Original Article

The Effectiveness Of Child-Centered Play Therapy In Aggression Of Children With Oppositional Defiant Disorder

Fahimeh Faramarzi^{1*}

- 1. Masters, Clinical Psychology, Islamic Azad University, Hamadan Branch, Hamadan, Iran.
- *Corresponding author: Fhimeh Faramarzi, Masters, Clinical Psychology, Islamic Azad University, Hamadan Branch, Hamadan, Iran.
- . fahime.faramarzi.40@gmail.com, ORCID: https://orcid.org/0000-0001-8311-5812.

Abstract:

Background: The present paper was conducted with the purpose of determining the effect of play therapy with a child-centered approach on reducing the level of aggression in children with oppositional defiant disorder.

Method: This study focused on the aggression of 3 children with oppositional defiant disorder and the selected sample was randomly obtained from preschools in Hamadan after direct observation of the child and matching the symptoms of this disorder with those mentioned in DSM-5 by an expert with PhD degree in clinical psychology. The level of aggression was obtained using Aggression Scale for Preschoolers developed by Vahedi, Fathi Azar, Hosseininasab, and Moghadam (2008) which contains 43 questions and measures aggression from different aspects. The statistical method used in this study is a single-subject multiple baseline design using one behavior of the individual in different situations and involves simultaneous observation (two baselines or more) in experimental situations; the situations observed in this study included in classroom situation, during break time and snack time and when having interaction with classmates and the teacher. The child-centered play therapy was conducted according to the principles of Axline theory (1929) in twelve 45-minute sessions. Visual inspection, recovery rate and Cohen's effect size formula were used for data analysis.

Result: The data analysis indicated a significant reduction in aggression symptoms in oppositional disobedience disorder.

Conclusion: Therefore, child-centered play therapy was found to be effective in improving the symptoms of aggression in oppositional disobedience disorder and therapists can use this method to help these people.

Keywords: Play Therapy, Child-Centered Play Therapy, Aggression, Oppositional Defiant Disorder, Single-Subject.

Submitted: 22 November 2021, Revised: 11 November 2021, Accepted: 3 December 2021

Introduction

Childhood is a time of physical, mental, emotional and social maturity. In order to achieve this point, in addition to appropriate genetic conditions. biological and environment is needed that ensures the child's growth in various aspects. An appropriate environment is a situation in which suitable opportunities for children and adolescents. supportive families, and individual and social opportunities for playing and exploration exist. However, such conditions are not available for everyone, and so some people psychological and social problems that may divert their natural development from its proper path [1]. This deviation from the normal path in children includes mild to extreme deviations, causing numerous problems and costs for families and the society. Sometimes families cannot afford to solve these problems, as a result, specific problems arise or these problems may probably turn into behavioral disorders. One of these disorders oppositional defiant disorder. About half of children with Attention-Deficit/Hyperactivity Disorder -mostly boys as young as 7 or after this age- suffer from another problem called [2]. These oppositional defiant disorder children show strong reactions to adults and other children. Children with conduct disorder violate social norms and become increasingly struggle with their principal at school. They may engage in fighting, theft, cheating, arson or destruction of property, or using illicit drugs. Approximately 30 to 50 percent of children with ADHD eventually develop conduct disorder [3]. Thus, hyperactivity, in particular there severe symptoms when are hyperactivity-impulsivity, is one of the most enduring predictors of oppositional defiant disorder and conduct disorder [4]

Hyperactivity disorder, defiant disorder and conduct disorder are usually inherited in families, indicating a common causal

mechanism [5] Accordingly, common genetic factors exist for these three disorders, in particular, between hyperactivity and oppositional defiant disorder [6]. Moreover, evidence for a common environment among children may be associated with family chaos and parents' weakness in upbringing child [7]. Defiant disorder requires numerous including interventions. play therapy. Therefore, in the current study, the role of play therapy in reducing aggression in these children has been investigated. From among the preschool children in Hamedan who participated in the anxiety screening program and were referred to the counseling center, three children who were diagnosed with oppositional defiant disorder by an expert with PhD in clinical psychology and also met the aggression criteria according to the Preschool Aggression Scale were selected in a voluntary basis to participate in this study.

