

# Research Paper: The Effectiveness of Group Play Therapy on Social Skills of Female Students With Intellectual Disability



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## ABSTRACT

**Purpose:** The present research was conducted to investigate the effectiveness of group play therapy on social skills of female students with intellectual disability.

**Methods:** The research method was quasi-experimental with pretest-posttest design and the control group. The study population included all female students with intellectual disability in Shiraz, Iran enrolled in academic year 2013-2014. Out of them, a sample of 30 students were selected through convenience sampling method and were randomly placed in the experiment and the control groups (each group 15 students). Pretest was taken from both groups and the experiment group received training for group play therapy in 10 sessions, while this training was not provided to the control group. At the end, a posttest was taken from both groups. For measuring social skills, the social skills scale (social skills rating system) was used. The collected data were analyzed using analysis of covariance by SPSS 21.

**Results:** According to the findings, the mean score for social skills and their subscales significantly increased in the experiment group ( $P < 0.01$ ).

**Conclusion:** The findings indicated the effectiveness of group play therapy on social skills of female students with intellectual disability. Therefore, we recommend that by designing and implementing group play therapy, social skills be improved in these students.

## Keywords:

Social skills, Group play therapy, Students, Intellectual disability

## 1. Introduction

Human beings are social creatures. Since birth, they live in the community, constantly interact with other human beings, and usually meet their needs through relationships with others. For this purpose, people always learn how to live in the society and to satisfy

their desires [1]. Social living requires social skills such as cooperation, assertion, self-control, and responsibility; these are observable learnt behaviors that enable a person to interact successfully with others and refrain from inappropriate behaviors [2].

Children with intellectual disability often show difficulty to properly interact with their peers and adults in various

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situations. They often lack social skills needed for positive and targeted interactions. This problem may cause these students to be less accepted by their peers [3]. In this regard, Matson and Hammer argued that recognizing social cues and also appropriate responses to specific situations are very difficult for people with intellectual disability, particularly those with deficits in their receptive and expressive language [4]. Also, Poormavedat and Bashash reported that the evolution of social cognitive development in children with intellectual disability is slow [5]. Children with intellectual disability have difficulty in social relations, i.e., they are not accepted by their usual peers. They are prone to suffer from behavioral, emotional, and educational disorders [6]. Therefore, preparation and implementation of educational and practical programs are essential for development of social skills in these people.

One of the methods for educating the children is play therapy. Play is a practical way for teaching skills to children. During play, children express their emotions and feelings and experience fearful and stressful situations that they cannot cope with in the real world. During play, children can express their needs, fears and inclinations, which was otherwise could not express them in real world because of their limited verbal abilities [7].

Play has been used to treat many disorders in children such as depression, fears, and behavioral problems that have their roots in anxiety, enuresis (bed-wetting), nail-biting, lying, quarrelsome attitude, and attention deficit. Play is known to increase the emotional adjustment, improve self-concept, increase self-control, and has been rated effective on many occasions [8]. Findings of Karcher and Lewis indicate that play therapy can reduce the intensity of anti-social and quarrelsome behaviors of children and increase their interpersonal skills. Through play, children can learn basic and social skills and evolve [9]. Play is a means for expression and communication of the child and in the opinion of some scholars, comprises a major part of the treatment process [9].

Play therapy is a psychological and social process in which, children through communication with each other in the play room learn many things about themselves. Group play therapy provides an opportunity for the therapist to help the children resolve their conflicts [10]. The general purpose of group play therapy intervention is to help children with participation, learning, responsibility, expressing emotions, showing respect, accepting self and others, to improve behaviors such as social skills, self-esteem, and to reduce depression [11]. Many studies have reported on the effect of play therapy. For example, Seneh and Salman have shown the effect of physical

activities and motion games on development of mental abilities of preschool female students [12]. Also, Ghanbari-e Hashemabadi and Saadat showed that the rhythmic movement of yoga improves social skills of primary schools children (boys) with intellectual disability [13]. Boulanger and Langevin have directly observed the effect of group play therapy on social skills deficits [14]. Also, Freeman investigated the effectiveness of dramatic games on self-concept and social skills and problem solving behavior of students of 9 to 10 years old with intellectual disability. The results were demonstrative of the significant effect of play on self-concept and social skills, however, regarding the problem solving behavior, this effectiveness was not seen as significant [15].

As it can be seen, the reviewed studies show that people with insufficient social skills, suffer from optimized and effective relationship with surrounding others. Also, the conducted studies have shown that children with intellectual disability have difficulty in social skills. Therefore, children with intellectual disability should be provided with opportunities and activities to actively engage and teach them social skills. In this regard, the studies conducted on social skills recommend play as an effective method for improvement and growth of social skills.

