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The effect of art therapy based on painting therapy in reducing symptoms of oppositional defiant disorder (ODD) in elementary School Boys

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Abstract

The purpose of this research is to investigate the effect of art therapy based on painting therapy on 30 children recruited from elementary School Boys with symptom of oppositional defiant disorder who were 7-12 years old. To find and select the main subjects, two steps were taken. At the first step, children obtaining scores higher than cut-off in CHILD SYMPTOM INVENTORY-4 (CSI-4) were selected, and at the second step, for final selection, children were attended in the Structured Diagnostic Interview-based on DSM-IV-TR criteria. The researcher adopted interview/observation and the document analysis for qualitative study and went through the painting therapy by 12 sessions twice per week, and each session lasted 40 minutes based on discussion and reviewing from parents and the teacher. An experimental and a pretest-posttest control group design method were applied in this regard. The data were analyzed using descriptive statistics as well as ANCOVA. The finding showed that experimental group did have a significant decrease in the symptoms of odd while the control group showed no significant difference.

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1.introduction

Oppositional defiant disorder (ODD) is described in the Diagnostic and Statistical Manual of Mental Disorders 4th edition (DSM-IV) and the International Classification of Mental and Behavioral Disorders (ICD-10) as a repetitive and persistent pattern of opposition, defiant, disobedient and disruptive behaviors towards authority figures persisting for at least 6 months. Oppositional defiant disorder does not include the more aggressive aspects of conduct disorder (CD) which is directed toward people, animals and property. Oppositional defiant disorder has a high co-occurrence with attention deficit hyperactivity disorder (ADHD) and many children with ODD go on to be diagnosed with CD. This means that families are under high levels of stress, dealing with several difficult behaviors. Characteristics of ODD as described in the DSM-IV include:

- Persistent stubbornness and refusal to comply with instructions or

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Unwillingness to compromise with adults or peers

- Deliberate and persistent testing of the limits
- failing to accept responsibility for one's own actions and blaming

Others for one's own mistake

- Deliberately annoying others
- Frequently losing one's temper.

It can be difficult to determine if a child qualifies for a diagnosis of ODD, as many of the behaviors required to meet this diagnosis are not uncommon in the preschool child or adolescent. However, if the child's behaviors are consistently presented by the parent as causing distress to the family system and are impacting on the child's social and educational functioning then further evaluation is warranted. A preschool aged child will usually behave in this way at home and with people, they know well. Oppositional behaviors may not be evident in other settings or during the medical examination, thus making the practitioner reliant on reports from family members. As the child develops and becomes involved in other environmental settings such as school, adverse experiences with peers, teachers or academic challenges can result in the child's oppositional behaviors becoming evident in that setting. (Webster, Reid, 2003). Based on international research, Sanders, Gooley and Nicholson reported that the prevalence of ODD in nonclinical samples ranges from 6–10% (Sanders, Gooley, Nicholson, 2003). Similarly Angold and Costello concluded from a review of prevalence rates that CD/ODD in the western world is a 'gigantic public health problem' with 5–10% of children aged 8–16 years having notable behavioral problems (Angold, Costello, 2001). The problem is also significant in Australia with Al-Yaman, Bryant and Sargeant reporting that in 1999–2000 for children aged 1–14 years, ODD occurred among the most frequent specific diagnoses accounting for hospitalization for mental health problems and behavioral disorders (Bryant, Sargeant, 2002).

There are no easy solutions to resolving the difficulties for families when a child has a diagnosis of ODD. There is general agreement that intervention is required early in the developmental progression of the disorder so as to prevent the development of more serious problems and to reduce the impact the child's oppositional behavior has on family and peer relationships and academic outcomes (Webster, Reid, 2003), (Sanders, Gooley, Nicholson, 2003), (Moeller, 2001), (Prinz, 1995).

The management plan should:

- address any co-occurring ADHD or learning difficulties
- address known risk factors for each case, (Sanders, Gooley, Nicholson, 2003).

and

- include intervention for all factors producing stress on the family system (Moeller, 2001).

Generally, intervention will be needed for the parents, child, family and school.

It can be quite daunting when considering the range of interventions required for a particular family: pediatric review, psychological treatments, family therapy, family supports and social interventions, and school based interventions. However, undertaking a Mental Health Assessment and Mental Health Plan can assist to clarify the issues for the family and determine the priority of interventions (Medicare Benefits Schedule, 2008).

Completing a Mental Health Care Plan will enable the family to access approved psychological services under the Medicare Benefits Schedule (MBS). The psychologist must be registered and have a Medicare provider number. The scheme provides for up to 12 individual sessions in a year and may approve (Newcorn, Ivanov, 2007).

