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# The Effect of Play Therapy on Symptoms of Oppositional Defiant Disorder in Boys Aged 5 to 10 Years Old

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**Abstract**

This study has been conducted with the aim of examining the effect of play therapy on symptoms of oppositional defiant disorder (ODD) in boys aged 5 to 10 years old in Tehran in 2014. The present study is quasi-experimental with the pretest-posttest control group design and random assignment of participants. From among the boys' elementary schools and preschools located in districts 6 and 7 of Tehran, 30 persons were selected as the final participants through structured clinical interview based on the criteria indicated in DSM-IV-TR, and were selectively divided into two control and experimental groups. The participants in experimental group were provided with 12 sessions of play therapy. In order to collect the data in pretest and posttest, the Persian standardized version of oppositional defiant disorder rating scale (ODDRS) of Hommersen et al. (2006) which has a desirable validity and reliability was used. The data obtained from pretest and posttest in two groups was analyzed with the help of analysis of covariance. The analysis results indicated that there

is a significant difference (F=20.74 and p<0.001) between experimental group and control group in posttest in symptoms of oppositional defiant disorder. In addition, the measure of effect size indicated that 84% of the difference between two groups in related to experimental intervention. According to the data obtained, it can be said that play therapy is effective in reducing symptoms of oppositional defiant disorder in boys aged 5 to 10 years old.

**Keywords:** Oppositional defiant disorder, play therapy, mental disorder

## 1. Introduction

Based on the revision of the fourth edition of *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV-TR), oppositional defiant disorder (ODD) is defined as a recurrent pattern of negativistic, defiant, disobedient, and hostile behavior toward authority figures. Children with ODD often lose their temper, argue with adults, swear or use obscene language, are angry and resentful and blame others for their mistakes or misbehaviour. The above symptoms often appear during childhood, and the problems of these children are more related to family and peers. If these children are not treated, they will exhibit symptoms of conduct disorder during adolescence, which is determined through patterns of antisocial behaviors (Matthys & Lochman, 2014).

If this disorder is not treated, its symptoms will last until adulthood and turn into the symptoms of antisocial personality disorder. These individuals are prone to drug abuse and to commit crime during adolescence and adulthood, and they impose a heavy cost on the society. Therefore, early identification of these children and providing appropriate intervening programs in order to prevent individual and social damages is very effective (Matthys & Lochman, 2014).

The prevalence rate of ODD is estimated at 3 to 8 percent and in many studies, its prevalence has been reported to be higher in boys than girls (McGoey, Eckert and DuPaul, 2002, cited in Najafi et al., 2009). Its prevalence is estimated at 3.6% among elementary students with higher prevalence among boys in Najafi et al. (2009) study.

Providing psychotherapy and/or consultation for children is faced with many problems and it reduces their benefit from common treatments. For example, Gravea and Blissett (2004) stated that children's average progress in treatment process is lower than adults. Besides, Holmbeck et al. (2003) proposed this hypothesis that if the treatment is appropriate to the child's growth level, its effectiveness will be higher. Furthermore, the effectiveness of treatment will be higher when the child is involved in the process of treatment and the treatment includes his/her active participation than when the treatment includes guidelines and psychotherapy for parents (Larsson et al., 2009). This has prompted the therapists and theorists to change or create appropriate treatment models for children. One of the most important and interesting activities of children is play; of course, play not only is interesting for children but also is necessary for their healthy growth. And it is not limited to this as play has many healing powers as well. Play is employed by play therapy specialists as a tool for helping children (Drewes, 2001). Play therapy is in fact the systematic use of theoretical

model for establishing interpersonal process in which trained therapists employ the power of play therapy for preventing and/or treating social-psychological problems of the patients and achieving desirable development and growth (Schumann, 2004).