Based on the literature, the effectiveness of play therapy (especially group form) on social skills of students with intellectual disability has not yet been investigated in Iran. Furthermore, because of limited cultural and economic affordability of most families of these children and the costly educational and treatment methods such as medical, paramedical, and psychological services, these studies can provide considerable help for this group. In this regard, the study of group play therapy effect on children with intellectual disability as a simple educational and treatment method without side effects is required to fill the research gap in this field and also to introduce an inexpensive and convenient method for improving various skills of children with intellectual disability to experts, teachers, parents, and instructors. Accordingly, the present study was conducted to investigate the effectiveness of group play therapy on the social skills of female students with intellectual disability.

## 2. Materials and Methods

The method of this research is quasi-experimental with the pretest-posttest design and the control group.

### Study participants

The study population comprised all female students with intellectual disability in the primary schools of Shi-

Table 1. Group play therapy training program.

General Characteristics of the Program		Subject: Social Skills Training With the Method of Group Play Therapy Number of Sessions: 10 Time: 45 Minutes Number of Participants: 15 Instruction Location: School Auditorium
Objectives of Each Session	Group Play Therapy Training Program	
Session 1	Greetings, introduction and welcome Time: 45 minutes	Games played: Greetings game, meeting and saying welcome and human circle game
Session 2	Imitation, interaction with the group and following the leader Time: 45 minutes	Games played: Reflections game, following the crazy leader and playing with balloons.
Session 3	Strengthening cooperation and interaction skills in group Time: 45 minutes	Games played: Chatter game, louder and louder, pressing hands and the train game.
Session 4	Obedying leader of the group (interventor), strengthening the emotions and feelings in the group Time: 45 minutes	Games played: Sit down and stand up game, helping the blind person, fainting and labyrinth.
Session 5	Group games to increase certainty in the group Time: 45 minutes	Games played: One step, two steps game, hand gripping game and play successor game.
Session 6	Recognition of facial expressions and feelings about them Time: 45 minutes	Games played: Expression of feelings game, Happy/sad, sad/happy and hand in hand game.
Session 7	Strengthening Skills of transferring feelings to others and showing emotions in accordance with environmental conditions Time: 45 minutes	Games played: Smile transfer game, Balls and emotions game and rotating with the ring.
Session 8	Strengthening continence and self-control in the group Time: 45 minutes	Games played: Inside and outside game, reaction game and islands game.
Session 9	Skills related to cooperation and at the same time emphasis on maintaining the certainty and self-control Time: 45 minutes	Games played: Statues game, wind and rain game and waves' game.
Session 10	Skills related to cooperation and at the same time emphasis on maintaining the certainty and self-control Time: 45 minutes	Games played: Ball pass game, ball in fabrics and the ball in the queue.

raz, Iran who were studying in schools for exceptional children in the academic year 2013-2014. The study sample included 30 female students with intellectual disability who were selected through convenience sampling method. Before the intervention program, pretest on social skills was taken from the experiment and control groups, and after the intervention program the posttest on social skills was taken from both groups.

Inclusion criteria for this study were being a female student in the primary school, having mild intellectual disability, absence of other disabilities, and their families' consent for cooperation in the intervention program. Children with above conditions entered the study, and those with illnesses such as extreme sensory and motor disorders or vision and hearing problems as well as severe behavioral difficulties that might lead to uncooperative participation were excluded from the study.

**Research tools**

In the present study, the group play therapy program was used for training the social skills, and social skills rating scale [2] was used to assess the social skills.

**Group play therapy program**

The group play therapy program was designed based on O'Connor's structured group play therapy theory [2]. O'Connor introduced a method called structured group play therapy (ecosystem) covering the development of social, physical, behavioral and cognitive aspects of children. Structured group play therapy program was performed in a room with three sections as follows: In one section, the low noise activities, talk, and eating snacks were performed. There, the child was expected to have verbal communication with other members of the group and follow simple and basic principles. In another section of the room, a table and a number of chairs were placed for the group. This section was used for table games and art activities and the main emphasis was on participation, cooperation, and orientation towards production through art activities. Section three of group therapy included a large space for activities related to gross movements and motional activities [16-18].

The sessions of group play therapy began with establishing communication with the therapist. Then, the ther-

apy continued while the group ate snacks and entered into discussions by emphasis on subjects that were important for all members of the group. After the end of discussion, it was time for performing group and art activities. Then the group engaged in motor skills activities that were designed and performed according to the book "Movements and Rhythmic Games" by T. Rafei [18]. It is worthy to note that intervention was trained in 10 sessions of 45 minutes each for 5 weeks, 2 sessions per week. Table 1, outlines the general plan of intervention program sessions also each session separately, in a summarized form, according to the aims and the training program.

