EFFECTIVENESS OF INDIVIDUAL PLAY THERAPY ON OPPOSITIONAL-DEFIANT DISORDER SYMPTOMS AMONG CHILDREN

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Abstract

Given the importance of childhood disorders, the purpose of this study was to evaluate the effectiveness of individual play therapy on Oppositional-Defiant Disorder symptoms among children. A quasi-experimental research design type using a cluster sampling method was employed. The study sample included 30 girls and boys aged 6 to 10 years with Oppositional-Defiant Disorder symptoms referred to psychological consultation centres in the city of Ahvaz. Using simple random selection, the study sample was divided into an individual play therapy group (15 individuals) and a control group (15 individuals). The Child Behavior Checklist and Teacher Report Form (Achenbach & Rescorla, 2001) were used as measurement instruments. In addition, a clinical interview with parents was conducted to confirm the presence of the symptoms. The subjects were exposed to individual play therapy interventions during 8 sessions (each lasting 45 minutes) on a weekly basis and then evaluated in three stages including pre-intervention, post-intervention, and two months after the completion of sessions in a follow-up form. The SPSS software (version 18) and multivariate analysis of covariance (MANCOVA) were used for data analysis. The results of the multivariate analysis of covariance indicated that Oppositional-Defiant Disorder symptoms reported by parents and teachers in the individual play therapy group significantly decreased at the post-test stage compared with those in the control group. Furthermore, the results were consistent after the two-month follow-up evaluation. These findings showed that individual play therapy could reduce symptoms of Oppositional-Defiant Disorder among children. Therefore, it is recommended that therapists use this therapy in treating children affected with this disorder.

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Keywords: Effectiveness; oppositional-defiant disorder; individual play therapy.
1. Introduction

Childhood is among the most significant stages of life wherein an individual’s personality is established and shaped. Most of behavioral inconsistencies and disorders in adolescents and adults originate from negligence of childhood behavioral and emotional problems as well as lack of proper guidance in the processes of growth and development (Cartwright-Hatton, 2005). Disruptive Behavior Disorder (DBD) is a stable pattern of repetitive behaviors in which social rights of others or major age-specific norms and rules are being violated. This disorder brings about social and educational dysfunctions and it is the most common mental syndrome diagnosed in childhood (Lemmens et al., 2006).

Oppositional-Defiant Disorder (ODD) is placed on the category of the DPDs that are among the largest group of disorders referred to mental health clinics for children (Costin et al., 2004). The ODD is the sustainable pattern of negative, aggressive, and impolite behaviors in the absence of a serious violation of social norms or the rights of others displayed through factors such as rage, quarrels with adults, intentional defiance, deliberate activities hurting others, irritability, sensitivity, quick annoyance by others’ actions, anger, tantrums, vindictiveness, and revenge (Diagnostic and Statistical Manual of Mental Disorders, 2013). Children with the ODD symptoms usually are not endowed with academic achievement (Burt et al., 2001); they are also weak in interpersonal relationships and suffer from attention problems and defects in their executive functions. Such children are mainly deprived of cognitive, social, and emotional skills (Hommersonn et al., 2006).

Due to the fact that experts are aware that mental health interventions are essential for primary school children in order to provide primary prevention and care as well as mental health development (Charron & Parns, 2004) and because of the growing problems caused by ODD in children and family life, numerous researchers have investigated treatment methods for this disorder (Turner & Sanders, 2006). It should be noted that the ODD treatment is mainly based on medications, parental training, and blended learning (parents and children training) (Morshed, Davoudi, & Babamiri, 2015).

One of the increasingly used treatment methods for the ODD is play therapy. Play therapy is a structured approach which establishes learning processes as well as natural and normal communications of children (Carmichael, 2006). In this way, therapists teach further adjustment behaviors to children with poor social and emotional skills (Pedro-Carroll & Reddy, 2005).

