

The Effectiveness of Family-Centered Therapy Program on the Mental Health of Children and Adolescents with Bipolar Disorder and the Marital Satisfaction of Their Parents

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Abstract: *The Effectiveness of Family-Centered Therapy Program on the Mental Health of Children and Adolescents with Bipolar Disorder and the Marital Satisfaction of Their Parents. Method: The present research is a Quasi-Experimental study with experimental and control group. The research was investigation of Effectiveness of Family-Centered Therapy Program on the Mental Health of Adolescents with Bipolar Disorder and Marital Satisfaction of their parents. Measurement of mental health symptoms was performed by Initial Adaptive Schema Tests and Strengths and Difficulties Scale. Assessing their parents' Marital Satisfaction done by Afrouz Marital Satisfaction Scale. The data of the questionnaires were extracted and analyzed by Multivariable Analyze of Covariance (MANCOVA). The results presented that Family-Centered program affects Marital Satisfaction, Strengths and Difficulties, Initial Maladaptive Schemas of Adolescents with Bipolar Disorder in the Follow-up step. It is recommended to be considered this program as a complementary treatment for patients suffering from Bipolar disorder.*

Keywords: *Bipolar Disorder, Adolescent Health, Marital Satisfaction, Bipolar family.*

Introduction

Nowadays, there are many challenges associated with Bipolar Disorders treatment and diagnosis. However, definition of Bipolar Disorders returns to the early nineteenth century (Reinares, M et al., 2015). The patients having this disorder is characterized by depression, mania or mild mania. Bipolar Disorder symptoms are associated with low quality of life and functional destruction. In general population, the prevalence of Bipolar disorder has been reported amount 4%. According to the American Psychiatric Association guide, this prevalence is about 23% and 26% (McElroy SL, 2011). The prevalence of psychiatric disorders among Tehran citizens are almost 21.5%, 34.2% and 39.6% respectively. Nourbala et al evaluated the effect of some of primary variables on development of mental disorders. They concluded that women 1.3 times are more likely than man to have mental disorders. Over the past years, Bipolar disorder was detected only in the late adolescence and early youth. Morris Miklowitze, and vakofsky (2007) reported that 15-18% of patients with Bipolar disorder experience the first period of the disorder before age 13. Diagnosis of Bipolar disorder symptoms from other natural signs of teenage period is one of the problematic issue that professionals have been faced for identifying Bipolar disorder (Merikangas KR et al., 2011). Studies have shown that this patients having more controller family than other Adolescents. As a result, Family training can help improving the mental health of this Adolescent who have Bipolar Disorder. Mental health is an important structure in

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psychology (Noorbala, AA et al., 2011). In current years, Family Mental Training Programs have been seriously encouraged by mental health professions, like psychologists (Green MF, 2006). The purpose of this study was to examine the effect of Family Psychological Training on the Mental Health of Adolescents with Bipolar Disorder and Marital Satisfaction of their parents. In fact, these statement specify the educational and other provisions are necessary to meet the parents and then their children. Around 30% of rate of relapse decreased during an 18-month follow-up. The results of this study showed that family psychosocial training about early diagnosis of relapse symptoms and the methods of preventing can recurrence of their attacks (Apps, J., 2008). Family psychosocial training is an effective way helping the family of patients to manage problems associated with the family disorder and developing support skills. When family members join to program as a member of the medical team, they are more likely to support this program (Chwastiak, L.A, 2011). In this study, the researcher have examined the effects of Functional Family Therapy (FFT) on the Mental Health of Adolescents with Bipolar Disorder and Marital Satisfaction of Their Parents.

