

# Group Play Therapy on Behavioral Disorders in Preschool Children

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**ABSTRACT: Background:** Behavioral disorders create many personal and social problems. Children with such disorders encounter families and the community with various issues and difficulties, and make them vulnerable to psychosocial disorders in their adolescence and even long into their adulthood. The purpose of this study was to investigate the effect of play therapy on reducing the behavioral problems of preschool boys. **Method:** For this purpose, 20 children aged 3 to 6 years with behavioral problems were selected through available sampling, and were next randomly divided into two 10-people groups of experimental and control groups. The tool used in this research was Rutter's Child Behavioral Questionnaire (Form B). Participants were asked to participate in 12 play therapy sessions. Data were analyzed by covariance test. **Results:** The findings revealed that the mean scores of behavioral problems in the experimental group had a significant decrease in the post-test stage compared to the control group ( $P < 0.05$ ). The findings of the study indicate the effectiveness of group play therapy on reducing the behavioral complications of preschool children. This decrease was evident in both the total score and the subscales of children's Rutter behavioral questionnaire (aggression and hyperactivity, anxiety and depression, social incompatibility, antisocial behaviors, attention deficit). **Conclusion:** Given the reduction of behavioral problems in preschool children, the role of group plays as one of the strategies for treatment of behavioral disorders in children should be considered.

**Keywords:** Behavioral Problems Group Play Therapy.

## INTRODUCTION

Childhood is one of the most important stages of life in which one's personality is established and formed. Most post-childhood disorders are owing to the lack of attention to the sensitive and vulnerable period of childhood and the lack of proper guidance in the evolving course. This neglect leads to a lack of reconciliation and adaptation to the environment and the occurrence of deviations in various dimensions within the child. A proper environment is of paramount importance for the children to undergo natural developmental stages and to have a strong and stable personality (1, 2). In this hierarchy of growth, environment, family, school, and community each have a distinct role, yet the most of which are the roles of the school and the family environment, i.e. the manner by which parents and educators communicate with the children (3, 4).

The ever-increasing prevalence of mental disorders in children during recent years has caused enormous concern regarding mental health and its impact on children's growth and performance. Consequently, experts emphasize the significance of timely evaluation and treatment of psychological disorders (5).

Behavioral and mental disorders in children cause many problems for teachers, families and children themselves and is the basis of many social problems. The World Health Organization (WHO) recognizes diseases, disorders and mental problems in children and adolescents as a world-wide concern. Researchers reported by WHO shows that 23 percent of children and adolescents suffer from mental illness, which include depression, anxiety, and difficulty in communication and social relationships with others (6).

Behavioral problems refer to individual behaviors that, barring low IQ, psychological and behavioral balance deviated from that of the general public, which has varying severity, and persistence in different times and places, to

the extent that the academic performance of the person is negatively affected. Such children are often rejected and shunted aside directly or indirectly by the people immediately around them (7), and are often complained at in their schools or kindergartens (8).

Various studies demonstrate that roughly 30 percent of all children and adolescents experience a recognizable psychiatric disorder during their lifetime, yet 70 to 80 percent of them do not receive the fitting intervention. Such disorders lead to functional impairment in a variety of fields, including familial relations and education, which ultimately leads to academic failure or delinquent behaviors (9).

In Iran, it is estimated that the prevalence of behavioral disorders in children to be higher than previously expected. In a study by Abolqasemi et al. (10) on a sample of 5136 male and female students, it was revealed that 2% of elementary students were afflicted with emotional disorders. This study also showed that 3% of students had conduct disorder, 2% had emotional disorders, 1% had defiant disorder, 3.1% had attention deficit disorder, 3.3% had hyperactivity disorder, 3.4% had attention deficit hyperactivity disorder (ADHD) and 2.6 percent had Oppositional defiant disorder. Moreover, this study showed that boys are more vulnerable to disorders of conduct, attention deficit, hyperactivity and ADHD than girls.

Employing proper interventions that can help resolve children's behavioral problems can prevent the adverse outcomes of the aforementioned disorders. Reviewing pediatric behavioral therapy methods suggests that play therapy, particularly with a child-centered approach, can be an effective intervention in the treatment of children's behavioral issues, since using language as a tool for communicating is plagued with various limitations. Consequently, many experts and counselors use play therapy instead of verbal counseling.

Playing games provides a solid ground for therapeutic diagnosis and treatment. Playing games is more associated to internal motives than the external ones, reflecting their inner status. Playing game causes the children to express their emotions and external interactions, as well as to develop the tendencies, communication skills, and increased happiness and adaptability of the child within the environment (11).