In line with treatments for adults, the effects of maladaptive beliefs and attitudes are emphasized in cognitive-behavioral play therapy (CBPT) (Spence, Donvan, & Berchman, 2000). In this respect; therapists help children to identify, modify, or build their cognition. In addition to assisting children to identify their cognitive distortions, they are also taught how to substitute adaptive thinking with a maladaptive one (Gallagher, Robin, & McCloskey, 2004). Such a treatment procedure has been developed for primary and preschool children because this age group is assumed to be active members in changing their own behaviors (Morshed, Davoudi, & Babamiri 2015).
2. **Problem Statement**

2.1. Children with ODD symptoms are abandoned by their peers and they are poor in terms of academic performance. They are also at the risk of delinquency in adolescence as well as expulsion (Charisa & Sung-Young, 2006).

2.2. Considering that the use of play therapy has been less investigated in terms of its effect on improvement of cognitive, social, and emotional skills among children affected with the ODD, the present study was conducted to evaluate the effects of the CBPT on reducing the symptoms of ODD.

3. **Research Questions**

3.1. Is individual play therapy effective to alleviate ODD symptoms?

3.2. Does the effect of individual play therapy continue to alleviate ODD symptoms in follow up studies?

4. **Purpose of the Study**

4.1. The purpose of this study was to evaluate the effectiveness of individual play therapy on Oppositional-Defiant Disorder symptoms among children

4.2. In this study, there was an attempt to use individual play therapy as an intervention with a cognitive-behavioral approach and teach coping strategies to children in order to deal with inadequate thinking patterns and cognitive styles to enable them to control and guide their right behavior, emotions, and feelings; reduce the severity of their failures through play therapy as a mental purifier; and learn useful problem-solving strategies during their plays.

5. **Research Methods**

The statistical population of this study included all boys and girls aged 6 to 10 years with symptoms of the ODD who had been referred to consultation and treatment centers in the city of Ahvaz. Out of the given population, 30 subjects were selected (they had obtained scores above the cutoff point - equal to or higher than 4 - according to the results of their oppositional-defiant indices in the CBCL). Raven’s Progressive Matrices (1938) for children were also administered to determine the normality of intelligence among the selected children. Furthermore, parents were invited to participate in a 30-minute clinical interview by the researcher to achieve the final accurate diagnosis. 30 randomly selected children were divided into two groups: experimental or individual play therapy group (n=15) and control group (n=15). Absence in more than one treatment session was considered as an exclusion criterion which was not met by any subjects in this study. The subjects were evaluated at pre-intervention and post-intervention stages, and two months after the intervention by using the following instruments:
5.1. Child Behavior Checklist (CBCL) (Parent Report Form (PRF))

The CBCL contains 120 items measuring children’s mental state in six scales. Such a questionnaire is applicable for subjects aged 4 to 18 years which can be completed based on children’s mental state in the last 6 months by parents or a person responsible for taking care of them (Achenbach & Rescorlar, 2001). In the section on behavioral and emotional problems, the ODD is measured with 5 items in which each person’s score can vary from 0 to 10 in this sub-scale. The score above and equal to 4 represents disorder in a person. The reliability of the checklist was determined by test-retest method with a one-week time interval and the reliability between the interviewers for the CBCL scores was between 0.93 and one. The content validity of this measurement system has been confirmed by four decades of research studies in this respect (Achenbach & Rescorlar, 2001).

5.2 Child Behavior Checklist (CBCL) (Teacher Report Form (TRF))

This form is applicable for children aged 5 to 18 years (Achenbach & Rescorlar, 2001) which can be completed by teachers or other school personnel. This form has two parts which are associated with educational aspects and child behavior checklist, respectively. Items and scoring methods are exactly similar to the CBCL. The reliability and the validity of this test have also been approved (Achenbach & Rescorlar, 2001).

6. Findings

This chapter presents the results of the data analysis to examine the identified hypotheses related to the results. Both descriptive and inferential statistics were applied to answer the research questions of the present study.

6.1. Descriptive statistics

Individual play therapy group included 8 boys and 7 girls but the control group comprised 12 boys and 3 girls. The mean age of the subjects in the individual play therapy group was 7.6 years and 7.4 years for the control group. In both groups, the maximum age of the subjects was 10 years and the minimum age was 6 years, as illustrated in Table 1.