First session (45 minutes) included greetings, getting acquainted and welcoming the participants. Games played were greetings, getting acquainted, and saying welcome to the participants, and human knot game.

Second session (45 minutes) included imitation, interaction with the group, and follow the group leader. Games played were game of reflexes, following the crazy leader, and playing with balloon.

Third session (45 minutes) included strengthening the cooperation skills and interaction in the group. Games played were playing chatter, louder and louder, pressing hands, and the train.

Fourth session (45 minutes) included obeying the group leader (intervener), strengthening the emotions and feelings in the group. Games played were the game of sitting and standing up, helping the blind, fainting, and spiral motion.

Fifth session (45 minutes) included group games with the aim of increasing assertion in the group. Games played were the game of one step, two steps, increasing steps, the game of holding hands, and the succession game.

Sixth session (45 minutes) included recognition of facial expressions and related emotions. Games played were games of expressing emotions, happy/sad, sad/happy, and the game of pat-a-cake.

Seventh session (45 minutes) included strengthening the skills of conveying the feelings and emotions to others, and showing feelings and emotions adapted to the surrounding circumstances. Games played were the game of conveying the feelings, smile, the game of ball and emotions, and circling, and with the loop

Eighth session (45 minutes) included strengthening self-control and self-control in the group. Games played

were the game of inside and outside, the game of reflexes, and the islands game.

Ninth session (45 minutes) included skills related to cooperation in the group with simultaneous emphasis on maintaining decisiveness and self-control. Games played were the statue game, wind and rain and wave.

Tenth session (45 minutes) included skills related to cooperation in the group with simultaneous emphasis on maintaining assertion and self-control. Games played were the game of pass the ball, ball in the cloth, and ball in the queue.

### Social Skills Rating Scale

For assessing social skills, the social skills rating scale [19] was used. This scale has been prepared for the three education levels of pre-school, primary school, and high school and has three especial forms, including the parents' form, the teachers' form, and the students' form. Each of the rating system forms can be used individually, or altogether. In the present study, the teacher's form was used. This form has 47 items of which, 30 items are related to social skills and 17 items to behavioral problems. In the present study, we used 30 items related to social skills. The highest score is 60 and the lowest is 0.

Each of the items of this scale has space for 3-point responses with options for "never," "sometimes," and "often." Social skills has three subscales of cooperation, assertion, and self-control, and by adding all subscales scores, the score for social skills is obtained. By using the Cronbach  $\alpha$  test reliability method, the validity of this scale has been reported as equal to 0.94. Also Sabzevar, Abedi, and Liaghatdar have reported its validity coefficients from 0.68 to 0.74 and for the whole questionnaire as 0.86. They obtained the validity of this test through the authentication method of psychological experts [20]. Also the reliability of the said scale has been reported for social skills as 0.87, for the cooperation as 0.76, decisiveness as 0.72, and self-control as 0.68 [21].

In the present study, in order to verify the validity of social skills' scale, the method of correlation of each dimension with the total score was used. Results showed that the correlation coefficient for the cooperation subscale was 0.98, for the decisiveness 0.97, and for the self-control 0.93. Also, by using the Cronbach  $\alpha$  method, the reliability of the scale for the total score was obtained as 0.96.

### Study procedure

First, the selected subjects were randomly divided into two groups of experiment and control group. Then,

before the intervention, (as a pretest) the Gresham and Elliot social skills rating system was placed at the disposal of the students' teachers and were filled out by both teachers' groups. Then, the experiment group attended the play room in 10 sessions (2 sessions per week, for a total of 5 weeks) and each session for 45 minutes. The intervention program was carried out for the experiment group, while the control group did not receive any intervention. After 10 sessions, the social skills rating system (as a posttest) was provided to teachers of both groups, and after completing and collecting the information, they were all statistically analyzed along with the scores obtained prior to the intervention. It should be noted that in order to observe ethical principles, after the conclusion of the study, the intervention program was also implemented for the control group.

### Data analysis

For the purpose of data analysis, SPSS 21 was used. For descriptive data, the descriptive statistics indices such as mean and standard deviation were used, and for testing the research hypotheses, the univariate covariance analysis test was used.

### 3. Results

Out of 30 study participants, 15 were in the experiment group with the age range of 8.4 to 14.3 years with mean age of 10.6 years. The control group comprised 15 students whose age range were from 8.7 to 14.5 years with the mean age of 10.9 years. With regard to educational level, in each group, 2 children were in the first grade, 2 in the second grade, 3 in the third grade, 4 in the fourth grade, 2 in the fifth grade, and 2 in the sixth grade.