Research Background

The fifth edition of the Diagnostic and Statistical Manual of Mental Disorders has identified two types of Bipolar disorders including type one and type two. Bipolar Disorder type one is detected when a person are experiencing a period of depression and mild mania (Perlis, R, 2006). Bipolar disorders criteria in Adolescents have some differences with Adults. For instance, Depression in Adolescents is longer than adults (Tillman R, 2003). Personality disorders, Alcohol Addiction, Drug Abuse, Psychiatric disorders, and low level of social function in these individuals are significantly lower than Adults (Perlis, R, 2006). There was a significant positive correlation between age and the incidence of patients suffering from Bipolar disorders. Recently, organizations and proficient of health field have focused on health determinants of family (Jones DE, 2015). The levels of intimacy of child-parent relationship play a vital role in decreasing or increasing health problems (Steinberg L, 2017). Mothers of these Adolescents have lower mental health than normal Adolescents (Corsentino, E, 2008). The scientists suggest that Adolescents with bipolar disorders and their parent interaction, are presented their communication problems (Sansone RA, 2011). These studies reveal cause of relapse are of depression or mania symptoms in Adolescents .Ability to predicted of relapse factors, can help professionals to arrange an appropriate therapeutic plan for each patients (Perlis, R, 2006). While medication is base of treatment for patient suffering from Bipolar Disorder (Sansone RA, 2011), the medication cannot solve all problems of Bipolar Disorder.in Despite of using the medication, 40% of patients with Bipolar Disorder experience one-year mood swings (Godard, J, 2012). Controlling of symptoms of Bipolar Disorder such as having drug cooperation, can reduced the risk of relapse, but because of drug side effects such as metabolic degeneration, weight gain, fatigue and sleepiness, the patient do not have drug cooperation as a result they experience relapse many more times. (West AE, 2014). One of the common therapies of Bipolar disorder is psychosocial interventions (. Normcore AH, 2014).

These interventions with training life- skill help patient to control relapse risk of Bipolar disorder (Setir V, 2010). Different psychological interventions are performed to improve the symptoms of Bipolar disorder. In fact, family-based is a kind of this intervention (Weinstein SM, 2015). Mojarad Kahani (2011) investigated the effectiveness of group psychosocial interventions in the family function of patients with Bipolar Disorder, the results illustrate that group intervention could raise family Self-Efficacy (Weinstein SM,2015). Plosky et al. (2006) mentioned that family conflicts are as a risk factor of relapse of Bipolar Disorder symptoms (Pilowsky DJ, 2006). Miklowitze et al. (2014) conducted a study on the families of adolescents with Bipolar Disorder within two-years. The results showed that functional family therapy (FFT) is effected in reducing relapse of Bipolar disorder (Mojarad Kahani, 2012). George et al. (2011) concluded that this intervention reduced the relapse of symptoms of Bipolar disorder in these Adolescents. In this research, the dimensions of the effectiveness of family-centered therapy program on the mental health status of adolescents with bipolar disorder and marital satisfaction of their parents were examined. According to the results of various studies, it is assumed that these symptoms in adolescents reduce their mental health and marital satisfaction of parents (Mojarad Kahani).

The main purposes of study are:

- The effectiveness of family-centered therapy program on the mental health of adolescents with bipolar disorder
- The effectiveness of family-centered therapy program on the marital satisfaction of their parents

Research Method

The present research is a Quasi-Experimental study with experimental and control group. The statistical population of this study was all bipolar adolescents in Tehran. From Bipolar patients admitted to Imam Hossein Hospital, 30 Adolescents with Bipolar disorder who had the inclusion criteria were selected based on the targeted and convenient method. They were randomly assigned two groups of 15, and 15 patients in the experimental group received medication and family-centered training and 15 patients in the control group received only medication. All members of the group got acquainted with research and therapy plan orally and a written consent was received from them for participation in the research. These Adolescents with Bipolar Disorder admitted to the center had the inclusion criteria including Bipolar Adolescents admitted to the psychiatric department of the Child and Adolescents. The entrance criteria were including: a) having parents with Bipolar disorder) parents do not be in recurrence period c) they have not addiction, d) having literacy, and fill out the study consent form. The exclusion criteria were including: 1) addicted parents, 2) do not have reading and writing skills, 3) parents in relapse period, 4) dissatisfaction to participate in the research. Patients were randomly divided into two groups of control and experimental group; each group was consisted 15 participants. The test group was conducted during 6 sessions (weekly, a 90-minute session). The samples were evaluated before the intervention and immediately after the intervention and the control group was tested at similar intervals.