Play therapy is actually a very useful and flexible treatment method which can be employed in various ages, situations and conditions in psychotherapy and consultation (Boyd Webb, 2011). Play therapy methods have been employed in providing a lot of consultations and psychotherapies so far. For example, Fall, Navelski, and Welch (2002, cited in Drewes, 2010), in their study on the psychotherapy of exceptional children with behavioral disorders, studied the effectiveness of play therapy by using experimental and control groups. Their findings indicated that social and behavioral problems of the children in experimental group significantly reduced compared to the children in control group. Ray, Schottelkorb, and Tsai (2007, cited in Drewes, 2010) compared play therapy and reading mentoring in treatment of a group of children with attention deficit/hyperactivity disorder (ADHD). Their results indicated the effectiveness of both treatment methods in reducing symptoms of hyperactivity, anxiety/withdrawal and learning disabilities; however, the group received play therapy demonstrated more improvement in emotional problems, anxiety or withdrawal than the other group. Play therapy can help children with oppositional defiant disorder to learn ways of coping with stressful stimuli and find out new strategies for developing the sense of mastery and success in social situations in relationships with peers and family. In group play therapy, children can learn how to collaborate with others and find out problem-solving strategies and how to establish proper social relationship with others, so their opposition and defiance reduces (Tiggs, 2010). Safari, Faramarzi and Abedi (2012) studied the effectiveness of play therapy with cognitive behavioral approach in reducing symptoms of oppositional defiance among students; their results indicated that play therapy reduces the symptoms of oppositional defiant disorder in students. Gholamzade Khaddar, Babapour and Sabourimoghadam (2013), in a study on the elementary boy students with ODD aged 7 to 12 years old, examined the effectiveness of art therapy by using coloring pages in reducing symptoms of ODD. They equally divided 40 children into two experimental and control groups and provided 12 coloring sessions for the experimental group. Their results indicated that symptoms of experimental group reduced in comparison to control group. According to the above review, the aim of the present study is to examine the effect of play therapy on symptoms of oppositional defiant disorder (ODD) in boys aged between 5 to 10 years old in Tehran in 2014. The conceptual model of the study is present in figure 1.

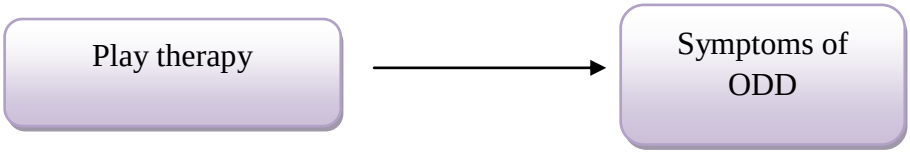


Figure 1. Conceptual model of the study

## 2. Methodology

The present study is quasi-experimental with the pretest-posttest control group design and random assignment of participants as per following model:

| group | pretest | X | posttest |
|---|---|---|---|
| Experimental group | T1 | Play therapy | T2 |
| Control group | T1 | ---------- | T2 |

The statistical population of this study includes 5-10-year-old preschool and elementary boy students in districts 6 and 7 of Tehran. From among these children, those who were previously psychiatrically diagnosed with oppositional defiant disorder by a specialist and those introduced by school counselors suspected of having this disorder were chosen and 30 children were selected who were diagnosed with symptoms of oppositional defiant disorder through carrying out structured interview with children and their parents as well as by considering other research criteria as follows: their parents willingness to let them participate in the research, not receiving pharmaceutical drugs and/or psychological treatments simultaneously, and being in the age range of 5 to 10 years old; these children were divided into two experimental and control groups. In order to identify children with oppositional defiant disorder, structured interview based on DSM-IV-TR was used by the master of clinical psychology for the diagnosis of conduct disorders. It is to be mentioned that all the selected children have had diagnostic criteria of oppositional defiant disorder, but a number of them could be diagnosed with other criteria for other disorders such as ADHD and some learning disabilities or they had related diagnostic history. The participants of experimental group were provided with therapeutic intervention and the participants of control group were not provided with play therapy and only received tutoring sessions. The model adopted in this study was modelled on the play therapy model combined with behavioral cognitive therapy model proposed by Drewes (2010) for providing play therapy for the experimental group; the children in experimental group received 12 sessions of play therapy (two sessions per week for one hour and a half). The impact of pretest on posttest was also controlled by One-Way Analysis of Covariance (ANCOVA). The collected data was analyzed with the help of computer and by using SPSS software (ver. 18). In order to collect data, oppositional defiant

disorder rating scale (ODDRS), another reporting scale for children aged 5 through 15, which was designed based on the diagnostic criteria of DSM-IV by Hommersen et al. (2006) has been adopted. Internal consistency of this scale has been reported 0.92 by using Cronbach's alpha and its reliability has been reported r=0.95 through retest (Faramarzi, Abedi and Ghanbari, 2012). This scale was translated by Abedi (2008) and has been standardized and its reliability and validity has been determined by using a sample of elementary students; its coefficient of reliability has been reported 0.94 through retest. The above scale was distributed between the mothers of participants in two experimental and control groups after they were guided on how to complete it in order to fill it out by considering the conditions of their child. It is to be mentioned that mothers were not aware of the placement of their child in control group and/or experimental group.