At first, the descriptive information of the participants and then the results of univariate covariance analysis test

to examine the effect of group play therapy on the social skills of female students with intellectual disability are presented. It should be noted that prior to conducting the covariance analysis, the main assumptions of covariance analysis were investigated. In this regard, to examine the assumptions of normality of distribution and homogeneity of variances, the Kolmogorov-Smirnov test and the Levine test were used, respectively. Also, to examine the assumption of uniformity of the regression line slope, the interaction between pretest and the independent variable were used. The results showed that using covariance analysis is without impediment.

According to Table 2, the mean scores of the experiment group and the control group with regard to the social skills total score and the subscales of cooperation, assertion, and self-control are almost equal. However, after group play therapy intervention, the mean score in the posttest for the experiment group with regard the total score of social skills and its subscales increased. Now, to determine whether the resulting changes are statistically significant, univariate covariance analysis test was used, the results of which, can be seen in the following tables.

The first hypothesis of the research was that group play therapy had significant impact on the social skills of female students with intellectual disability. To test this hypothesis, the univariate covariance analysis was used. Table 3 presents the results of this analysis.

Results of Table 3 demonstrate that by considering the pretest scores as covariate variance (auxiliary), group play therapy intervention leads to a significant difference in the posttest scores between the two groups of experiment and control ( $P < 0.01$ ). The impact level was 0.57. Therefore, it can be said that group play therapy has a significant effect on social skills of female students with intellectual disability.

**Table 2.** Social skills scores of the experiment and the control groups in pretest and posttest.

Variance	Experiment Group				Control Group			
	Pretest		Posttest		Pretest		Posttest	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Cooperation	16.76	6.43	19.90	6.17	16.46	6.65	16.46	6.65
Assertion	7.1	2.77	8.03	2.80	6.80	3.02	6.86	3.04
Self control	11.56	4.78	13.6	4.31	11.40	4.57	11.40	4.57
Social skills	35.43	13.64	43.43	11.95	34.66	14.01	34.73	13.99



**Table 3.** Results of univariate covariance analysis test to examine the effect of group play therapy program on social skills.

Variance	Sum of Squares	df	Mean Total	F	Sig. Level	Eta Separation Factor
Covariate (pre-test)	3014.66	1	3014.66	199.30	0.01	0.88
Group	559.67	1	559.67	37.00	0.01	0.57
Error	408.40	27	15.12			
Total		30				

PHYSICAL TREATMENTS

The second hypothesis of the research was that group play therapy had a significant effect on social skills' subscales of female students with intellectual disability. To test this hypothesis, the univariate covariance analysis was used. Table 4 shows the results of this analysis.

Results of Table 4 demonstrate that by considering the pretest scores as covariant variance (auxiliary), group play therapy intervention on the cooperation dimension has led to a significant difference in the posttest scores between the two groups ( $P < 0.01$ ). The impact level was 0.73. Also, the results of the above Table

demonstrate that by considering the pretest scores as covariant variance [auxiliary], group play therapy intervention on the assertion subscale of social skills has led to a significant difference in the posttest scores between the two groups ( $P < 0.01$ ). The impact level was 0.52. Finally, the results of Table 4 demonstrate that by considering the pretest scores as covariant variance [auxiliary], the group play therapy intervention on the self-control subscale of social skills has led to a significant difference in the posttest scores between the two groups ( $P < 0.01$ ). The impact level was 0.66.

**Table 4.** Results of covariance analysis statistical test for social skills' subscales in the experiment group and the control group.

Variance	Source of Change	Sum of Squares	df	Mean Total Squares	F	Sig. Level	Eta Separation Factor
Cooperation	Pre-test	643.70	1	643.70	92.158	0.01	0.85
	Group	309.09	1	309.09	31.76	0.01	0.73
	Error	109.36	27	4.05			
	Total	12987	30				
Assertion	Pre-test	166.51	1	166.51	208	0.01	0.88
	Group	24.30	1	24.30	36.30	0.01	0.52
	Error	2161	27	1.8			
	Total	2165	30				
Self-control	Pre-test	329.30	1	329.30	44.137	0.01	0.83
	Group	129.96	1	129.96	24.54	0.01	0.66
	Error	64.69	27	2.39			
	Total	6088	30				

PHYSICAL TREATMENTS

#### 4. Discussion

The present study aimed to investigate the effectiveness of group play therapy on the social skills of female students with intellectual disability. Results showed that group play therapy was effective on the improvement of social skills and their subscales in female students with intellectual disability. This finding is in line with the results of various studies on the effectiveness of group play therapy [12-15]. One of the most important objectives in education of children with intellectual disability is to provide them with social adjustment, establishing useful and effective relationships with others, and accepting social responsibility [6]. Students with intellectual disability have difficulty in social skills and consequently in socialization process. It makes their independent lives difficult and imposes a heavy burden on their families and school officials. Play as one of the methods to improve adaptive and social behaviors is a form of enjoyable physical activity that is not compulsory and will please the child [14].