Young Schema Questionnaire

Young Schema Questionnaire (YSQ_S3) was used in this study. (Parikh SV, 2012) He used the interpersonal techniques within a cognitive-behavioral framework and used the concept of initial maladaptive schema beyond the short-term approach. According to this definition, schemas are essentially non-conditional beliefs. For this reason, they were inflexible and perceived by individuals as a model for the processing of experience, maintenance, and irrevocably. (Parikh SV).

The reliability of this questionnaire was reported by calculating the Cronbach's alpha coefficient as much as 0.94 (HU Y-f, 2007, 2016). Also, the reliability of the Young Schema Questionnaire with 75 items by Sadughi et al. (2008) and Glaser et al. (2002) on a general scale were as much as 0.94 to 0.96 for the general scale and 0.62 to 0.93 for the subscales (Ghiasi et al. Parikh SV, 2011)D

Abilities and Problems Questionnaire

Abilities and Problems of children and adolescents, which evaluated the results of the findings in 25 items. This questionnaire assesses the strengths and difficulties of children and adolescents in 25 items. Each question is categorized has been categorized as "completely correct", "somehow correct", and "incorrect", so the reporter must choose one of them (Cherkin DC, 2016).. According to parents and teachers, there were significant differences in behavioral problems and desirable social behaviors between the two genders. The total score of the problems in 70% of the sample population in the parent and teacher questionnaire was under 12 and 13, respectively. Considering the cut-off point of 5 on hyperactivity score, it was higher or equal to this value in parent questionnaires with a sensitivity of 70%, an attribute of 76%(Miklowitz DJ, 2006). This was higher or equal to 5 with a sensitivity of 52% and an attribute of 75% in the teacher questionnaire. The results of this study show a relatively favorable sensitivity and specificity.

Afrouz Marital Satisfaction Questionnaire

In this research we used Afrouz Marital Satisfaction Questionnaire .The current study aimed to observe the practicality, reliability, validity and norm finding of Afrouz couple's satisfaction scale. For this reason, a sample consisted of 415 guidance and middle schools teachers in Tehran city were selected by multi stages random sampling method then Afrouz marital satisfaction scale (110 item, based on Likert's 4 point spectrum, fully agree to fully disagree) was administrated by the sample. The result of this study

show that, reliability coefficient of this test obtained through Cronbach Alpha was equal to (0/989). According to the results of the research marital satisfaction of parents in the two experimental groups in the post-test and follow-up stages was significantly different from pre-test stage, which was followed by a graph of the total score obtained from this questionnaire (Zohreh S,2008)

Research Theory

The protocol has 6 sessions of treatment, and is based on meetings organized by (Miklowitze, 2009) in a 1.5-hour session with bipolar adolescents. The content of the therapeutic sessions includes Symptomatology and etiology, types of treatments and their complications, the effect of disorders on the family and family reaction and how to deal with the patient, problem-solving methods, critical support resources, and common family problems such as education, marriage, and employment.

Results

The demographic results of the research subjects have been presented. The research samples were in the age range of 13-16 years old with a mean and standard deviation as much as 14.03 ± 1.03 for the experimental group and 13.84 ± 1.24 for the control group. There were 7 (47%) boys and 8 (53%) girls in both groups, indicating the homogeneity of the two groups in age and gender indicators.

Descriptive indicators obtained from marital satisfaction, strengths and difficulties, initial maladaptive schemas of adolescents tests have been shown in three stages of pre-test, post-test, and follow-up.