The researchers have come to agree that an undirected age-based play therapy can fulfill the needs of children in their age group and has also a beneficial effect on their behavior, adaptability and social skills (12). Moreover, the effect of the play therapy on reducing the psychological problems of children has been confirmed (13).

The findings of various studies have attested to the effectiveness of play therapy in decreasing delinquent behaviors within children. Play therapy based on group activity has reduced behavioral problems in male students (14), decreased ADHD symptoms, coping disorder and behavioral disorders in boys with ADHD symptoms (15). The results of the study, Glassfar et al. (16), showed that cognitive social skills training and cognitive social play therapy are effective in the development of social skills and social acceptability of children with behavioral disorders and can be used in clinical interventions. Also, the review of meta-analysis shows that child-centered therapy games in elementary schools are internalized and internalized behavioral problems, self-efficacy and academic performance (17). On the other hand, the results of the Barnes study (19) indicated that social skills training for children with ADHD has a long-term effect of 12 months.

It is imperative that, based on the scientific findings of previous researches, proper education is presented to the managers, educators and parents of children regarding effective and constructive collaborative and group games to inform them about the therapeutic effects of these interventions on some of the most important and common behavioral problems within children. Therefore, performing psychological interventions, including play therapy, is of utmost importance and effective in preventing the negative effects that these types of disorders in extend well into adulthood. given the impairment that these disorders bring about and the related behavioral issues, as well as the lack of research on the effect of play therapy on behavioral problems, this study seeks to contribute to the knowledge in this field. Therefore, the purpose of this study is to examine the effectiveness of group play therapy on reducing the behavioral problems of boys aged 3 to 6 in kindergartens of Kerman.

## **MATERIALS AND METHODS**

This study is an interventional research with control and intervention groups, and pre- and post-tests. In this study, play therapy was measured as independent variable and behavioral problems including anxiety, aggression, hyperactivity and attention deficit, social incompatibility and antisocial behaviors were measured as dependent variables. The statistical population of the study included all active kindergartens under the welfare organization of Kerman city which have registered boys aged 3 to 6 years old in Kerman for the 2011-12 academic year. A kindergarten was randomly selected, and then 20 were diagnosed by the clinical psychologist on the basis of diagnostic criteria and interviewing the accompanying parent and the child himself as having behavioral issues. The criteria for entering the study are: being aged between 3 and 6 years, exhibiting diagnostic symptoms for the disorder, being in a healthy physical condition, not being hospitalized for physical or psychological reasons, the consent of the child and their parents regarding their participation in the research and not undergoing interventions outside the

program. Boys who met the criteria were assigned boys in kindergarten control the variables of children's intelligence and their last degree, staffing and income level of their parents by random method in two groups of 10 experimental and control groups according to the age classification (3, 3-4 years old, 3 5-4 years old and 4 people aged 6-5 years old) were replaced and matched.

The data collection tool used in this research was the Children's Rutter Behavioral Questionnaire (Form B). The questionnaire was first formed by Michael Rutter in 1967 in order to provide a consistent and reliable tool for identifying children's behavioral problems (19). Instructor's form (Form B) is consisted of 26 simple phrases completed by the instructor, and is arguably one of the most common questionnaires for identifying children's mental health problems. The instructor will score the questionnaire, taking into account the child's behavior during the past three weeks of observation. Score "0" implies that the described behavior is lacking in the child. Score "1" implies that described behavior is only partially applicable to this child. Score "2" reflects that the behavior described is wholly applicable to the child. The questionnaire consists of five subscales of aggression and hyperactivity (items 1, 2, 3, 9, 14, 19, 23), anxiety and depression (items 6, 7, 8, 20, 21, 22, 24, 26, 28), social incompatibility (items 5, 13, 14, 29, 30), anti-social behaviors (items 12, 15, 16, 20, 25, 27, 28) and attention deficit disorder (items 1, 2, 14, 23, 30).

In the original research by Rutter (19), the concord between the questionnaire and the diagnosis of the pediatric psychiatrist was estimated to be 76.7%. Ramzpour (20) reported a reliability of 72% for the test, which was calculated through a two-week re-test.

