

Gestalt play therapy has a significant effect on impulsivity in preschool children with autism spectrum disorder.

Table 4. Results of the Analysis of Covariance for Hypothesis 2

Variable	Source	Sum of Squares	df	Mean Square	*F*	*p*	Eta Squared (η^2)	Observed Power
Non-Planning Impulsivity	Constant	107.701	1	107.701	18.925	0.001	0.412	0.987
	Error	153.657	27	5.691	—	—	—	—
Motor Impulsivity	Constant	14.856	1	14.856	2.009	0.168	0.069	0.877
	Error	199.631	27	7.394	—	—	—	—
Cognitive Impulsivity	Constant	38.690	1	38.690	24.664	0.001	0.497	0.999
	Error	39.178	27	1.451	—	—	—	—

The results presented in Table 4 indicate that the significance levels for two dimensions non-planning impulsivity and cognitive impulsivity were below 0.05. Therefore, it can be concluded, with a 99% confidence level, that Gestalt play therapy training has a statistically significant effect on impulsivity in children. Furthermore, the eta-squared coefficients indicate that the play therapy intervention accounted for 41.2% of the variance in non-planning impulsivity and 49.7% of the variance in cognitive impulsivity among preschool children with autism spectrum disorder.

- Hypothesis 3

Gestalt play therapy has a significant effect on adjustment in preschool children with autism spectrum disorder.

Table 5. Results of the Analysis of Covariance for Hypothesis 3

Variable	Source	Sum of Squares	df	Mean Square	*F*	*p*	Eta Squared (η^2)	Observed Power
Experience	Constant	63.678	1	63.678	17.574	0.001	0.394	0.981
	Error	97.832	27	3.623	—	—	—	—
Insight	Constant	24.133	1	24.133	7.700	0.010	0.222	0.763
	Error	38.618	27	3.134	—	—	—	—
Social Integration	Constant	38.248	1	38.248	7.662	0.010	0.221	0.761
	Error	134.773	27	4.992	—	—	—	—

The results presented in Table 5 indicate that all significance levels were below 0.05. Therefore, it can be concluded, with a 99% confidence level, that Gestalt play therapy training has a statistically significant effect on adjustment in children. Furthermore, the eta-squared coefficients indicate that the play therapy intervention accounted for 39.4% of the variance in experience, 22.2% of the variance in insight, and 22.1% of the variance in social integration among preschool children with autism spectrum disorder.

Conclusion

The present study was conducted to examine the effectiveness of Gestalt play therapy on impulsivity, adjustment, and executive functioning in preschool children with autism spectrum disorder in Bukan. The findings demonstrated that Gestalt play therapy had a significant negative effect on impulsivity in preschool children with autism spectrum disorder. In other words, Gestalt play therapy was effective in improving two major components of impulsivity, namely non-planning impulsivity and cognitive impulsivity. The reduction in these two components suggests that, following the play therapy intervention, the children developed a greater capacity to control their impulses, plan their actions, and think before acting. This considerable improvement may be attributed to the emphasis of Gestalt play therapy on awareness of bodily sensations, emotions, and needs, as well as the enhancement of children's communication and problem-solving skills. These findings are consistent with the results reported by *Emamiyan and Taher (2021)*, *Hosseinzadeh (2021)*, and *Yahyavizanjani et al. (2020)*.

Emamiyan and Taher (2021) demonstrated that both Floortime play therapy and neurofeedback therapy were effective in reducing impulsivity in children with attention-deficit/hyperactivity disorder (ADHD). Similarly, *Hosseinzadeh (2021)* concluded that cognitive play therapy reduced symptoms of attention deficit/hyperactivity disorder and impulsivity and recommended this approach to therapists and psychology professionals. *Yahyavizanjani et al. (2020)* also found that play therapy, through enhancing concentration, was effective in increasing attention span and reducing impulsivity among students with attention-deficit/hyperactivity disorder.

These findings can be explained by the fact that play therapy provides an optimal opportunity to create a context in which children can acquire appropriate experiences with the assistance of a therapist, thereby strengthening prosocial behavioral and emotional skills. Participation in a play environment and interaction with professionals in this field enable children to acquire, through play, skills that they may be unable to learn in other environments, thereby reducing the likelihood of inappropriate and impulsive behaviors. The implementation of Gestalt play therapy with children with autism, by providing opportunities for thinking and sustained concentration on play activities to achieve effective solutions and successful outcomes, can gradually help calm children and guide them toward greater mental focus. Play can also be considered a useful means of teaching behavioral skills related to impulsivity, such as turn-taking and patience. Play strengthens children's muscular and sensory-motor development and thereby has a substantial influence on their cognitive abilities. Through play, children's attention to tasks and their capacity for reflective behavior before acting are enhanced. Furthermore, because the present study specifically focused on Gestalt play therapy, it can be argued that, through increased accuracy of visual and auditory perception, children learned to pay greater attention before taking action. As their

attentional accuracy increased, their capacity for self-control and acceptance of responsibility for their actions also improved, consequently resulting in a significant reduction in impulsive behaviors.

The findings also demonstrated that Gestalt play therapy had a significant positive effect on adjustment in preschool children with autism spectrum disorder. In other words, these findings suggest that Gestalt play therapy, by creating a safe and supportive environment, helps children better recognize and express their emotions. Moreover, by focusing on sensory and bodily experiences, this therapeutic approach helps children strengthen their social skills and establish more effective interactions with others. These findings are consistent with those reported by *Ahmari et al. (2024)* and *Kaboodi (2022)*.

