Cumhuriyet Üniversitesi Fen Fakültesi
Fen Bilimleri Dergisi (CFD), Cilt:36, No: 3 Özel Sayı (2015)
ISSN: 1300-1949

Cumhuriyet University Faculty of Science
Science Journal (CSJ), Vol. 36, No: 3 Special Issue (2015)
ISSN: 1300-1949

Effectiveness of Reality Therapy on the Oppositional Defiant Disorder Symptom Reduction among Students

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Received: 01.02.2015; Accepted: 05.05.2015

Abstract. The present study has been carried out to explore the effectiveness of reality therapy on the oppositional defiant disorder (ODD) symptom reduction among the students of the fifth and sixth grade in the city Tehran. The methodology has been of a quasi-experimental nature with a pretest posttest design and a control group. The statistical population has been composed of the male students of the fifth and sixth grade of the city Tehran in the academic year 1393-1394 and ampling was carried out by the multistage cluster random one. After the Children Symptom Inventory-4 (CSI-4) had been filled in by the teachers, 30 students with the points higher than the cut-off point in CSI-4 were selected and randomly assigned to the experimental and control group. The former group received 10 reality therapy sessions each for 90 minutes after which a posttest was given to them. To analyze the statistical data, a covariance method was applied as a result of which a meaningful reduction ($p>0.001$) was observed in the posttest intensity of ODD symptoms for the experimental group in comparison to the control one. Given the findings of the study, reality therapy is believed to contribute to the reduction of ODD symptoms among the students, rendering it as an effective intervention method.

Keywords: Oppositional Defiant Disorder Symptoms; Reality Therapy; Intervention Method

1. INTRODUCTION

The increasing prevalence of mental disorders in children in recent years has turned into a reason behind the concerns about mental health and its impact on children's growth and performance. Accordingly, experts emphasize the importance of assessment and treatment of psychological disorders. As shifting the emotional and behavioral patterns in adults is difficult, the on-spot diagnosis of mental health in childhood is one of the aspects of public health prevention (Tiggs, 2010, as quoted by Safari, et al (2012) Meanwhile, about 75% of mental disorders diagnosed in children and adolescents, on the floor of behavioral disorders is (Quay, 1995, as quoted by Brdaly and Mendel, 2005). It is estimated that children with behavioral disorders cause many challenges for their parents, which exert negative effects on their surrounding people and society. It is estimated that people with anti-social behavior in children at least 10 times more than a normal 28-year-old, the cost burden on society. It is estimated that children with antisocial behaviors in their childhood create social costs 10 times more than a 28-year-old normal person (Scott, 2001) behavioral disorders is one of the main challenges for teachers in dealing with students too. On the other hand, behavioral disorders is one of the main reasons for referring children to the mental health care centers (Keenan, 2012).The oppositional defiant disorder is regarded as a sort of destructive behavioral disorder, because many children with oppositional defiant disorder show cognitive, social and behavioral disorders as they do other behavioral disorders. It is also one of the most common psychiatric disorders among clients resorting to the treatment centers (Whitman, 2006; Keenan, 2012). The Fifth Diagnostic and Statistical Manual of Mental Disorders defines the oppositional defiant disorder as a pattern

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Special Issue: The Second National Conference on Applied Research in Science and Technology

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of anger/irritability of temper or a kind of challenging/opposing or revenging behavior that is diagnosed on the criterion of occurring at least one time per week and last 6 months. These criteria are explained on the premise that the that people with this disorder often lose their temper; angry most of the times; struggle with the authorities; are actively disobedient and stubborn, often annoy others deliberately; chide the others for their own misbehaviors and mistakes and are biased and bitter. Also during this period their social performance should be disordered. Symptoms of the disorder often are a damaged pattern of interaction with others. In addition, the children do not pay attention to their negative and aggressive behavior. In contrast, they justify their behaviors as their demands and illogical circumstances. (America Psychological Association, 2013). The rate of prevalence of the disorder ranger from 1 to 11 percent, with an estimated average of approximately 3.3 %(Costello, 2003; Moughan, 2004; America Psychological Association, 2013). It should be noted that the estimated prevalence rate depends on such factors as data collection sources (Parents, teachers or children) the type of the report (now or posteriori) as well as the criteria for conduct disorder.