The range of interventions available will be largely determined by the locality and services available within that region, and the family's capacity to engage in appropriate services. For some families the symptoms of ODD will resolve, but for others ongoing monitoring and re-referral to services will be required. Pharmacological treatments there have been little research on the use of pharmacological treatments for ODD. (Sanders, Gooley, Nicholson, 2003), (Moeller, 2001). In some instances when aggressive behaviors are difficult to manage by behavioral means, medication may assist in diminishing the problematic behavior until the child and the systems around him develop the skills to cope with the oppositional behaviors. If there is a co morbid diagnosis of ADHD, the use of stimulant medication to treat these symptoms may show some improvement in ODD symptoms. (Sanders, Gooley, Nicholson, 2003), (Ipser, Stein, 2007), (Newcorn, Ivanov, 2007).

The most important treatment strategy is to assist families with psychosocial interventions to deal with the many behavioral challenges from their child. Other interventions for this group is Group therapy. Group therapy sessions in a year if recommended by the practitioner and psychologist. (Sanders, Gooley, Nicholson, 2003), (Moeller, 2001).

1. Art therapy group is a combination of disciplines: art and therapy. In an art therapy session the child is involved in making art (painting, sculpting, writing a poem, telling a story, dancing, acting out a scene). Art therapy is the disciplined reflection on these two processes. In the art therapy group the child makes art in the presence of her peers and the therapist. This exposes each child to the images made by other group members on both a conscious and an unconscious level. This also allows them to learn from their peers, and to become aware that other children may be feeling just like them (Kalmanowitz, 2004). It is through this process that the child can begin to make meaning of events, emotions or experiences in her life, in the presence of a therapist. The process of drawing, painting, or constructing is a complex one in which children brings together diverse elements of their experience to make a new and meaningful whole. In the process of selecting, interpreting, and reforming these elements, children have given us more than a picture or sculpture; they have given us part of themselves: how they think, feel and see (Lowenfeld, 1987). Through the group, they learn to interact and share, to broaden their range of problem solving strategies, to tolerate difference, to become aware of similarities and to look at memories and feelings that may have been previously unavailable to them. The image, picture or enactment in the art therapy session may take many forms (imagination, dreams, thoughts, beliefs, memories, feelings). The images hold multiple meanings and may be interpreted in many different ways. The art therapist never imposes interpretations on the images made by the individual or group, but rather works with the individual to discover what her art-work means to her (Kalmanowitz, 2004).

2. Art is of vital importance to children. It is one way in which a small child can interact with, and understand her environment. This enables her perhaps to participate more fully in the complex and often confusing adult world. Art therapy works on many levels: through the absorption in the art-making process, through the dynamic of relationships, through the dynamic of conscious and unconscious and through reflections on the content of the image itself. At the centre of art therapy is the understanding that all of the above can lead to change. Art Therapy does not rely on previous art skills (Kalmanowitz, 2004). In the art therapy session, the child makes art. The child is encouraged to explore and experiment, to find her own way. In the art therapy session there is no right or wrong way to make art, only a way in accordance with the unique nature of the individual child. Within this, however, clear boundaries or limits are set in which the art therapy session can take place (Kalmanowitz, 2004). Art therapy's purpose, regardless of the circumstance, is to encourage children and adolescents to express their feelings, participate in new tasks, such as those involving focused attention, and to learn creativity (Henley, 1998; Hume & Hiti, 1988; Sundaram, 1995; Zamierowski, 1980).

3. Art therapy was seen as a powerful tool for encouraging hospitalized children, such as those with paralysis, a fatal kidney disease or even a borderline psychotic child (Prager, 1993; Steinhardt, 1995). Art therapy was even useful for a borderline psychotic child, who as a result to this method, allowed him to be able to enter a normal school environment (Steinhardt, 1995). Children who undergone this form of therapy have improved on school performance, creativity, self-awareness, and relating to fellow peers (Carter, 1979; Henley, 1998; Steinhardt, 1995).

2. Method

2.1. Participants

Participants were recruited from elementary schools with symptom of oppositional defiant disorder that were 7-12 years old. To find and select the main subjects, two steps were taken. At the first step, children obtaining scores higher than cut-off in CHILD SYMPTOM INVENTORY-4 (CSI-4) were selected, and at the second step, for final selection, children were attended in the Structured Diagnostic Interview-based on DSM-IV-TR criteria.

2.2. Procedure

The researcher adopted interview/observation and the document analysis for qualitative study and went through the painting therapy by 12 sessions twice per week, and each session lasted 40 minutes based on discussion and reviewing from parents and the teacher.

2.3. Measures

2.3.1. Child Symptom Inventory-4:

The Child Symptom Inventory-4 (CSI-4) is a behavior rating scale that screens for DSM-IV emotional and behavioral disorders in children between 5 and 12 years old. The CSI-4: Parent Checklist contains 97 items that screen for 15 emotional and behavioral disorders, and the CSI-4: Teacher Checklist contains 77 items that screen for 13 emotional and behavioral disorders. The CSI-4 can be scored to derive Symptom Count Scores (diagnostic model) or Symptom Severity scores (normative data model). Scoring is quick and easy with user-friendly score sheets.