Table 01. Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>Age Mean (SD)</th>
<th>CBCL Mean (SD)</th>
<th>TRF Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>pretest</td>
<td>posttest</td>
</tr>
<tr>
<td>Play therapy</td>
<td>7.6 (1.45)</td>
<td>7.73 (1.10)</td>
<td>2.87 (0.91)</td>
</tr>
<tr>
<td>control</td>
<td>7.4 (1.54)</td>
<td>7.47 (1.40)</td>
<td>7.07 (2.34)</td>
</tr>
</tbody>
</table>
6.2. The effect of treatment on post test

As a whole, the effectiveness of individual play therapy was evaluated by using the repetitive MANCOVA. To this end, the MANCOVA was performed on the post-tests of the individual play therapy group and that of the control group with controls over their pre-tests in order to assess the effectiveness of individual play therapy. To evaluate the effectiveness in the follow-up stage, the MANCOVA was conducted on the follow-up scores obtained by the individual play therapy group as well as the control group though taking their pre-tests under control.

Table 02. Results of MANCOVA

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>F</th>
<th>df</th>
<th>Error df</th>
<th>Sig</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pill's Trace</td>
<td>0.81</td>
<td>55.11</td>
<td>2</td>
<td>25</td>
<td>≤0.001</td>
<td>0.81</td>
</tr>
<tr>
<td>Wilk's Lambda</td>
<td>0.81</td>
<td>55.11</td>
<td>2</td>
<td>25</td>
<td>≤0.001</td>
<td>0.81</td>
</tr>
<tr>
<td>Hotelling's Trace</td>
<td>4.40</td>
<td>55.11</td>
<td>2</td>
<td>25</td>
<td>≤0.001</td>
<td>0.81</td>
</tr>
</tbody>
</table>

According to Table 2, there was at least a significant difference in terms of one of the dependent variables including the ODD symptoms reported by parents and those stated by teachers. To evaluate the differences, one-way analysis of covariance (ANCOVA) was conducted on the dependent variables in the context of the MANCOVA. The results of this analysis are presented in Table 3.

Table 03. Results of ANCOVA

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean of squares</th>
<th>F</th>
<th>Sig</th>
<th>Eta coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBCL</td>
<td>137.77</td>
<td>1</td>
<td>137.77</td>
<td>108.30</td>
<td>P ≤ 0.001</td>
<td>0.80</td>
</tr>
<tr>
<td>TRF</td>
<td>105.46</td>
<td>1</td>
<td>105.46</td>
<td>81.49</td>
<td>P ≤ 0.001</td>
<td>0.75</td>
</tr>
</tbody>
</table>

6.3. The effect of treatment on follow up

According to the results presented in Table 3, a significant difference was found between the two groups in terms of the dependent variable of the ODD symptoms reported by parents (F=139.40 and P≤0.001) and those reported by teachers (F=93.14 and P≤0.001). As can be seen in Table 3, the F ratio in the case of all the variables in the study was significant.

Table 04. Results of MANCOVA

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>F</th>
<th>df</th>
<th>Error df</th>
<th>Sig</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pill's Trace</td>
<td>0.56</td>
<td>16.50</td>
<td>2</td>
<td>25</td>
<td>≤0.001</td>
<td>0.56</td>
</tr>
<tr>
<td>Wilk's Lambda</td>
<td>0.43</td>
<td>16.50</td>
<td>2</td>
<td>25</td>
<td>≤0.001</td>
<td>0.56</td>
</tr>
<tr>
<td>Hotelling's Trace</td>
<td>1.32</td>
<td>16.50</td>
<td>2</td>
<td>25</td>
<td>≤0.001</td>
<td>0.56</td>
</tr>
</tbody>
</table>

| Roy's Largest Root | 1.32 | 16.50 | 2   | 25       | ≤0.001  | 0.56        |
Table 4 also showed nonetheless a significant difference in terms of one of the dependent variables including the ODD symptoms reported by parents and those revealed by teachers in the follow-up stage. To study the differences, one-way ANCOVA was conducted on the dependent variables in the context of MANCOVA. The results of this analysis were presented in Table 5.

