

Extended Abstract



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Research paper

The effect of the Participatory games training program on stereotyped behaviors of children with autism spectrum disorder

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Introduction

Autism Spectrum Disorder (ASD) is a pervasive developmental disorder, and its specific symptoms can typically be distinguished from normal development between 18 to 24 months of age (Zeidan et al., 2022). Stereotyped behaviors are the primary challenge for children with ASD (Katimani et al., 2025). These behaviors involve repetitive, unusual, or undesirable activities (Murphy et al., 2009). Although some experts believe that children with autism participate in and enjoy certain social games, due to deficits in group interactions and cooperation, most tend to abandon play or become involved in conflicts with their peers (Johnson and Meyers, 2007). Among these, participatory games—where the goal is to enjoy the activity and the outcome is based on a win-win principle—play a special role. In such games, individual competition is absent, and values such as cooperation, consultation, interaction, coordination, sharing, helping others, and similar social skills are taught. Given this background, the purpose of the present study is to examine the effect of a participatory games training program on stereotypical behaviors in children with ASD.

Method

The research method was a semi-experimental pre-test-post-test design with a control group. The statistical population included all male children aged 8 to 12 years with ASD attending medical, rehabilitation, and educational centers in Tehran in 2018. From this population, 20 male children with ASD were selected through convenience sampling and randomly assigned to an experimental group (10 participants) and a control group (10 participants). Inclusion criteria were a definitive diagnosis of ASD documented in psychiatric records, male gender, and age between 8 and 12 years. Exclusion criteria included prior participation in similar training sessions during the study period and absence from two consecutive training sessions. The research instrument was the Revised Stereotyped Behavior Scale. The participatory games intervention was delivered in groups by two trained play therapy instructors across 10 sessions, each lasting 45 minutes, over two months at the Autism Research and Treatment Center. Data were analyzed using multivariate analysis of covariance (MANCOVA).

Results

The significance levels for all four multivariate test statistics—Pillai's Trace, Wilks' Lambda, Hotelling's Trace, and Roy's Largest Root—were less than 0.05 ($p < 0.05$). The results indicate a significant difference in stereotyped behaviors between the experimental and control groups at post-test. The eta square shows that 79% of the variance in the linear combination of behavioral stereotypes is due to cooperative games. Accordingly, it can be said that the cooperative games educational package was effective in reducing children's stereotypical behaviors. Additionally, given that the mean scores of the experimental group at post-test were lower, it can be concluded that the participatory games training program was effective in reducing stereotyped behaviors in children with ASD.

Discussion and Conclusion

The present study aimed to determine the effect of a participatory games training program on stereotyped behaviors in children with ASD. The findings indicated that participatory games reduced stereotyped behaviors in children with ASD. Overall, the results highlight the importance of using participatory games to decrease stereotyped behaviors. Among the limitations of this study were that it was conducted only on boys and involved a small sample size; therefore, caution is advised when generalizing the findings. It is recommended that future research consider the gender of children with ASD and include larger sample sizes. Furthermore, it is suggested that participatory games training programs be implemented continuously in schools and special centers for children with ASD. Finally, teachers, instructors, and therapists working with children with ASD should receive proper training on how to effectively teach participatory games to these children.

Ethical Considerations

The ethical considerations of the research included informing the participants about the study, obtaining their full consent to participate, ensuring the confidentiality of the participants' private information, and not charging any fees from the participants.

Financial Support

This study did not receive any financial support.

Authors, Contributions

This article is derived from the first author's master's thesis and was written under the supervision of the second author and with the consultation of the third author.

Conflict of Interest

The authors declare that they have no conflicts of interest to disclose.

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