The results of various studies have reported that the effectiveness of group play therapy is more than individual play therapy [14]. Likewise, in group play therapy, the child learns cooperation and interaction with others and observe other people's rights. In other words, the child learns how to be responsive in return for other people's assistance, be appreciative toward their talks in any way possible, be patient when problems arise during play, and be magnanimous in victory. In reality, through play, children learn how to be accepted by members of the group and become cognizant of other people's abilities to meet their needs. Thus, group play therapy promotes the growth of social aspects of the child's personality and improves the social skills of students with intellectual disability [21]. To corroborate this argument, Boulanger and Langevin have reached the conclusion that group plays improves children's social roles [14].

As regards the effectiveness of group play therapy on cooperation of female students with intellectual disability, it can be said that children, who are engaged in group play, learn how to establish communication with other members of the group, follow instructions and guidelines, partnership with others and accept them, wait their turns, and control emotions, all of which are constituents of positive cooperation in the group [22]. Play therapy is certainly effective on social growth, however, in implementing play therapy, especially for students with intellectual disability, the important point is the manner of implementation of play therapy and its speed of efficien-

cy; because these students due to intellectual deficits do not acquire training like ordinary people.

However, the important facilitating point in the present study is the manner by which the group play has been designed and executed based on the intellectual conditions of these students and the rewards that they receive through gaming chips and strengthen their behaviors. Therefore, the games played in this study, as conforming to the general principles of group play therapy, required the students to establish communication with other members of the group, follow instructions and guidelines, form partnership with others, accept them, wait their turns, and control their emotions. That is why educational intervention might be effective on the social skills of sample people.

Also, the research findings showed that group play therapy improved the assertiveness in female students with intellectual disability. Assertiveness as one of the social skills' subscales is a valuable tool to reach self-confidence and self-control and includes initiating behaviors such as acquiring information from others, introducing one's self to others and proper response to other people's behavior [22]. In other words, group play therapy makes it possible for students to acquire necessary skills in social interactions and provides opportunities by which the students take part in their favorite group games, be active in performing the play, and be resolute in expressing their emotions [23]. To corroborate this, Freeman also investigated the effectiveness of play therapy on self-concept and creating a positive image of one's self that would lead to assertion, and results showed that play therapy is effective in establishing assertiveness in students [15].

Furthermore, the findings of the study showed that group play therapy improves self-control in female students with intellectual disability. To explain this finding, it can be said that when a student with intellectual disability is engaged in group play, she actively organizes the stimuli, and by accepting the roles, understands the social rules in the form of play and adjusts her behavior according to those rules. Also in the present study, implementing the principles and rules of the game, including tolerating the conditions of play in the group, carrying out tasks such as waiting one's turn, demonstrating patience and forbearance, observing other people's rights, and having reasonable and appropriate approach regarding different situations can be considered effective elements for improving self-control in female students with intellectual disability. Several studies have been conducted that confirm this conclusion and their results

indicate that group play therapy has a positive effect on social and emotional development of children and control of their behaviors in the group, which is the same as self-control [13, 24, 25].

Sampling method in this study was the convenience sampling method. As such, caution must be taken in generalizing these results to the whole community. Also, the present study was conducted in primary school female students with intellectual disability. Again, we must be careful in extending the results of this study to female students with intellectual disability at higher levels of school studies. Considering the mentioned limitations, carrying out the study on students at higher levels of school studies by employing clinical trial with randomized sampling can be an effective step in further generalization of the results. It is also recommended that the present study be conducted on other groups of children with special needs. Finally it should be reminded that holding training sessions of group play therapy in the form of workshops for teachers and parents of students with intellectual disability can be an effective step for improving the social skills of students with intellectual disability.

Results of the study show that group play therapy has a positive and significant effect on social skills and their subscales in female students with intellectual disability. Therefore, considering the achieved results, importance and desirable benefits of play, and learning conditions of students with intellectual disability, group play therapy can be an enjoyable, tangible, and objective program to achieve desirable social skills in students with intellectual disability.

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### Conflict of Interest

The author declared no Conflict of interests.

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