Table (1): Demographic characteristics of both experimental and control groups

Group variables		Experiment (15 people)	Control (15 people)
Age (year)		14.03 \pm 1.53	13.84 \pm 1.24
Gender	Boy	(%47) 7	(%47) 7
	Girl	(%53) 8 girls	(%53) 8 girls
Educational level	Sixth	%33	%37
	Seventh	%46	%41
	Eighth	%19	22

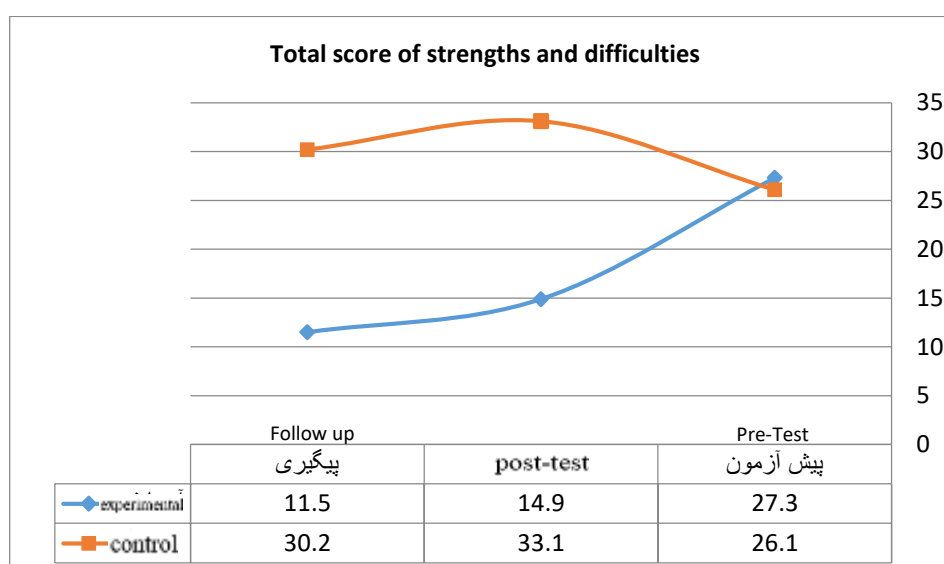


Figure (1): Pre-test, post-test, and follow up of the total score of strengths and difficulties in the experimental and control groups

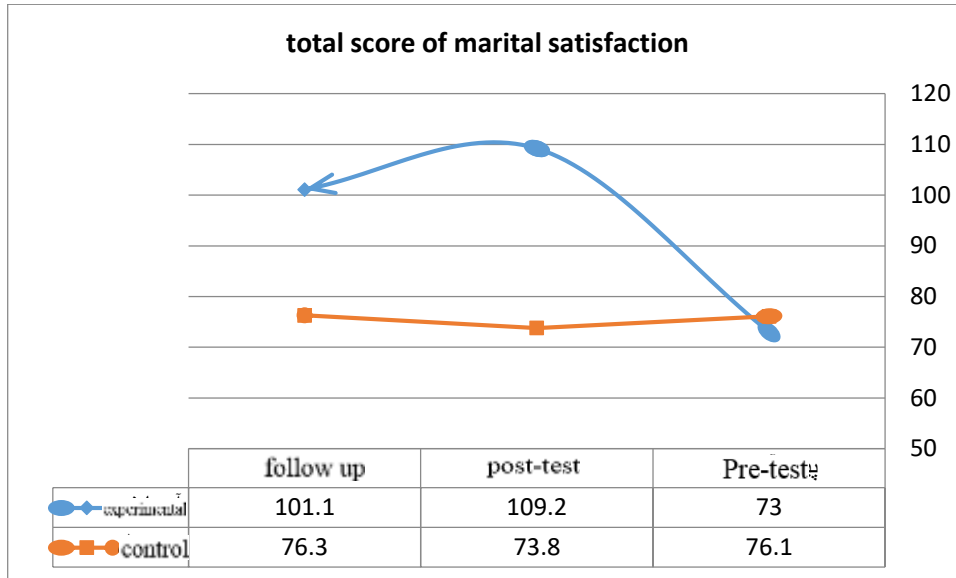


Figure (2): Pre-test, post-test, and follow up of the total score of marital satisfaction in the experimental and control groups