1. Methodology

Three subjects with oppositional defiant disorder who were identified to have aggressive behavior using the aggression scale were voluntarily selected from among the children preschool in Hamedan who participated in the anxiety screening program and were referred to the counseling center; and these individuals were diagnosed with confrontational defiant disorder by an expert who was PhD in clinical psychology. The selection method is interviewing with the teacher and parents, direct observation of the child and use of Children Aggression Scale as wells as diagnostic criteria for oppositional defiant disorder. The research approach is quantitative. The method of this research is a single-subject with a multiple baseline A-B design in three situations applied on three children. In this research, since the behavior is the target of aggression and the play of the therapist (play therapy) extinct this behavior of the child, it is unreasonable to return this destructive behavior to its original state in

order to prove the effectiveness of the method leading to its extinction, as continuing this behavior may result in hurting other students. Therefore, in this study, a multiple baseline design is used that measures the behavior of an individual in different situations. After determining the baseline condition for the behavior in different situations, that behavior is experimental affected bv the (independent variable) in one of those situations. If the experimental action in that situation shows the desired effect on the behavior, that behavior would be affected by the experimental action in another situation. If again the expected improvement is achieved by the behavior in the second situation, the behavior is affected by the independent variable in the third situation. If it is found that the independent variable produces the expected desired changes in the target behavior in all different situations, it can be concluded that a functional relationship exists between the method used (independent variable) and the behavior under consideration (dependent variable).

2. Statistical Population, Sample Group and Sampling Method

The statistical population in this research included preschool children in Hamadan who participated in the separation anxiety screening program and were referred to Roozbeh Counseling Center but were not undergone clinical diagnosis. Among these children, those who, at the discretion of an expert with PhD in clinical psychology and using the Pediatric Symptoms Scale, had oppositional defiant disorder and met the aggression criteria using the Aggression Scale for Preschoolers, participated with a sample size of three children. This study was conducted on a voluntary basis[8]

3- Research Instruments

In this study, the Aggression Scale for Preschoolers was used. This scale was designed and developed by Vahedi, Fathiazar, Hosseininasab, and Moghadam (2008) in order to measure the aggressive level in preschool children in various dimensions (verbal assault, physical assault, relational and impulsive aggression). This scale contains 43 items. The screening method which is used in most studies is scored on a 4-point Likert scale. The scoring method was based on the severity of pathological symptoms on a 4-point scale, never = 0, rarely = 1, once a month = 2, once a week = 3, most days = 4. Interpretation of results was conducted based on the scores obtained from items 1 to 14 indicating the verbal assault component, items 15 to 27 representing the physical assault component, items 27 to 36 indicating the relational aggression component, items 37 to 43 representing impulsive aggression component [9].

In a study conducted by Vahedi et al. (2008), the validity and reliability of this scale were tested. Factor analysis method was used to evaluate the construct validity. The factor analysis of this scale with the help of principal component analysis and after Varimax rotation, provided four factors: verbal assault, physical assault, relational and impulsive aggression, representing the construct validity of the scale. To evaluate the reliability of this questionnaire, Cronbach's alpha method was used and its value for the whole scale was 0.98, indicating a good reliability for the scale[10]

4- Procedure

Initially, the child's direct teacher was interviewed in the preschool center and the symptoms of oppositional defiant disorder were examined. The child was referred to the child's clinical therapist to confirm the diagnosis. After the clinical therapist' approval, the teacher responded to the aggression scale and the level of four aggression components in three situations, i.e. in classroom, during break time, and snack time, was assessed. The first baseline was recorded and the first child-centered play therapy session began. These sessions were held for 12 sessions for all three children over six weeks.