However, the rate of oppositional defiant disorder may be dependent on the gender of children. Until adolescence, it is more common in boys than in girls (pear et al., 2007; Ray 2, 2012). The symptoms of oppositional defiant disorder may be limited to one area and seen frequently at home. However, in most cases, the symptoms of the disorder are seen in several areas. Oppositional defiant disorder, is most prevalent in those families where parents or caregivers are not responsive or are negligent in taking care of their children. (Academy of Child and Adolescent Psychiatry America, 2007). Peoples suffering from the oppositional defiant disorder make such relationships with parents, teachers and peers that have been destroyed significantly. In comparison with their peers, these children not only have disorders, but they also are rated 2 standard deviations points lower in rating scale for their social adjustment. They also demonstrate more social disorders in comparison with the children's suffering from bipolar disorder, depression and anxiety disorder. (Green, 2002; Hamilton and Armando, 2008). Children with oppositional defiant disorder usually do not show a good progress in school. They have problems in their interpersonal relationships. They also have problems in their executive functions and they lack the cognitive, social and emotional skills (Burt et al., 2001; Hemerson et al., 2008). Kerry and MCanany (1984) bleave that irrational criminal actions are not often unpredictable and meaningless, but they means that these children have not learned social skills in their lives. The inefficiency of social competence are related with psychological problems. Hence, we need programs appropriate for the children with behavioral problems, by which we can prevent the enhancement of such behaviors.

Over the years, a variety of treatment methods has been adopted for dealing with behavioral cognitive and emotional problems in children with oppositional defiant disorder. In this measure, some of the treatments focus on individual interventions and some others focus on familial interventions, in a way that that various programs have been executed, including parental education for helping them manage their children's behavior, personal psychotherapy for anger management, family therapy for improving communication, training the social skills to enhance flexibility and frustration tolerance among peers and cognitive-behavioral therapy for teaching problem-solving skills and reducing negativism (Academy of Child and Adolescent Psychiatry America, 2007)

William Glasser posited a new theory of psychopathology and behavioral disorders and a treatment in 1965 called "reality therapy". Generally speaking, based on the "choice theory", reality therapy explains "why" and "how" to behave. This theory explains the modes of human operations in demonstrating a behavior. "Choice theory" holds that whatever we demonstrate is a behavior, for example: eating food, fighting, coming to a date late, getting angry are all certain behaviors, as getting upset or depressed, getting anxious and also the hallucination of a psychotic person are (Glaser, 2003, translated by Sahebi, 2010). Also Glaser (2008) states that

people must be responsible for their feeling better about themselves and life. According to the choice theory, each human being possess five basic requirements, including: 1- obsession and social tendency (love); 2-progress and power; 3- freedom; 4- recreation and 5- need to survive.

On the basis of this theory, every person can feel powerful, confident, self-esteemed and finally responsible when s/he can meet his/her basic requirements effectively and bleave that his/her life is managed by himself/herself and s/he can provide a better situation for himself/ herself. This method is regarded as one of the common therapeutic interventions in cognitive psychology, determining behavioral regulations and a way to achieve consent, happiness and success. In this method of therapy, facing reality, accepting responsibility, recognizing the basic requirements, ethical judgment about right and false behavior and focusing on here-and-now is emphasized. (Catherine, 2008). In a research conducted in an elementary schools of South Koria, on the responsibility of the fifth-grade students (13 respondents in an experiment group and 12 persons in the control group), Kim (2002) came to the conclusion that reality therapy increases the students' responsibility.

In an attempt to study the teaching of responsibility on the basis of reality, its impact on reality therapy and its impact on decreasing the boy students' aggression in the secondary school of the Saveh city, Masters Farahani (2011) came to conclusion that reality therapy decreases aggression and violence. The impact of the method of reality therapy on such areas as anger control, increasing the responsibility of the elementary students, decreasing the drug abuse, delinquency, and preventing crime numbers, family violence and managing the conical diseases such as heart attacks and MS has been confirmed. (Wubbolding 2, 2000; Kim 3, 2002; Mason and Duba 4, 2009).

According to the findings of the various studies conducted in this area, the fundamental question of the present study is whether the reality therapy method has impact on the symptoms of students' oppositional defiant disorder?

2. METHODOLOGY

This is a semi-experimental study with pretest and protest design with a control group.