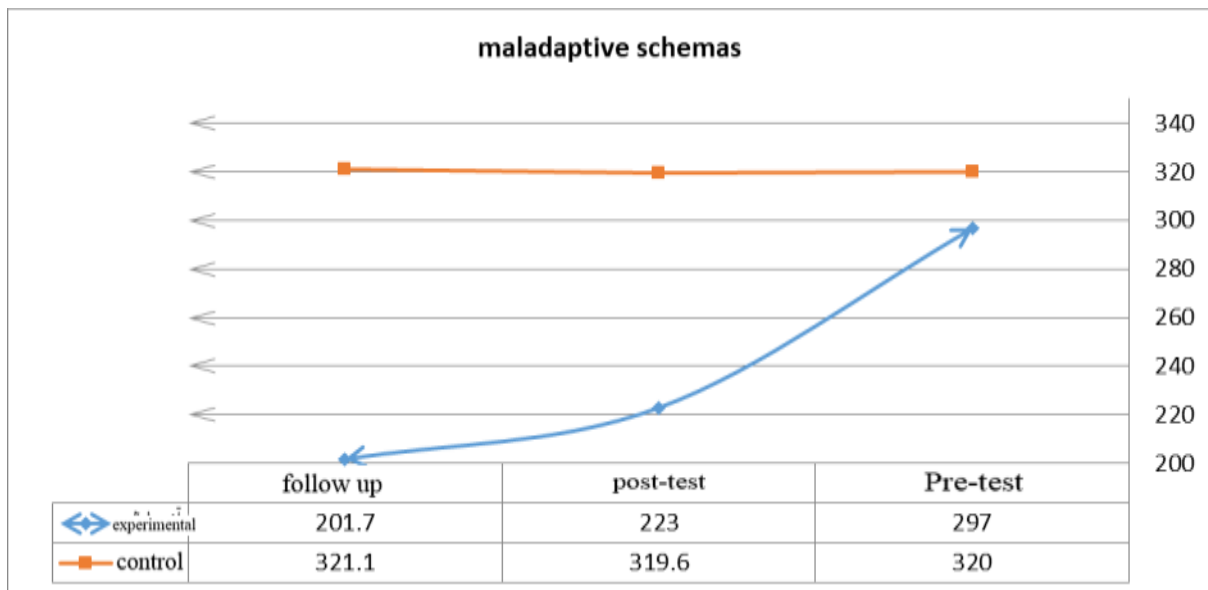


Figure (3): Scores of maladaptive schemas in pre-test and post-test

Manova covariance analysis was used to show a significant difference between the post-test and follow-up scores as well as adjustment of the pre-test effect of two groups of experiment and control. In the first step, the Shapiro Wilk test was used to examine the distribution of the variable to investigate the multivariate covariance assumptions and the results were confirmed ($P < 0.05$). The Mbox test confirmed the homogeneity of variance and covariance matrices ($P = 0.17$). The homogeneity assumptions of variances were also tested and validated using the Levene test ($P < 0.05$). In addition, the study of homogeneity of regression slope shows a non-significant correlation between conditions and pretest. Therefore, the preconditions for covariance analysis were established and the multivariate covariance analysis can be used to analyze the test scores whose results are presented in Tables 2 and 3.