Table 1. Scores of participants

| Table 1. Scores of participants | Aggression | Baseline | In | Snack | Break |
|---------------------------------|-----------------------|----------|-----------|-----------|-----------|
| | | score | classroom | time | time |
| | | | situation | situation | situation |
| Participant 1 (first session, | Verbal assault | 28 | 22 | 24 | 28 |
| interview and scale | Physical assault | 22 | 11 | 22 | 26 |
| completion) | Relational aggression | 11 | 24 | 24 | 28 |
| | Impulsive aggression | 28 | 26 | 28 | 30 |
| Participant 1 (session 4 of | Verbal assault | 28 | 23 | 20 | 22 |
| the play therapy) | Physical assault | 22 | 24 | 28 | 30 |
| | Relational aggression | 11 | 17 | 24 | 28 |
| | Impulsive aggression | 28 | 30 | 28 | 28 |
| Participant 1 (the last | Verbal assault | 28 | 24 | 21 | 28 |
| session of the play | Physical assault | 22 | 23 | 17 | 10 |
| therapy) | Relational aggression | 11 | 18 | 10 | 18 |
| | Impulsive aggression | 28 | 30 | 18 | 24 |
| Participant 2 (first session, | Verbal assault | 40 | 30 | 32 | 30 |
| interview and scale | Physical assault | 38 | 32 | 28 | 38 |
| completion) | Relational aggression | 28 | 36 | 26 | 34 |
| | Impulsive aggression | 24 | 23 | 20 | 21 |
| Participant 2 (session 4 of | Verbal assault | 40 | 28 | 38 | 28 |
| the play therapy) | Physical assault | 38 | 31 | 36 | 38 |
| | Relational aggression | 28 | 30 | 24 | 30 |
| | Impulsive aggression | 24 | 20 | 16 | 18 |
| Participant 2 (the last | Verbal assault | 40 | 24 | 30 | 20 |
| session of the play | Physical assault | 38 | 30 | 32 | 24 |
| therapy) | Relational aggression | 28 | 24 | 14 | 18 |
| | Impulsive aggression | 24 | 20 | 14 | 16 |
| Participant 3 (first session, | Verbal assault | 44 | 43 | 40 | 40 |
| interview and scale | Physical assault | 40 | 38 | 36 | 34 |
| completion) | Relational aggression | 28 | 28 | 24 | 22 |
| | Impulsive aggression | 24 | 24 | 24 | 24 |
| Participant 3 (session 4 of | Verbal assault | 44 | 42 | 38 | 36 |
| the play therapy) | Physical assault | 40 | 38 | 34 | 30 |
| | Relational aggression | 28 | 26 | 22 | 20 |
| | Impulsive aggression | 24 | 22 | 20 | 20 |
| Participant 3 (the last | Verbal assault | 44 | 36 | 30 | 28 |
| session of the play | Physical assault | 40 | 32 | 28 | 20 |
| therapy) | Relational aggression | 28 | 20 | 20 | 18 |
| | Impulsive aggression | 24 | 18 | 18 | 16 |

During the play therapy sessions, in the second session, at the end of the fourth session, at the end of the twelfth session, the aggression scale is given to the teacher and the assistant teacher (to record the snack time situation) for evaluation.

5- Results

Data Analysis: (Describing the nature of the collected data and the type of statistical analysis required)

In the present study, visual inspection, recovery rate and effect size are used to analyze the data and evaluate the effect of the treatment method.

Visual Inspection

In the visual inspection, the changes resulting from the intervention are evaluated and interpreted separately during the baseline, intervention and follow-up stages based on the characteristics related to the size of the change (changes in level and mean) and the features related to the change (changes in the trend and latency). Changes in the mean of the stages indicate fluctuations the average in performance of the dependent variable during the baseline, intervention, and follow-up stages. Changes in level, which indicate the reliability of the intervention effect, point to the fluctuations in the performance of the dependent variable after the completion of one stage and the beginning of the next stage. Changes in the trend or slope of changes refer to the systematic tendency of data to increase or decrease the performance of the dependent and variable direction change through intervention or elimination of intervention during the stages (in relation to the horizontal line at the baseline stage). The change latency that occurs at the time of the stage change refers to the period between the beginning or end of a situation (such as intervention, return to the baseline) and the emergence of changes in the performance of the dependent variable, i.e. the duration or waiting period until the emergence of effects or changes of a situation such as intervention or elimination of intervention [11]. Visual inspection of the data, if the criteria are met, shows that the observed changes are stable and strong and have been resulted due to the treatment rather than other factors [12].