Following the determination of the sample, the researcher asked parents for their cooperation regarding attending the play therapy sessions, who expressed their consent with the participation of their children by signing a special letter of consent. Afterwards, parents were informed that their children will be attending 12 one-hour sessions. Next, the children with symptoms were randomly assigned to intervention and control groups, subscales of anxiety, aggression, hyperactivity and attention deficit disorders, social incompatibility and antisocial behaviors from the children's Rutter's behavioral questionnaire were filled by the instructor as pre-test. The children of the intervention group participated in 12 therapy sessions. After the completion of the training sessions, subscales were completed by the instructor during the post-test period. Finally, the difference between the post-test and the pre-test scores was analyzed using covariance analysis. It should be noted that after performing the post-test, three play therapy session were conducted with the children from control group due to ethical reasons. The contents of the training sessions (21) are outlined in Table 1.

Table 1. The outline of therapy sessions

Session	Themes	Content of therapy session
1	Introduction and encouraging cooperation	Familiarizing children with each other, introducing the counselor to children, devising the rules of group meetings, encouraging children to communicate with each other
2-3	Interpersonal and group communication	Strengthening interpersonal communication skills, strengthening the relationship between counseling and children, increasing participation and collaboration in the group
4-6	Self-awareness and empathy skills	Introducing body parts, recognizing the features of appearance, paying attention to their own unique and different human beings with each other, increasing self-esteem, recognizing their own feelings and others, increasing empathy and mutual understanding
7-8	Establishing effective communication	Understanding positive and negative emotions of oneself and others, improving empathy and mutual understanding, increasing social adaptability and accepting others, developing creativity, increasing social adaptability and cooperation
9-10	Dealing with negative emotions	Understanding and expressing negative emotions, improving the skill of expressing feelings, recognizing negative feelings and controlling them
11	Decision-making and problem-solving skills	Increasing self-esteem, increasing sense of responsibility, strengthening decision-making power
12	Conclusion	Examining the subjects' progress, reviewing the skills learned in the previous sessions, and generalizing the lessons

**Data**

In this study, 20 preschool children with behavioral problems were selected and randomly assigned to two test and control groups. Descriptive findings showed that 6 (30%) patients were 3-4 years old, while 6 (30%) were age 5-4 years old and 8 (40%) were 5-5 years old, all of which were males.

Table 2 exhibits the mean and standard deviation of the variables studied in the pre-test and post-test of the two groups, as well as the results of the Levene's variance homogeneity test between the dependent variables of the research. The results from table 2 indicate that Levene test was not significant for the variables studied, and thus the variance of the two groups was found to be homogeneous, and the hypothesis of the homogeneity of variances was confirmed.

Table 2. Descriptive variables in pre-test and post-test

Variables	group	Pretest			Posttest			Levin test	
		N	M	SD	N	M	SD	f	P level
Aggression &Hyperactivity	experimental	10	6/1	3/47	10	1/7	1/7	1/32	0/26
	control	10	7/4	2/95	10	5/3	2/31		
Anxiety & Depression	experimental	10	5/2	2/74	10	1/1	0/84	0/86	0/36
	control	10	4/6	2/98	10	2/7	2/83		
unsociability	experimental	10	5/7	1/76	10	1/6	0/84	0/53	0/47
	control	10	6/7	2/16	10	4/7	1/41		
Antisocial behaviors	experimental	10	1/8	1/61	10	0	0	3/84	0/06
	control	10	2/6	1/5	10	1/6	1/34		
Attention deficit	experimental	10	6/4	2/74	10	2/6	1/95	0/002	0/96
	control	10	6/6	2/22	10	5/1	2/02		
Behavioral problems	experimental	10	19/7	5/77	10	4/9	2/8	1/4	0/25
	control	10	21/8	6/67	10	14/7	5/63		

The homogeneity of regression slopes is another fundamental assumption in the covariance analysis, for which the effects within the groups were tested. Summary and the final results are presented in Table 3.

Table 3. Results of pre-test effects on the variables of the study

Pretest * groups	F-Value	P-value
Aggression & Hyperactivity	0/84	0/37
Anxiety & Depression	5/84	0/28
unsociability	1/43	0/24
Antisocial behaviors	35/18	0/1
Attention deficit	0/37	0/54
Behavioral problems	3/76	0/07

According to the results of Table 3, the interactive effect of pre-test and groups were not significant in any of the variables studied ( $P > 0.05$ ). given the acquired result, it can be concluded that the mutual vectors were not significant and the regression coefficients of the groups were therefore equal. The results of MANCOVA test for investigating the effect of experimental intervention on post-test scores with pre-test controls are presented in Table 4.