3. POPULATION, SAMPLE AND SAMPLING

The population of the study consist of all fifth and sixth-grade boy students in Tehran schools in the academic year of 2014-2015 who show the symptoms of oppositional defiant disorder. In this study, the multi-stage cluster sampling method was used. This means that among the fifteen educational areas of Tehran, one region was selected randomly and then from among the existing schools of the district, the school was chosen randomly. After that, children symptom questionnaire was chosen by teachers of the school was compiled. After scoring students' questionnaires, 35 students showed symptoms of, oppositional defiant disorder, among whom 30 students were chosen randomly and categorized in two groups (15 students in experiment group and 15 students in control group).

4. INSTRUMENTS

4.1. Child Symptoms Inventory

The child symptom inventory (CSI-4) is one of the common screening methods for psychiatric disorders that is compiled on the basis of diagnostic and statistical criteria of the manual of mental disorders. The first draft of the inventory was designed and titled as SLUG inventory by Sprafkin, Loney Unita and Gadow in 1984. On the basis of the categorization in the third edition of The Manual of Diagnostic and Statistical of the Mental Disorders in order to screen 18 behavioral and emotional disorders in children between 5 to 12 years old. Later, after revising the third edition of the book in 1987 the CSI_3 version of the inventory was created and finally in 1994, after the publication of the fourth print of The Manual of the Diagnostic and Statistical of the Mental Disorders, the CSI-4 was revised and changed slightly by Gadow and Sprafkin in comparison with the previous versions. The last edition of the CSI-4 has two forms of parent and teacher. In the present study, the author has used the teacher checklist. The teacher form has 41 questions that assesses the behavioral disorders. Each of the above-mentioned questions are answered in a 4-option scale: Never, sometimes, and often and most of the times. In the present study, questions 19 t0 26 of the inventory assess oppositional defiant disorder. Two methods of scoring has been designed for the child symptoms inventory. The cut of point method and a method based on the severity of symptoms. In most of the researches, due to the more effectiveness and reliability, the cut of point method is used. In this research the scoring method is used too. In this method the method of scoring is possible through adding up the number of the questions answered by the options of often and most of the times (Mohammadesmaiil, 2001). The child symptom inventory has been examined in various studies and its validity, reliability and sensitivity has been calculated. In a research conducted by Grayson and Carlson (1991) on CSI-3R, its sensitivity was reported to be 93 percent for the oppositional defiant disorder. The other researchers reported the coefficience of the CSI-3R checklist to be 66 percent (Gadow and Sprafkin, 1994). In the research done by Kalantary et al (2001) the validity of the inventory was calculated by splitting the inventory into two halves: the teacher was 91 % and the parents was 85%. The content validity of the inventory of the CSI-4 was approved by 9 psychiatrists in the research conducted by Mohammadesmaiil (2001).

4.2. The Method of Implementation

After obtaining permission from the General Education Office and the Education Office of the 14th region in Tehran, the author resorted to the school in question. After resorting to the school, the teachers were aware of the procedure of the research and the features of the people with the oppositional defiant disorders. The students with this disorders were recognized. The especial teacher form of the inventory was filled by the teacher. The students whose scores were indicative of this disorder were selected. After that, the participants were categorized in two groups randomly. The students of the experimental group participated in 10 90-minutes reality therapy sessions. At the end of the sessions, the child symptoms inventory was filled by the teachers for both the experiment and control groups (posttest) and the results were recorded.
The Summary of the Intervention Program according to the divided Sessions:

The first session: Introducing the members and making communication among the members and psychologist.
The Goal: Familiarizing the group members with each other, establishing the emotional relationship among the members and psychologist.

The Second Session: Explaining the whyness and whatness of the behavior and introducing the constructive behaviors (appropriate) and annoying (harmful).

Goal: The examination of the concept of the relation with others, familiarity with the features of the effective relations.

The third Session: Practical exercise and objectivizing the constructive and harmful behaviors.
Goal: The individual's exposure to process of the practical behavior, practical and empirical examination the results emanating from the weak relation with others.

The fourth Session: Introducing the symptoms of oppositional defiant disorder explicitly and how feelings, excitements and behavioral incompatibilities can be destructive.
Goal: Changing the destructive behavior into satisfying behavior, examination of the obstacles (bitterness, anger, unconformity and disobedience, annoying others deliberately, chiding others).

The fifth session: Introducing the general behavior and familiarizing he group members with the components of the general behavior along with experiencing through playing role.
Goal: Familiarity with the concept and meaning of decision-making, the significance of decision-making, the stages of decision-making.