Recovery Rate

If the therapy can bring the target problems to the level of normal people, it can be argued that the treatment has been clinically significant. The recovery rate formula was used to objectify the recovery rate in the dependent variable. This formula was first proposed by Blanchard and Schwars [13] in 1988 to analyze the data obtained from single-subject experimental designs. In this formula, an individual's pre-test score is subtracted from the post-test score and the result is divided by the pre-test score and then the obtained result is multiplied by 100. According to Blanchard and Schwars, based on this formula, 50% reduction in symptoms is considered as the treatment success, between 25 and 49% is regarded as a slight recovery and eventually reduction of symptom scores below 25% is considered as the treatment failure (Oggles, Loner and Bonstil, 2001; quoted by Hamid Pouro et al., 2010) [14].

Recovery rate= Treatment course score - baseline score/ baseline score X 100

3- Effect Size

Effect size is a title referring to a set of indices measuring the magnitude of the test effect. In this study, the effect size was obtained using Cohen's D formula (standardized difference between two means).

The effect size indicates the standardized difference between the means of the experimental group and the control [15]. Studies to interpret this index have suggested the value of 0.41 as the minimum effect size, 1.5 as the average effect size and 2.70 as the large effect size [15].

Effect size= mean treatment course- means baseline/ total SD (spooled)

Spooled =
$$\sqrt{\frac{s_{1+(n_1-1)+}^2 s_{2(n_2-1)}^2}{n_1+n_2-2}}$$

6- Demographic Characteristics of the Participants

Participants in the study included three children with oppositional defiant disorder symptoms, whose demographic characteristics are summarized in the table 2.

Table 2. Demographic Characteristics

| Participant | Age | Gender | Education |
|-------------|-----|--------|-----------|
| First | 6 | Male | Preschool |
| Second | 6 | Male | Preschool |
| Third | 7 | Female | Preschool |

In the current research, before the starting the treatment sessions, the aggression scale was completed by the teacher and the school assistant teacher in three situations: in classroom, during break time and during snack time.

Table 2. Participant 1 (first session, interview and scale completion)

| Aggression | Baseline | In classroom | Snack time | Break time |
|------------------|----------|--------------|------------|------------|
| | | situation | situation | situation |
| Verbal assault | 28 | 22 | 24 | 28 |
| Physical assault | 22 | 11 | 22 | 26 |
| Relational | 11 | 24 | 24 | 28 |
| aggression | | | | |
| Impulsive | 28 | 26 | 28 | 30 |
| aggression | | | | |

Table 3. Participant 1 (session 4 of the play therapy)

| Aggression | Baseline | Baseline In classroom situation | | Break time situation | |
|------------------|----------|---------------------------------|----|----------------------|--|
| Verbal assault | 28 | 23 | 20 | 22 | |
| Physical assault | 22 | 24 | 28 | 30 | |
| Relational | 11 | 17 | 24 | 28 | |
| aggression | | | | | |
| Impulsive | 28 | 30 | 28 | 28 | |
| aggression | | | | | |

Table 4. Participant 2 (first session of interview and scale completion)

| Aggression | Baseline | In classroom situation | Snack time situation | Break time situation |
|-----------------------|----------|------------------------|----------------------|----------------------|
| Verbal assault | 40 | 30 | 32 | 30 |
| Physical assault | 38 | 32 | 28 | 38 |
| Relational aggression | 28 | 36 | 26 | 34 |
| Impulsive aggression | 24 | 23 | 20 | 21 |

Table 4-5. Participant 2 (session 4 of the play therapy)

| Aggression | Baseline | In classroom situation | Snack time situation | Break time situation |
|------------------|----------|------------------------|----------------------|----------------------|
| Verbal assault | 40 | 28 | 38 | 28 |
| Physical assault | 38 | 31 | 36 | 38 |
| Relational | 28 | 30 | 24 | 30 |
| aggression | | | | |
| Impulsive | 24 | 20 | 16 | 18 |
| aggression | | | | |