Table 4. Results of one-way covariance analysis in the context of MANCOVA for post-test comparison

Effect	Depended variable	Total of square	df	Mean of square	F	P	$\eta$
Group	Aggression & Hyperactivity	41/35	1	41/35	25/18	0/001	0/59
	Anxiety & Depression	17/42	1	17/42	6/27	0/02	0/2
	unsociability	35/54	1	35/54	36/92	0/001	0/68
	Antisocial Behaviors	7/89	1	7/89	13/05	0/002	0/43
	Attention deficit	28/21	1	28/21	16/48	0/001	0/49
	Behavioral problems	353/52	1	353/52	57/62	0/001	0/77

To determine the difference point, the one-way covariance analysis was performed for dependent variables. The results of the analysis revealed that there is a significant difference between the two groups in the difference between the pretest and posttest scores for subscales of behavioral problems.

### RESULTS AND DISCUSSION

The purpose of this study was to determine the effectiveness of group play therapy on reducing the behavioral difficulties of preschool children. As the results of the study indicated, group play therapy is effective in reducing behavioral problems in children, to the extent that the mean of general score for behavioral problems in indexes (aggression and hyperactivity, anxiety and depression, social incompatibility, anti-social behaviors and attention deficit) have been reduced following the corresponding medical interventions, according to the measurements of the questionnaire. These results are consistent with the findings of cognitive-behavioral interventions from other researchers and therapists regarding children's behavioral issues. In a study by Gallagher (22), group play therapy was found to be effective in treating anxiety and depression.

Group play therapy is specifically intended for preschoolers and early primary students, with emphasis on child participation in treatment and by focusing on issues such as control, mastery and acceptance of responsibility regarding one's behavioral changes. It is alleged that adaptive behavior is the result of interaction between thoughts, feelings and behavior of the individual. Playing games is beneficial for children as it provides a background for diagnosis and treatment. Playing games is more associated to internal motives than the external ones, reflecting their inner status. Playing game causes the children to express their emotions and external interactions, as well as

to develop the tendencies, communication skills, and increased happiness and adaptability of the child within the environment (11).

This study finally revealed the significant effect of play therapy on reducing the behavioral problems of children. This is similar to the findings of previous researchers regarding the effect of play therapy on reducing aggression (23, 24), communication problems (23), behavioral issues (25, 26), reduction of symptoms of hyperactivity and oppositional defiant disorder (15), and the development of social skills (16). Due to their rather weak abstract thinking, children are unable to express their feelings and emotions, and the most prevalent technique that allows children to present issues that they are not otherwise able to express in their daily environment is play therapy.

Among the limitations of this research is the restriction of samples to boys aged 3 to 6 years with symptoms of behavioral problems in Kerman; hence, the results should be proceeded with caution. The use of high-volume samples for both genders is thus recommended. Another limitation of the research was lack of the follow-up period; therefore, this limitation should be dealt with in prospective researches.

### **Conclusion**

The results indicated the effectiveness of group play therapy on the reduction of symptoms of behavioral problems in boys aged 3 to 6 years with a history of behavioral problems. Based on these results, it is suggested that child psychologists and counselors who are working in the reduction of children's psychological problems to use play therapy techniques to reduce the psychological difficulties of children with previous symptoms of behavioral problems.

### **Acknowledgements**

The authors would hereby like to offer their gratitude to the children and their parents who participated in this study.

### **Conflict of interest**

There authors claim no conflicts of interest for this article.