## 3. Findings

*Descriptive*

The average age of the participants of the study has been 7.68. All the participants have had both parents and they lived together (not divorced). Table 1 shows the mean and standard deviation for the scores of symptoms of oppositional defiant disorder in two control and experimental groups in pretest and posttest stages.

Table 1. Descriptive indices of the study variables in pretest and posttest stages

| Number of participants | Posttest | | Pretest | | Group | Variable |
|---|---|---|---|---|---|---|
| | Standard deviation | Mean | Standard deviation | Mean | | |
| 15 | 1.32 | 8.03 | 1.26 | 7.13 | experimental | Symptoms of ODD |
| 15 | 1.01 | 5.26 | 1.57 | 7.36 | control | |

As it is seen in table 1, the scores of the participants in experimental group regarding the score for oppositional defiant disorder obtained from ODDRS in posttest have changed compared to pretest; besides, the difference between the scores of experimental and control groups is observable.

*Inferential*

Analysis of covariance has been used for examining the research hypotheses. Carrying out analysis of covariance requires the establishment of some conditions and assumptions such as linearity of variables and homogeneity of regression slopes; the aforementioned assumptions were established in this study. The results of analysis of covariance are presented in table 2.

Table 2. Summary of results of analysis of covariance for the scores of posttest for symptoms of ODD

| Eta coefficients | Significance level | F | Square means | Degrees of freedom | Sum of squares | Source of changes |
|---|---|---|---|---|---|---|
| 0.47 | 0.001 | 251.27 | 94.08 | 1 | 94.08 | Pretest |
| 0.84 | 0.001 | 20.74 | 7.96 | 1 | 7.96 | Group |
| | | | 6.77 | 28 | 189.59 | Error |
| | | | | 29 | 2351 | Total |

According to the findings presented in table 2, and by considering the scores of pretest as covariate, there is a significant difference between the mean score of symptoms of ODD in posttest in control and experimental groups (P<0.0001). In other words, it can be said that play therapy has been able to significantly reduce the symptoms of ODD in participants. Besides, eta coefficient is 0.84 at the group stage, so it can be said that 84 percent of this change in the score of symptoms of ODD is due to play therapy intervention. Altogether, it can be concluded that the intervention of play therapy could significantly reduce symptoms of ODD in children aged 5 to 10 years old.

## 4. Discussion and Conclusion

This study has been conducted with the aim of examining the effect of play therapy on the symptoms of oppositional defiant disorder (ODD) in boys aged 5 to 10 in Tehran in 2014. The obtained results indicated the effectiveness of play therapy in reducing symptoms of ODD in these children. As it was stated, the play therapy model combined with behavioural cognitive therapy model proposed by Drewes (2010) has been adopted in this study for therapeutic intervention in experimental group in 12 play therapy sessions (2 sessions per week for one hour and a half). The results of the present study are consistent with the findings of Gholamzade Khadar, Babapour and Sabourimoghadam (2013), Boyd Webb (2011), Safari, Faramarzi and Abedi (2012), Ray, Schottelkorb, and Tsai (2007, cited in Drewes, 2010), and Zare and Ahmadi (2007).

In explanation of the effectiveness of play therapy in reducing the symptoms of ODD, it can be said that providing play therapy gives an appropriate opportunity to children with disorder to release their great energy as well as excitement in an proper and even totally practical way (such as constructive, exploratory games requiring creativity), and most importantly, in constructive interaction with other children. Besides, since the games provided in therapeutic model of play therapy are target-oriented, children can gradually learn ways of controlling and improving their defiant, oppositional and even aggressive behaviors in an active manner.

Furthermore, the findings of the present study confirm the effectiveness of treatment according to childhood needs (play) and based on active intervention of the child in treatment process. The results of this study support the involvement of the children in their treatment and this finding has been confirmed in previous studies as well. For example, Drugli et al. (2006) believed that involving the children in the treatment process and employing them in education can reduce the disorder process and its symptoms. Behavioural cognitive play therapy is specifically designed for preschool children and early years of school, and it is developed by considering the child participation in treatment and through taking into account things such as control, mastery and acceptance of responsibility towards personal behaviour's change (Zare and Ahmadi, 2007).