Table 5. Participant 3 (session 4 of the play therapy)

| | | | <u> </u> | |
|------------|----------|--------------|------------|------------|
| Aggression | Baseline | In classroom | Snack time | Break time |
| | | situation | situation | situation |

| Verbal assault | 44 | 42 | 38 | 36 |
|------------------|----|----|----|----|
| Physical assault | 40 | 38 | 34 | 30 |
| Relational | 28 | 26 | 22 | 20 |
| aggression | | | | |
| Impulsive | 24 | 22 | 20 | 20 |
| aggression | | | | |

Table 6. Participant 3 (the last session of the play therapy)

| Aggression | Baseline | In classroom situation | Snack time situation | Break time situation |
|------------------|--------------------------|------------------------|----------------------|----------------------|
| Verbal assault | 44 | 36 | 30 | 28 |
| Physical assault | 40 | 32 | 28 | 20 |
| Relational | 28 | 20 | 20 | 18 |
| Impulsive | ggression mpulsive 24 | | 18 | 16 |
| aggression | 24 | 10 | 10 | 10 |

Table 7. Overall results of aggression by situation and time

| | Situation | Chi | ld 1 | | | Child 2 | , | | | Child 3 | } | | |
|--------|-----------|-----|---------|------|-----|---------|---------|------|-----|---------|---------|------|-----|
| Aggre | | Ba | In | Sna | Bre | Baseli | In | Sna | Bre | Baseli | In | Sna | Bre |
| ssion | | sel | classro | ck | ak | ne | classro | ck | ak | ne | classro | ck | ak |
| SSIOII | | in | om | time | tim | | om | time | tim | | om | time | tim |
| | Sessions | e | | | e | | | | e | | | | e |
| Verba | First | 28 | 22 | 24 | 28 | 40 | 30 | 32 | 30 | 44 | 43 | 40 | 40 |
| 1 | Fourth | 28 | 23 | 20 | 22 | 40 | 28 | 38 | 28 | 44 | 42 | 38 | 36 |
| assaul | Last | 28 | 24 | 21 | 28 | 40 | 24 | 30 | 20 | 44 | 36 | 30 | 28 |
| t | | | | | | | | | | | | | |
| Physic | First | 22 | 11 | 22 | 26 | 38 | 32 | 28 | 38 | 40 | 38 | 36 | 34 |
| al | Fourth | 22 | 24 | 28 | 30 | 38 | 31 | 36 | 38 | 40 | 38 | 34 | 30 |
| assaul | Last | 22 | 23 | 17 | 10 | 38 | 30 | 32 | 24 | 40 | 32 | 28 | 20 |
| t | | | | | | | | | | | | | |
| Relati | First | 11 | 24 | 24 | 28 | 28 | 36 | 26 | 34 | 28 | 28 | 24 | 22 |
| onal | Fourth | 11 | 17 | 24 | 28 | 28 | 30 | 24 | 30 | 28 | 26 | 22 | 20 |
| aggres | Last | 11 | 18 | 10 | 18 | 28 | 24 | 14 | 18 | 28 | 20 | 20 | 18 |
| sion | | | | | | | | | | | | | |
| Impul | First | 28 | 26 | 28 | 30 | 24 | 23 | 20 | 21 | 24 | 24 | 24 | 24 |
| sive | Fourth | 28 | 30 | 28 | 28 | 24 | 20 | 16 | 18 | 24 | 22 | 20 | 20 |
| aggres | Last | 28 | 20 | 18 | 24 | 24 | 20 | 14 | 16 | 24 | 18 | 18 | 16 |
| sion | | | | | | | | | | | | | |

The participants, then, entered the treatment plan in a step-by-step manner. During 12 treatment sessions, the questionnaire was completed in 2 rounds, first after the end of the fourth session of treatment and the second time at the end of the twelfth session of treatment by the teacher and the school assistant in three

situations: in classroom, during break time and snack time [16].