Table 05. Results of ANCOVA

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean of squares</th>
<th>F</th>
<th>Sig</th>
<th>Eta coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBCL</td>
<td>67.78</td>
<td>1</td>
<td>67.78</td>
<td>28.66</td>
<td>P ≤ 0.001</td>
<td>0.52</td>
</tr>
<tr>
<td>TRF</td>
<td>66.02</td>
<td>1</td>
<td>66.02</td>
<td>31.27</td>
<td>P ≤ 0.001</td>
<td>0.54</td>
</tr>
</tbody>
</table>

According to the results in Table 5, there was a significant difference between the two groups in terms of the dependent variable of the ODD symptoms reported by parents (F=28.66 and P≤0.001) and those reported by teachers (F=31.27 and P≤0.001). As can be seen in Table 5, the F ratio in the case of all the variables in the study was significant. Thus, the effect of individual play therapy was maintained in the follow-up stage.

7. Conclusion

This chapter includes discussion of the results based on the evidence from prior investigation and conclusion of the study.

7.1. Effectiveness of individual play therapy on ODD symptoms

The results of this study showed that individual play therapy reduced symptoms of the ODD in the post-test stage and the results were maintained in the follow-up stage. The findings were consistent with the results obtained by Ray (2008); Pedro and Reddy (2005); Evans, Mullett, Weist, and Franz (2005); Azarnioshan et al. (2012).

In terms of the etiology of the ODD, numerous researchers have considered lack of skills in critical conditions as one of the most fundamental problems experienced by disobedient children. The frequency of this problem in children with the ODD has been reported by 72% (Bullis & Davis, 1997) and children with externalized behavior disorders such as the ODD are known as children unable to meet the expectations of their parents and teachers or those raised by laws (Oltmanns & Emery, 2012). The ODD process is heavily dependent on the severity of symptoms and child’s ability to express adaptive responses to authorities (Kaplan and Sadock, 2015). Studies that have been conducted about these children display flaws in cognitive skills of these children (Green et al., 2003). Such cognitive deficits are often found in terms of executive functions, emotion regulation, language processing, and social information processing; for example, about 55% of children with language disorders have also the ODD diagnostic criteria (Greene, Ablon, & Goring, 2003). Cognitive verbal deficits may limit the abilities of children with the ODD in terms of identification and labeling emotions expressed by others. In this regard, not only their response alternatives become restricted but also they are susceptible to improper physical reactions. In this way, children affected with the ODD cannot label negative behaviors and their
efforts to curb behavioral problems do not lead to relatively useful results (Wilson, Gottfredson, & Najaka, 2001). Considering the above issues, the importance of these deficits in affected children becomes evident and cognitive-behavioral play therapy puts emphasis on the involvement of children in the treatment process and also their participation through talks about issues relating to control, dominance, and responsibility of individuals to change their own behaviors. In fact, children can be an active participant in this change process through integrating cognitive and behavioral components and behavioral-cognitive therapists can help them to identify and change potentially incompatible ideas in order to experience their personal power (Drews, 2009).

7.2. The ongoing impact

Furthermore, the results of individual play therapy remained stable during the follow-up stage. Despite the lower results at this stage, the effectiveness of individual play therapy was maintained which revealed the impact of play therapy on reducing the ODD symptoms. However; due to the decline in results at this stage compared with those in the post-test stage, it should be noted that many problems of children affected with ODD occur in a family environment, so it can be said that preservative factors are in the same environment. Therefore, it can be argued that educating those who spend the most time with children and have the most influence on them decreases the probability of reducing inappropriate behavior and its continuation. In this study, treatment was performed without parental involvement and remarkable results were obtained according to some studies such as the research conducted by Bratton, Ray, Rhine, and Jones (2005). Finally, according to the results of this study indicating the effectiveness of individual play therapy on the ODD symptoms, child therapists were recommended to use cognitive-behavioral play therapy in the treatment of childhood disorders as mentioned in the present study.

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References