## **REFERENCES**

- 1- DE Genna, Natacha M, Dale M et al. From Risky Behavior to Health Risk:Continuity Across Two Generations. J of Developm Behavioral Pe .2006; 27(4): 297-309.
- 2- Dempster R. Wildman, Beth G. Langkamp, Diane. Pediatrician identification of Psychosocial Priblems: Role of Child Behavior, Parent Affect, Parenting Behavior,Parenting Satisfaction And Efficacy. 2006; 27(5): 435.
- 3- Danesh Nia J. Prevalence of relationship some of health factors with enuresis among the school-age children (Aged 7-12 years) in 9, 10 and 17 regions in the Tehran city. Rahavard danesh, Journal of Arak university of medical sciences. 2001; 14(4): 10-15.
- 4- Moein A, Moghadam Nia M. Prevalence of nailbiting in primary schools of Tehran. Daneshvar, sxientific-research Journal of Shahed university. 2001; 34(8): 59-64.
- 5- Mohammad loo H, ghorbaniyan E, Khanbani M. Effectiveness of social- cognitive skills training on the Oppositional Defiant Disorder Symptom Reduction students .Journal of Applied Psychology. 2015; 9(3): 99-113.
- 6- Eriksson S. Children in play therapy: What Significance does this have for their parents perceived health? Thesis Dissertation in Public Health Science. Sweden: The University of Gavle;2014.
- 7- Khazaei T, Khazaei MM, Khazaei M. Prevalence of behavioral disorders among school children of Birjand. Journal of Birjand university of medical sciences. 2005; 23-22(12): 79-85.
- 8- Karami S. TheAssessment Bihavioral Disorders children. Journal of Zanjan university of medical sciences. 2000; 2(17): 34.
- 9- Evans, S.W. Mullett, E. Weist, M.D, & Franz K. Feasibility of the mind matters school mental health promotion program in American schools. Journal of Youth and Adolescenc. 2011; 34: 51-58.
- 10- Abolghasemi Abbas, Narimani Mohammad, Kiamartis Azar .The Prevalence and Consequence of Behavioral Disorders in Primary School Students and their Relationship with Academic Achievement. Journal of Science and Technology . 2005; 4(3).
- 11- Landreth GL Play therapy: The art of the relationship. New York, N.Y: Brunner .2011.
- 12- Baggerly J. The Effect of Child-Centered Group Play Therapy on Self-Concept, Depression, and Anxiety of Children Who Are Homeless. Int J Play Therapy. 2004; 13 (2): 31-51. <http://dx.doi.org/10.1037/h0088889>
- 13- Schottelkorb A, Ray D. ADHD Symptom Reduction in Elementary Students: A single- Case Effectiveness Design. Profes School Counsel. 2009; 13(1): 11-22. DOL:
- 14- Bagheri N, Shehni Yailagh M, Alipour C, Zarghar Y. Investigating effectiveness of school-based group activity play therapy on behavior problemsofthe elementary school male students in Shahrekord. J Shahrekord Univ Med Sci. 2017; 19(1): 148-157.

- 15- Ariapooran S, Eskandari A. Effectiveness of Group Play Therapy on Symptoms of Oppositional Defiant and Behavior Disorder in 6-9 Age Children with Attention Deficit/Hyperactivity Disorder. *Iranian Journal of Pediatric Nursing*. 2016, 2(4): 44-50.
- 16- Shishehfar S, Attarian F, Kargarbarzi H, Darvish naranjbon S, Mohammadlo H. Comparison of the effectiveness of teaching social cognitive skills with the cognitive behavioral game therapy on the social skills and social acceptance of children having behavioral disorders. *Journal of Exceptional Children*. 2018, 16 (4): 87-100.
- 17- Ray DC, Armstrong SA, Balkin RS, Jayne KM. Child-centered play therapy in the schools: Review and meta-analysis. *Psychol Schools*. 2015; 52(2): 107-23.
- 18- Barnes G, Wilkes-Gillan S, Bundy A, Cordier R. The social play, social skills and parent-child relationships of children with ADHD 12 months following a RCT of a play-based intervention. *Aust Occup Ther J*. 2017; 64(6):457-465. DOI: 10.1111/1440-1630.12417.
- 19- Rutter M. A Children's Behaviour Questionnaire for Completion by Teachers: Preliminary Findings. *Journal of Child Psychology and Psychiatry*. 1967;8(1):1-11.
- 20- Ramzpour ZM. [Standardization of Rutter behavior questionnaire (teacher form) (Persian)]. *University of Iran Medical Science*. 1995:123-124.
- 21- Sohrabi SN. Play Therapy techniques and its implication for emotional disturbances and behavioral disorders. *J Psychol Model Method*. 2011,1(4):45-63.
- 22- Gallagher HM, Brian AR, Michael SM. A brief group cognitive-behavioural intervention for social phobia in childhood. *Journal of anxiety disorders*. 2010; 18: 459-479.
- 23- Bratton SC, Ceballos PL, Sheely- Moore AI, Meany-Walen K, Pronchenko Y, Jones LD. Head Start Early Mental health intervention: Effect of child-centered play therapy on disruptive behaviors. *Int J Play Therap*. 2013; 22 (1): 28-42.
- 24- Kahrizi S, Momeni KM, Moradi A. the effectiveness of sand play therapy in reducing aggression/ hyperactivity in preschoolers. *Counsel cultur Psychotherap*. 2014; 5(18): 111- 135.
- 25- Malek M, Hasanzadeh R, Tirgari A. Effectiveness of group play therapy and cognitive behavioral techniques in reducing behavioral problems in children with reading disorder. *J learn Disabil*. 2013; 2(4): 140-153.
- 26- Sarihi N, Pournesaei GS, NikaKhlagh M. Effectiveness of group play therapy on behavior problems in preschool children. *J Analytic Cognitiv Psycho*. 2015; 6 (23): 35-41.