Participants' history:

Participant 1:

He is a boy (called Armin) born in 2013 and is studying in a preschool. His father is 40 years old and a welder with secondary education and his mother is 35 years old and a housewife with

a high school diploma. The child is the second child in the family and has an 11-year-old older brother. The family is part of the lower socioeconomic class of society. The quality of Armin's parents' marital relationship has a lot of fluctuations. According to his mother, Armin had a difficult childhood and was stubborn and defiant about various issues. He has often started verbal and physical fights with other children at school and in the streets due to the refusal of his irrational requests, and most of the time he has had arguments with his parents. In many cases, Armin's teacher has expressed dissatisfaction with the way he communicates with his classmates. Twice in the last three months, he has sought revenge on brother and secretly destroyed his belongings [17].

Participant 2:

He is a boy (called Mehrdad) born in 2013 and is studying in preschool. His father is 45 years old and an employee with undergraduate education, and his mother is 38 years old and a housewife with a bachelor's degree. The child is an only child. The family is part of the middle socio-economic class of the society. The quality Mehrdad's parents' marital relationship is unsatisfactory. The mother is counseling monitored during sessions. Mehrdad's mother complains a lot about his over-talking and verbal aggression. In the last three months, he has had more than a dozen cases of verbal assaults with his parents and classmates[14].

Participant 3: She is a girl (called Atrina) born in the first half of the 2013 and is studying in preschool. Her father is a 48-year-old physician with higher education and her mother is 45 years old and she is a midwife with post-graduation education. The child is the first child in the family and the mother is passing the last months of her pregnancy. The family is part of the upper socio-economic class of society. The quality of marital relationship between parents is fluctuating and the mother has been

receiving medication for her depression for 6 months. The preschool teacher complains that Atrina has a lot of arguments with her classmates, and that she shows physical assault during snack times.

Due to the fact that in Rogers' theory of treatment, therapy goals are not set for the clients and the agenda of each session will be determined by the clients, so in child-centered play therapy, unlike structured methods, there is no treatment protocol for disorders, and this process is proceeded based on the principles proposed by Axline. [9].

Discussion

Main Hypothesis: Play therapy with a childcentered approach has an effect on reducing aggression in children with oppositional defiant disorder.

The results of this study showed that play therapy with a child-centered approach has an effect on reducing aggression in children with oppositional defiant disorder. In general, in all three situations, in classroom, during snack time and break time, a significant decrease in aggression is observed in the scores of all the three individuals. Aggression scores reduced uniformly during the therapy sessions, and this decrease was also shown in high-slope scores at the end of the treatment [12]. The results of this finding are consistent with the findings of Abdollahi (2010) [16] who investigated the effect of sand therapy on reducing aggression and those of Amani and Razeghi (2012) [17], who have studied the effect of cognitivebehavioral play therapy on aggression, as well the findings of Dachman (2015) [18] who examined and the effectiveness of cognitivebehavioral intervention on aggressive boys.

In explaining the results of this hypothesis, it can be argued that a completely significant relationship between the cognitive-behavioral play therapy and aggression in children with oppositional defiant disorder indicates that play therapy is quite effective in adaptation of these children and their knowledge of the environment. Sources of power, including parents, educators and teachers, etc. can have a significant impact on reducing the effects of disability on these children through a better communication with these children. By understanding this fact and using this type of treatment, parents can minimize the impact and limitations of children's disability, and this shows that more and more research is being performed on play therapy as an effective treatment method. Children learned to respect and apologize for their mistakes through play and they also learned to apologize for their mistakes from sources of power, including parents and teachers. Moreover, they learned to respect the people they interact with in some way. The study conducted by Torabi; Mahdavian and Sha'iri (2011) [19] on the analysis of the findings suggested that play therapy is an effective method to reduce behavioral disorders and aggression in children. Amjadi (2006) [20] also investigated the effect of play therapy on reducing aggression in children and considered it to be effective. Ahmadi (2010) [21] in a study conducted on children aged 10 to 13 years, showed that play therapy is effective in reducing aggression in children during failure. Understanding children's play behavior provides clues that help the therapist enter more into the child's inner emotional world. Since the child's world is a world of action and activity, play therapy provides an opportunity for the therapist to enter the child's world. Failure is one of the issues that leads to aggression. If the aggression in children is created due to their failure, the failed child should be guided in peaceful behaviors while achieving desirable and lovable goals.