Table (2): The Significance of Multivariate Covariance Analysis (MANCOVA) of the effectiveness of family-centered training on marital satisfaction, strengths and difficulties, initial maladaptive schemas of adolescents with bipolar disorder

Test	Value	Degrees of freedom	Degree of Freedom of Error	F	P-Value
Pillai's trace	.727	5.336 ^a	6.000	12.000	.007
Wilks Lambda trace test	.273	5.336 ^a	6.000	12.000	.007
Hotelling's Trace Test	2.668	5.336 ^a	6.000	12.000	.007
Roy's largest root	2.668	5.336 ^a	6.000	12.000	.007

The results of Table 2 show that the significant levels of all tests allow the use of the Multivariate Covariance Analysis (MANCOVA) test and the results of this test can be trusted.

Table (3): Multivariate Covariance Analysis of the effectiveness of family-centered training on marital satisfaction, strengths and difficulties, initial maladaptive schemas of adolescents with bipolar disorder

Variables		Sum of squares	Degrees of freedom	Mean Square	F	Significance level	Eta square
Effect of group for post test	marital satisfaction	152.192	1 and 27	152.192	2.561	.044	.032
	strengths and difficulty	123.987	1 and 27	123.987	5.433	.032	.242
	initial maladaptive schemas	8155.634	1 and 27	8155.634	25.009	.000	.595
Effect of group for follow up	marital satisfaction	279.102	1 and 27	279.102	2.153	.038	.064
	strengths and difficulties	129.123	1 and 27	129.123	3.108	.046	.155
	initial maladaptive schemas	5370.287	1 and 27	5370.287	6.283	.023	.270

Discussion and conclusion

A reduction was observed in the scores of the total score, hyperactivity disorder, focus deficit, and behavioral disorder regarding the effect of family-centered training on improving the health status of adolescents with bipolar disorder. However, the scores of social skills and peer relationships were increased. There was also a significant reduction in initial schemas criteria i.e. detachment and exclusion, guidance by others, self-regulation, impaired performance, excessive obeying, inhibition, and disordered limitations and boundaries. In general, it can be concluded that the experimental group had a significant difference in the level of strengths and difficulties and maladaptive schemas with the control group.

According to Table 3, variables of marital satisfaction ($P=0.05$, $F=2.56$), strengths and difficulties ($P=0.05$, $F=5.43$), and initial maladaptive schemas ($P=0.001$, $F=25.00$) were significant at the level of $\alpha = 0.05$ in the posttest. The results of studies by Leo (2015), Swartz et al. (2016), George et al. (2015), Yaghoubi (2014), and Habibi (2012) (Sarvkalaei HE, 2014) were consistent with the results of this study. Studies show that mutual satisfaction in healthy relationships can predict the health and well-being of the family (Habibi Z, 2013). Turnbull and Turnbull (2005) believe that each family has its own interactions, functions, and life cycles, and any experience that affects one member of the family affects all family members (Boylan, K, 2013). This can lead to a change in the roles and responsibilities of each family member. In these families, solutions are used to deal with and control the disorder that is ineffective or inappropriate (Motomura, N, 2010). Psychological treatments such as family therapy, family-centered training, and cognitive-behavioral therapy have been able to make many improvements in the treatment of depression and anxiety disorders, but it has not yet achieved much success in treating bipolar disorder symptoms (Miklowitz DJ, 2018). The use of long-term medication in the treatment of bipolar disorders can control acute symptoms, but has not been successful in preventing relapse of the disorder (Ramirez, G., 2016). Studies have shown that family psychological training is effective in controlling mania symptoms through the efficacy of drugs on bipolar patients as one of the methods of psychotherapy along with drug therapy (Green MF, 2006).

It can be concluded that family-centered training seems to be an effective support in the treatment process on marital satisfaction, strengths and difficulties, and initial maladaptive schemas of adolescents with impaired bipolar patients (Fiorillo, A,2013. However, some researchers (Fiorillo, A, 2013), including the researcher in this study, have not been able to demonstrate its full effectiveness. In conclusion, the results indicate that providing family-centered training sessions alongside medication therapy was effective in bipolar patients and the treatment results were sustainable.

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