Finally, lack of a sample of girls, non-intervention of parents in treatment process as well as lack of follow-up period can be considered to be among the most important limitations of the presents study, so it is suggested to eliminate these limitations in future studies.

## References

1. Abedi, A. (2008*). Standardization and measurement of validity and reliability of oppositional defiant behavior rating scale among elementary students in Isfahan*. Education Department of Isfahan.
2. Boyd Webb, N. (2011). Play therapy for bereaved children: Adapting strategies to community, school, and home settings. *School Psychology International, 32* (2), 132-143.
3. Drewes. A. (2010*). Combining play therapy with behavioral cognitive therapy* (Gh. Ramezani, Trans.). Tehran: Vania Publication.
4. Drewes, A. A. (2001). The possibilities and challenges in using play therapy in schools. In A. A. Drewes, L. J. Carey & C. E. Schaefer (Eds.), *School-based play therapy* (pp. 41–61). New York, NY: Wiley & Sons.
5. Drugli, M. B., Larsson, B. (2006). Children aged 4-8 years treated with parent training and child therapy because of conduct problems: Generalization effects to day-care and school settings. *European Child & Adolescent Psychiatry, 15*(7), 385-392.
6. Faramarzi, S., Abedi, A., & Ghanbari, A. (2012). The effect of teaching mothers' communication pattern on reducing symptoms of children's oppositional defiant disorder. *Medical Journal of Medical University of Tabriz, 34*(2), 90-96.
7. Gholamzade Khadar, M., Babapour, J., & Sabourimoghadam, H. (2013).The effect of art therapy based on painting therapy in reducing symptoms of oppositional defiant disorder (ODD) in elementary School Boys. *Social and Behavioral Sciences, 84*, 1872-1878.
8. Gravea, J., & Blissett, J. (2004). Is cognitive behavior therapy developmentally appropriate for young children? A critical review of the evidence. *Clinical Psychology Report, 24*, 399-420.

9. Holmbeck, G. N., Greenley, R. N., & Franks, E. A. (2003). Developmental issues and considerations in research and practice. In A. E. Kazdin & J. R. Weisz (Eds.). *Evidence-Based Psychotherapies for Children and Adolescents* (pp. 21-41). New York: Guilford.

10. Hommersen, P., Murray, C., Ohan, J., & Johnston, C. (2006). Oppositional defiant disorder rating scale: Preliminary evidence of reliability and validity. *Journal of Emotional and Behavioral Disorders, 14*(2), 118-125

11. Larsson, B., Fossum, S., Clifford, G., Handegard, B. H., & Merch, W. (2009). Treatment of oppositional defiant and conduct problems in young Norwegian children. *European Child & Adolescent Psychiatry, 18* (1), 42-52.

12. Matthys, W., & Lochman, J. (2014). *Oppositional defiant disorder and conduct disorder in children* (A. Parand, A. H. Khanzadeh and F. Jah, Trans.). Tehran: Arjmand Publications.

13. Najafi, M., Foulad Chang, M., Alizadeh, H., & Mohammadifar, A. (2009). Prevalence rate of attention-deficit hyperactivity disorder, conduct disorder and oppositional defiant disorder in elementary students. *Study in the Area of Exceptional Children, 9*(3), 239-254.

14. Safari, S., Faramarzi, S., & Abedi, A. (2012). The effect of play therapy with behavioral cognitive approach on reducing symptoms of oppositional defiant disorder in students. *Journal of Clinical Psychology, 4*(1), 4-10.

15. Schumann, B. R. (2004*). Effects of child-centered play therapy and curriculum-based small-group guidance on the behaviors of children referred for aggression in an elementary school setting* (Dissertation). University of North Texas.

16. Tiggs, P. L. (2010). *Play therapy techniques for African American elementary school-aged children diagnosed with oppositional defiant disorders* (Dissertation). Capella University.

17. . Zare, M., & Ahmadi, S. (2007). Effectiveness of play therapy in behavioral cognitive form in reducing children's behavioral problems. *Applied Psychology, 1*(3), 18-28.