Sub-hypothesis 1: Play therapy with a childcentered approach has an effect on reducing aggression in children with defiant disorder in the classroom

As it is observed, the recovery rate in the therapy period was negative for the first

individual in snack time and break time situations, but in the final stage, in all situations, a higher recovery rate is observed compared to the treatment period. It can be argued that play therapy with a child-centered approach has the necessary effectiveness in reducing aggression.

These results are confirmed as they are in line with the findings of Komijani (2008) [22] in a study titled "The effect of play therapy on reducing behavioral disorders", a study by Jalali et al. (2008) [23] entitled "Group play therapy", the findings of Perez's study (1987) [24] on the effect of individual and group play therapy, and also with those of Agave's research (2004) [25] regarding the effect of play therapy on children with trauma experience.

Garza (2013) [26] evaluated the effect of play therapy in reducing aggression and other behavioral problems in Hispanic children to be positive and concluded that the children learn management skills, effective anger communication skills with peers, and positive ways to express aggression with the help of play therapy and through play they can raise their self-esteem level. Ray (2012) [27] examined the effectiveness of play on reducing various forms of verbal, non-verbal and latent aggression in boys. The results showed that play therapy can significantly control all types of aggression. Khadivi Zand, Asghari Nekah (2016) [28], in their research entitled "The effectiveness of group play therapy on reducing aggression in preschool boys" expressed their results as follows: Play therapy can have a effect on reducing children's positive aggressive behaviors and it is also a powerful tool for solving children's behavioral problems. Khadivi Zand, Agha Mohammadian Sherbaf, Asghari Nekah (2012) [27] examined the effect of group play therapy on reducing children's aggression. Findings of this study indicated that group play therapy reduces children's aggression compared to the control group, and the sub-hypotheses of this study included the effect of group play therapy on aggression subscales, and the effect of play therapy on physical, verbal and impulsive aggression was confirmed.

Sub-hypothesis 2: Play therapy with a childcentered approach has an effect on reducing aggression in children with defiant disorder during the break time.

The results of this finding showed that the effect size for the first person was 1.71, which is almost a little more than the average rate, indicating that the application independent variable was significant for him. In the case of the second participant, the effect size was 5.774, which is much higher than the average rate and shows that the application of the independent variable was significant for him. The effect size for the third participant was 4.830, which is much higher than the average, suggesting that the application of the independent variable was significant for this person. Also, in the follow-up period, all three individuals showed almost the same increase in incompatibility, but the second person had the highest recovery rate. Given the fact that the average recovery rate in the follow-up period was higher than 10%, it can be concluded that the changes in the follow-up period were clinically significant. According to the results, the mean of the second person in the baseline and treatment period was more than the other two people. The third participant in the followup period showed a higher increase in scores, so the mean score of her follow-up period is much higher than the others. Therefore, there is a larger standard deviation in all stages of the research, indicating a greater difference in the range of scores for this participant. The findings of this study are confirmed since it is in line with the findings of Naderi et al. (2010) who have investigated the effect of play therapy on children with ADHD, Janatian (2008who studied the effectiveness cognitive-behavioral play therapy on the

severity of ADHD symptoms, and Raya (2007) who has examined the effect of child-centered play therapy on children with ADHD.

Conclusion

According to the results of research in the play therapy educational program, by playing emotional games and creating opportunities to help express the child's feelings and emotions, methods of overcoming anger when aggression in failure situations and anger management skills are expressed in the form of games. Thus, during play therapy and the release of emotions, children learn to behave well in the face of external failures or the person who makes them angry, and to achieve their goal. This study focuses on the effect of play therapy on increasing aggression during failure in male students aged 8 to 12 years. It can also be concluded that the changes in the follow-up period were clinically significant. The effect of play therapy on children with ADHD symptoms was identified and confirmed.

References

[1]Abolmaali K, Mousazadeh Z. Aggression (nature, causes and prevention), Tehran, Arjmand 2012.

[2]Ahmadi M. The effectiveness of child-centered play therapy on aggression, Tarbiat Modares University.1996 (M.A Thesis)

[3]Eghbali M. Evaluation of the effectiveness of intervention on attention games on the level of attention of children with ADHD, Islamic Azad University, Tabriz Branch, 2013 (M.A Thesis).