2.3.2. Structured Diagnostic Interview-based on DSM-IV-TR criteria

2.4. Statistical methods

An experimental and a pretest-posttest control group design method have been applied in this regard. The data were analyzed using descriptive statistics as well as ANCOVA. Means and standard deviations were computed for each of the measures at pre intervention, post-intervention, and 1-month follow-up.

3. Results

The findings showed that the experimental group did have a significant decrease in the symptoms of ODD while the control group showed no significant difference.

3.1. Treatment outcomes

Descriptive statistics for each of the samples are presented in Table 1

Table 1. Descriptive Statistics

Group	Variable	N	minimum	maximum	mean	SD
Control	Pre-test of ODD	15	10	20	13.80	3.07
	Post-tests of ODD	15	12	18	14.26	2.01
Experimental	Pre-test of ODD	15	11	22	14.60	3.48
	post-tests of ODD	15	9	18	12.73	2.84

Table2. One-Sample Kolmogorov-Smirnov Test

Control	Kolmogorov-Smirnov Z	.785	.849
	Asymp. Sig. (2-tailed)	.569	.467
Experimental	Kolmogorov-Smirnov Z	.815	.782
	Asymp. Sig. (2-tailed)	.520	.574

Table3. Mean Difference between control and experimental group

Dependent Variable: odd

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	144.216 ^a	3	48.072	28.876	.000
Intercept	29.289	1	29.289	17.593	.000
group	8.423	1	8.423	5.059	.033
odd	117.070	1	117.070	70.323	.000
group * odd	2.986	1	2.986	1.794	.192
Error	43.284	26	1.665		
Total	5655.000	30			
Corrected Total	187.500	29			

a. R Squared = .769 (Adjusted R Squared = .743)

For the current table, The α level is set at the .05 level. The result of the F test of the product term of painting therapy on symptoms of oppositional defiant disorder fails to support the violation of the assumption of the regression homogeneity, $F_{\text{group} * \text{ODD}}(1, 26) = 1.794$, $p > 0.05$. Therefore, a single rule of the covariate-based adjustment of the dependent variable scores can be applied to participants across painting therapy method groups.

In other words, an interaction effect does not exist. Therefore, you can assess the effects of painting therapy on symptoms of oppositional defiant disorder.

Table4. Tests of Between-Subjects Effects

Dependent Variable: odd

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	141.230 ^a	2	70.615	41.206	.000
Intercept	27.815	1	27.815	16.231	.000

odd	123.597	1	123.597	72.123	.000
group	30.878	1	30.878	18.018	.000
Error	46.270	27	1.714		
Total	5655.000	30			
Corrected Total	187.500	29			

a. R Squared = .753 (Adjusted R Squared = .735)

For the current table, the α level is set at the .05 level. The results of the F-test support the effect of painting therapy on symptoms of oppositional defiant disorder, $F(1,27) = 18.018$, $p < 0.05$.

4-Discussion

The aim of this study was to the effect of art therapy based on painting therapy in reducing symptoms of oppositional defiant disorder in elementary School Boys .Boys showed reducing symptoms of oppositional defiant disorder. The explanation for this finding can be said art therapy can help people with their disorders.

The findings were shown as follows:

1. After 12 sessions painting therapy, the subjects showed more adaptive behaviors and emotions.
2. The subjects tended to share his feelings. The communication ability also did have obvious improvement.

The results were discussed, and suggestions for further research and implications for counseling practices were proposed.

Basically, the benefits of art therapy can be quite broad. It can improve lives by helping people improve their mental, emotional, and even physical states. It can raise the quality of life for many people, and it's worth considering if it can aid you in some way or another. Again, maybe it's just the act of executing creative expression on your own or with others, or maybe it's seeking professional help with a certified art therapist. Either way, the benefits of art therapy make it worth exploring as a catalyst for healing.As mentioned Art therapy group is a combination of disciplines: art and therapy. In an art therapy session the child is involved in making art (painting, sculpting, and writing a poem, telling a story, dancing, acting out a scene). Art therapy is the disciplined reflection on these two processes. In the art therapy group the child makes art in the presence of her peers and the therapist. This exposes each child to the images made by other group members on both a conscious and an unconscious level. This also allows them to learn from their peers and to become aware that other children may be feeling just like them (Kalmanowitz, 2004). It is through this process that the child can begin to make meaning of events, emotions or experiences in her life, in the presence of a therapist. The process of drawing, painting, or constructing is a complex one in which children brings together diverse elements of their experience to make a new and meaningful whole. In the process of selecting, interpreting, and reforming these elements, children have given us more than a picture or sculpture; they have given us part of themselves: how they think, feel and see (Lowenfeld, 1987). Through the group, they learn to interact and share, to broaden their range of problem solving strategies, to tolerate difference, to become aware of similarities and to look at memories and feelings that may have been previously unavailable to them. The image, picture or enactment in the art therapy session may take many forms (imagination, dreams, thoughts, beliefs, memories, feelings). The images hold multiple meanings and may be interpreted in many different ways. The art therapist never imposes interpretations on the images made by the individual or group, but rather works with the individual to discover what her art-work means to her(Kalmanowitz, 2004) .

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