The sixth session: Discussing and talking about the behavior that are demonstrated when facing a frustration, the way to choose and controlling the appropriate behavior.
Goal: Critical view over behavior and the assessment of its usefulness in connection with self and others and accepting responsibility for behavior.

The seventh Session: Introducing the four conflicts and the forced behaviors.
Goal: The significance of relation and its role in making consent, self-esteem and meeting the basic requirement and creating mental health.

The eighth session: Recognizing the basic requirements of human being and categorizing the basic requirements by the members' and the psychologist's attempts and examining the significance of meeting the requirements.
Goal: Familiarity with the aspects of behavior from Glasser's perspective, the human's role in controlling behavior.

The ninth session: Teaching how the past events have passed and changing them is not possible and it is only the present and future situation that can be changed.
Goal: emphasizing the present time.

The tenth session: Overviewing the previous sessions and evaluating their progress.
Goal: Conclusion

In the sessions, first the previous tasks are reviewed, then the subject is discussed and later the task of the next session is determined and the members are asked to participate in the group discussions. At the end of the session, a conclusion is made of the presented subjects. In this research, the SPSS 18 has been used for analyzing the data. In the analytical statistics, in order to describe the achieved data, we used the mean and standard deviation. In the inferential statistics, given the fact that all the presuppositions of the covariance analysis are available, we used the covariance to analyses the data.

5. FINDINGS

The indexes of statistical descriptions related to the scores of the oppositional defiant disorder were calculated individually in each group. The descriptive data are available in table 1.

Table 1. The pretest and posttest statistical description of the scores of the "oppositional defiant disorders" in the two groups.

Groups	stages	mean	Standard deviation
Experiment	pretest	15.66	6.36
	posttest	11.33	2.09
Control	pretest	17.40	4.50
	posttest	18	3.27

According to table 1 and its mean and standard deviation, the difference among the teachers' assessments of the oppositional defiant disorder of the experiment and control groups is not significant. On the contrary, the mean of the scores of the oppositional defiant disorder of the experiment group in pretest (15.66) and posttest (11.33) shows significant difference. But in the control group there is a slight and intangible. Therefore, in order to have a more precise analysis, and to see whether the difference is statistically significant or not and to control the mean impact, we used the covariance analysis and its results are valuable in table 2.

6. HYPOTHESIS TESTING

The hypothesis: The reality therapy method has effects on the decreasing of the oppositional defiant disorder symptoms.

Table 2: The results of covariance analysis of the scores of the oppositional defiant symptoms in two groups.

The source of the changes	SS	DF	MS	F	P	The impact Measure
Pretest	21.95	1	21.95	3.12	0.001	0.104
Groups (Independent)	298.18	1	298.18	42.51	0.001	0.612
Error Variance	189.38	27	7.01			
Total	6998	30				

As indicated in the table, given the results and supposing the variable of the pretest in the means of the scores of the oppositional defiant disorder in two groups, there is a significant difference in the posttest stage ($P \leq 0.001$). It means that based on the teachers' assessments, the two groups of experiment and control are different in terms of the variable of oppositional defiant disorder symptoms in the posttest stage. Also, according to table 1, the scores mean of the oppositional defiant disorder symptoms in the experiment group are 11.33 and 15.66 respectively in posttest and pretest stages. The impact measure in this case amounts to 0.61, meaning that 61 percent of the posttest scores changes are related to reality therapy method.

7. DISCUSSION AND CONCLUSION

The oppositional defiant disorder is a method adopted by the children with unsatisfactory relations. Their brains are normal. The problem is that the teachers, before establishing a strong relation with them, force them to do what the children are not interested in. The changing of the teaching method suffices to persuade the children that what is done by the teacher is worth

doing. A few number of students study because they believe that education is to their interest (Glasser, 2003, translated by Sahebi, 2010).