[4]American Psychiatric Association. Diagnostic and Statistical Manual of DSM Mental Disorders, translated by Rezaei F. 2013.

[5]Angaji L, Asgari A. Play and its effect on child development, Tehran, Tarahan Image 2011.

[6]Asams L. Group treatment of children with developmental disorder (autism and Asperger's), translated by Rafiei S. 2011, Tehran, Fara Ravan 2006.

- [7]Eisenk M, Caine M. Cognitive Psychology, Translated by Rahnama A. and Faridi MR, 2010), Tehran, Ayizh 2010.
- [8]Bayat M. The effectiveness of unguided play therapy in children with internalized problems in preschool children, Iranian Psychologists Quarterly, 2008 (15), 267-276.
- [9]Jafari A, Jafari F. Play therapy with emphasis on the treatment of ADHD, Abhar Azad University Press 2010.
- [10]Hamzelouei Z. Investigating the effect of child-centered play therapy on reducing the severity of behavioral syndrome in 9 to 10 year old male students in 15th district of Tehran in the academic year of 1990-89, Allameh Tabatabaei University, 2011. (M.A thesis).
- [11]Heidari A. Developmental Psychology and Common Mental Disorders in Children, Seyed Mohebbi 1995.
- [12]Dadsetan P, Bayat M, Asgari A. The effect of child-centered play therapy on reducing children's externalized problems, Journal of Behavioral Sciences, 2009 (4) 257-264.
- [13]Zabihi A. The effectiveness of group play therapy on reducing aggression in children with physical disabilities, Ferdowsi University 2013 (M.A thesis in General Psychology).
- [14].Kakavand A. Child pathological psychology, Tehran, Virayesh 2006.
- [15].Ganji K, Zabihi R, Khodabakhsh R, Karaskian A. The effect of child-centered play therapy on reducing behavioral symptoms in children with ADHA, Quarterly Journal of Clinical Psychology, 2011 (415) 12.
- [16]. Ginat H. The relationship between parents and children, translated by Sar Tipi, S (2009), Tehran, Etelaat 2009.
- [17].Landarth, GL. Play therapy (art of communication with children) translated by Mohammadi S, Jamshidi K. Tehran, Ravan 2013.
- [18].Mohammad Esmaeil E. Evaluation of reliability, validity and determination of cut points of disorders of pediatric symptoms

- questionnaire on 14- to 6-year-old primary and secondary school students, Tehran: Exceptional Children Research Institute, 2001. [19].Madadi N. The effect of painting therapy on reducing the emotional problems of 7 to 11 year old children, Islamic Azad University, Tehran Markaz 2000 (B.A thesis).
- [20].Raha Malek ZF. Children's Monthly Educational Quarterly Information Department, July, 2008, No. 38.
- [21].Sadouk BJ, Sadouk VA. Summary of psychiatry, translated by Afkari N, Tehran: Shahr-e-Ab 2004.
- [22]. Sobhani F. Evaluation of the usefulness of group play therapy with flower work technique on reducing aggression of aggressive female students in the fifth year of elementary school in Shahriar, Payame Noor University, 2012, (M.A thesis).
- [23]. Soleimani K, Touzandeh JH. Play therapy for adaptation and aggression, Tehran, Baman 2014.
- [24]. Sherayden M. Child play and development from birth to 6 years old, translated by Shabani Hesar H (2008), Mashhad, 2014.
- [25]. Shams EH. Environmental Psychology, Tehran, Publication Inc. of the Organization for the Study and Compilation of Humanities Books (SAMT) 2014.
- [26].Sahebi M, Alipour EH, Mohammadi MR. Evaluation of Dimensions and Color Indices in the Color Drawing Test of Children and Adolescents with Bipolar Disorder, Monitoring Quarterly, 2003 (17).
- [27].Sedaghat F. Anger and Aggression of Children, Tehran, Toi 2007.
- [28].Kaylan, HE, Sadouk BJ, Greb JA. Child and Adolescent Psychiatry, Translated by Fazel, A and Karimi A (2004), Shiraz, Rahgosha 1994.