In this regard, *Ahmari et al. (2024)* demonstrated that parent–child relationship-based play therapy was effective in improving social adjustment and social skills among students with intellectual and visual disabilities. Similarly, *Kaboodi (2022)* found that group play activities resulted in a 35% increase in social adjustment and a 38% reduction in feelings of loneliness, although no significant difference was observed in anger-control scores.

These findings can be explained by the fact that play therapy provides children with an opportunity to express their emotions, thoughts, and contradictory or opposing beliefs. When children are placed in a room filled with various toys and are free to choose and play with whichever toys they prefer, play therapy provides an effective context for role-playing and exploring thoughts and emotions. It gives clients an opportunity to express their feelings, concerns, and creative ideas and helps them articulate issues that, for various reasons, they may be inhibited from expressing in ordinary situations (*Hosseinzadeh, 2021*). In addition, social adjustment, which refers to an individual's adaptation to their environment, requires self-regulation and is highly correlated with social competencies. It provides individuals with the necessary means to achieve goals arising from personal interests or social expectations (*Kaboodi, 2022*). In this context, Gestalt play therapy, through enjoyable activities, provides opportunities for improving the emotional relationships of children with autism. Developing such an orientation in children can promote self-regulation and, ultimately, strengthen their adjustment.

The findings further demonstrated that Gestalt play therapy had a significant positive effect on executive functioning in preschool children with autism spectrum disorder. By creating a play-oriented and experiential environment, Gestalt play therapy provides children with autism with opportunities to develop their social, emotional, and cognitive skills within a safe and supportive setting. Through structured and purposeful play activities, this therapeutic approach helps children develop greater awareness of their emotions and needs, learn problem-solving skills, and establish more effective social interactions. Furthermore, by emphasizing the *here and now*, Gestalt play therapy helps

children remain present in the moment and focus their attention on ongoing activities, thereby contributing substantially to improvements in attention, concentration, and impulse control. These findings are consistent with those reported by *Emamiyan and Taher (2021)*, *Ghasemi Hamzeh Kala (2023)* and *Farsham et al. (2023)*.

In this regard, *Emamiyan and Taher (2021)* demonstrated that sensory integration-based play therapy had a significant effect on executive functioning and social adjustment in children with attention-deficit/hyperactivity disorder (ADHD). Similarly, *Ghasemi Hamzeh Kala (2023)* found that play therapy contributed to the improvement of executive functions. In the same context, *Farsham et al. (2023)* reported that such interventions could be used for children with brain tumors, although rehabilitation therapy integrated with play therapy was more appropriate for improving the cognitive skills of children with brain tumors.

These findings can be explained by the fact that active play involves the use of the child's entire musculature, allowing the child to expend energy through enjoyable and relatively unstructured activities. Because active play does not involve a rigid structure or organization that places pressure on children with autism, and because most children engage in these activities during their free time without external pressure, such play can promote creativity, skills, social interactions, and motivation among children. Moreover, these types of activities require children to engage their entire musculature through activities involving cardiovascular endurance over relatively extended periods, which may influence working memory and selective attention. This is because, in conjunction with aerobic exercise, such activities can contribute to the generation of new cells in the olfactory bulb and dentate gyrus, as well as increases in the volume of the prefrontal region and the anterior white and gray matter of the brain, areas that are typically associated with memory.

Consequently, Gestalt play therapy transforms a relatively passive learning experience into an active activity. This type of exercise provides children with autism with a sense of immersion, enabling them to benefit substantially from instruction and learning. By immersing children in the learning experience, these exercises actively engage them with educational materials, thereby increasing and improving their concentration and attention while reducing impulsivity and hyperactivity. Engagement and the intrinsic appeal of these activities are also important components in enhancing concentration, attention, and memory. In other words, by providing opportunities for experiential and interactive learning, Gestalt play therapy helps children with autism acquire the skills required for everyday life in a natural and enjoyable manner. Therefore, this therapeutic approach can be considered an effective tool for improving the quality of life of these children and increasing their independence.

The present study faced several limitations, including limited generalizability of the findings to other children; the possibility of habituation and the short-term

attenuation of the effects of the play therapy sessions; and the inability to control certain potentially influential factors, such as socioeconomic status, family climate, and intelligence quotient.

Based on the findings of the study, Gestalt play therapy is recommended as an effective approach for reducing impulsivity and improving adjustment and executive functioning in preschool children with autism spectrum disorder. Child specialists can use this approach alongside other therapeutic interventions to improve the quality of life and enhance the social functioning of these children. In addition, training parents and educators in Gestalt play therapy can enable them to strengthen children's self-regulation skills, reduce impulsivity, and improve their social and communication skills in home and school environments. Furthermore, it is recommended that educational and therapeutic centers serving children with autism design and implement regular weekly or daily Gestalt play therapy programs in collaboration with child psychologists and special education professionals. This approach can also be integrated with other therapeutic approaches, such as cognitive behavioral therapy and speech therapy, to enhance overall treatment effectiveness.

Among the research recommendations arising from this study is the need to examine the effects of Gestalt play therapy on reducing impulsivity and improving executive functions in preschool children with autism spectrum disorder. Future research should also investigate the effectiveness of Gestalt play therapy in enhancing social adjustment and reducing autism symptoms among preschool children. In addition, comparing the effects of Gestalt play therapy and structured play therapy on improving social skills and reducing impulsivity in children with autism could provide a valuable direction for future research. Modeling the relationships among impulsivity, adjustment, and executive functions in children with autism following Gestalt play therapy is another potential avenue for future research. Finally, investigating the role of parents in enhancing the effectiveness of Gestalt play therapy for children with autism is recommended.

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