The oppositional defiant disorder is one of the common disorders in childhood that will create unsolvable problems for the child and his family if it is not tackled in childhood. Therefore, interference with this disorder is necessary. This research aims at studying the impact of reality therapy on the decreasing of the symptoms in the students with the oppositional defiant disorder. The present study demonstrates that the method of reality therapy decrease the symptoms of the oppositional disorder in the students of the fifth and sixth grades in elementary schools significantly in the posttest stage. Therefore, the findings achieved in this research are in line with those conducted by Chen (1987), Kim (2002), Mason (2009) and Cornett (2012). In explaining the impact of the reality therapy on decreasing of the oppositional defiant disorder, first we must consider some of the features of the disorder. The researchers conducted on these people in recent years demonstrate the existence of some defects in the cognitive and social skills of these people. These defects are often obvious in the executive functions, emotional regulation, language processing, social information processing, problem-solving and compatibility (Hashemi et al, 2011).The children suffering from this disorder have problems in relation with teachers, parents and the like. The researchers conducted demonstrate that many of them lack the appropriate social skills and they are hardly accepted by their peers. Moreover, they have problems in detecting the problems and adopting appropriate procedures to solve them. In comparison with their peers, they adopt fewer positive solutions. These defects can create problems in school, in establishing positive relationships with peers and in attracting the other students' favors. They are also signs of the antisocial behaviors in adulthood (Schaefer, 2009).One of the therapeutic methods that can cause decrease in the symptoms of this disorder and in the negative effects is the reality therapy. The reality therapy leaps people control their behavior and make new choices. Also this method is based on the premise that people have control over their thoughts, desires and manners in their lives and they are responsible for them (Glasser, 1985). Glasser believes that the reality therapy stresses that people must face the reality of their lives and be responsible for them. They must face the right and wrong so that they would assess their own behaviors and adopt new methods for meeting their requirements. The reality therapy provide a useful conceptual framework for understanding people's behavior (Chung, 1994).

There are five essential requirements in the reality therapy: 1- need to survive; 2- Love and belonging; 3-freedom; 4-powe and 5- Recreation and entertainment (Cameron, 2009). Rapport (2007) defines the need to power as the capability of feeling important in his qualitative world. The essential need to power in students with the oppositional defiant disorder is regarded as problematic cause of struggle with the authorities. Cameron (2009) believes that the helplessness caused by the lack of this essential need will cause the loss of control in the person. As a result, the person may make decisions that will have negative effects for them. The students whose disorders are diagnosed will face functional problems in school, in particular with the school staff (Fahim et al, 2011).Therefore, the reality therapy will be effective in solving such problems by targeting the factors of unconformity and stubbornness in children and youth. During the reality therapy, the students will be able to replace the incompatible methods with the more compatible ones and to learn the more positive confrontational skills by behavioral assessments and adopting responsibility for their behaviors. Also, they will learn various and useful skills in different cognitive, emotional and social skills to make appropriate relations with others and solving the problems effectively. During the sessions, they will practice these skills by doing different activities with other students. Therefore, they will be able to generalize these skills to the similar situations in their real-world lives and they will tackle their social and emotional problems by using these skills so that the unmoral behaviors originated from the lack or loss of these skills will decrease gradually. Given the effectiveness of the reality therapy in increasing the responsibility of the students, this method can be used as

a means of internal control in these students, so that they will be able to increase their ability to control and to learn how to meet their needs (Kim, 2002).The results of the study confirms the effectiveness of the reality therapy in decreasing the symptoms of the oppositional defiant disorder in boy students.

In analyzing the individual questions related to the oppositional defiant disorder in the posttest of the experiment and control groups in the inventory filled by the teachers the reality therapy has significant effect on decreasing the struggling, disobeying, annoying deliberately and chiding. However, in decreasing the anger, irritability, violence and bitterness, the method has not significant effect. According to the observations done by the author and the teachers' comments, this interference method has no significant effect on the behaviors whose main center is aggressively. On the basis of this we can say that the reality therapy exert significant effects on those aspects of the oppositional defiant disorder which are caused by the educational factors.

Though the present research had the necessary control over, the present research faced with some limits, including time constraint, which led to the limitations in the number of the sessions. Another limit was the absence of the parents of the students during the training courses and also inconsistency between the author's interference and the teacher's. Therefore, it is a recommended that the teachers and parents be instructed about the necessary requirements and establishing the warm relation with students. It also necessary for the parents and teachers to participate in the training courses and interference. We also need to conduct more researches on this subject and increase the number of the samples and use the follow-up tests. This research needs to be conducted on other types of behavioral disorders and in various ages.

ACKNOWLEDGMENT

I express my gratitude to Prof Farangis Kazemi, Prof Shahla Pezeshk in the Allameh Tabatabai'I University, Tehran, Iran and Prof Ali Sahebi and all the other contributors who helped me conducting this research.

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