KMAN PUBLISHING INSTITUTE
Journal Website

Article history:
Received 19 November 2023
Revised 11 January 2024
Accepted 20 December 2024
Published online 10 March 2024

Journal of Adolescent and Youth Psychological Studies

Volume 5, Issue 3, pp 9-22

E-ISSN: 2981-2526

Effectiveness of Parental Behavioral Training on Distress Tolerance, Family Cohesion, and Maternal Parenting Self-Efficacy in Mothers of Children with Oppositional Defiant Disorder Symptoms

Firozeh. Oladzad Abbasabadi[1], Ramezan. Hasanzadeh[2*], Hosseinali. Ghanazadegan[3]

[1] Phd Student, Educational Psychology, Sari Branch, Islamic Azad University, Sari, Iran
[2] Professor, Department of Psychology, Sari Branch, Islamic Azad University, Sari, Iran
[3] Department of Psychology, Sari Branch, Islamic Azad University, Sari, Iran

*** Corresponding author email address**: hasanzadeh@iausari.ac.ir

A r t i c l e I n f o

Article type:
Original Research

How to cite this article:
Oladzad Abbasabadi, F., Hasanzadeh, R., & Ghanazadegan, H. (2024). Effectiveness of Parental Behavioral Training on Distress Tolerance, Family Cohesion, and Maternal Parenting Self-Efficacy in Mothers of Children with Oppositional Defiant Disorder Symptoms. *Journal of Adolescent and Youth Psychological Studies, 5*(3), 9-22.
https://doi.org/10.61838/kman.jayps.5.3.2

A B S T R A C T

Objective: Oppositional Defiant Disorder (ODD) is one of the behavioral disorders classified under destructive and harmful behavior disorders. Children with this disorder tend to destroy objects around them and defy the commands of parents and school authorities. Therefore, the purpose of this study was to examine the effectiveness of parental behavioral training on distress tolerance, family cohesion, and maternal parenting self-efficacy in mothers of children with symptoms of ODD.
Methods and Materials: This study employed an experimental method. It was designed as a quasi-experimental study with pre-test, p1-10ost-test, follow-up, and control groups. The population of this study included all mothers of children with symptoms of ODD under the coverage of the Imam Khomeini Relief Committee in Sari city during the academic year 2021-2022. Thirty individuals were selected through purposive sampling from among mothers of children with ODD and divided into two groups of 15 (one experimental and one control group). The experimental group received parenting training based on Choice Theory in eight 90-minute sessions, while the control group was placed on a waiting list. Measurement tools included the Distress Tolerance Scale by Simons and Gaher (2005), the Family Cohesion Scale by Olson (1999), and the Parenting Self-Efficacy Questionnaire by Dumka. Descriptive statistics (such as frequency tables, mean indexes, and standard deviation) and inferential statistics (univariate analysis of covariance and Bonferroni post-hoc test) were used for data analysis, with SPSS-22 software facilitating the analysis process.
Findings: The F-value of univariate analysis of covariance for the distress tolerance variable in the post-test (F=59.57, P=0.001) and follow-up (F=57.85, P=0.001), family cohesion in the post-test (F=45.52, P=0.001) and follow-up (F=47.13, P=0.001), and finally for the parenting self-efficacy variable in the post-test (F=39.48, P=0.001) and follow-up (F=41.14, P=0.001) were significant.
Conclusion: Based on the findings, it can be concluded that parental behavioral training is effective in improving distress tolerance, family cohesion, and maternal parenting self-efficacy in mothers of children with symptoms of ODD.

Keywords: *Parental behavioral training, Distress tolerance, Family cohesion, Parenting self-efficacy, Mothers, Oppositional defiant disorder.*

1. Introduction

Behavioral disorders are typically observed in the early years of childhood and peak between the ages of 8 and 15. Oppositional Defiant Disorder (ODD) is a behavioral disorder classified under destructive and harmful behavior disorders. Children with this disorder tend to destroy objects around them and defy the commands of parents and school authorities (APA, 2022). Children with symptoms of ODD usually do not perform well in school, are poor in interpersonal relationships, have attention problems and deficiencies in executive functions, and are mainly lacking the cognitive, social, and emotional skills required to meet greater demands (Gomez & Stavropoulos, 2019). Parents of children with behavioral disorders such as ODD significantly report higher levels of externalizing behaviors such as aggression in their children compared to normal children. Oppositional behavior is often part of the natural development phase of children aged two to three years and the early teenage years, but the prevalence of this disorder in various studies has been reported to be between 2 to 16 percent (Chen et al., 2020). Various research has emphasized that mothers of these children experience intense psychological stress and high anxiety and are prone to mood disorders such as depression and anxiety (Burke et al., 2021). Moreover, a comparison of the psychological adjustment of fathers and mothers of children with ODD found that mothers of these children experience a higher level of stress related to family problems and pessimism about their child's future, a higher consumption of antidepressants, and a higher level in seeking treatment compared to fathers.

Parental self-efficacy relates to parents' judgments about their ability to perform important parenting tasks successfully. Numerous studies have shown that parents with high self-efficacy are more likely to engage in positive parenting behaviors, which in turn enhances the development of their children (Holloway et al., 2019). Also, the results have shown that problematic child behaviors are more related to the self-efficacy of mothers than fathers (Albanese et al., 2019). The correlation between self-efficacy and parental behavior has been studied, showing that self-efficacy, parental behavior, and child behavior are interactively related and influence each other. Parents with an anxious or distressed child often feel less effective than other parents (Kuhn & Carter, 2006). Parents with low self-efficacy are more likely to resort to harsh and authoritarian methods, whereas parents with higher self-efficacy use more positive parenting methods such as warmth, sensitivity, positive affection, adaptability, and regulation. Children of parents with low self-efficacy are more stubborn and less compliant (Glatz & Trifan, 2019).

On the other hand, Lin et al.'s research (2018) showed that another problem of parents of children with ODD is the low family cohesion among them (Lin et al., 2018). Emotional bonding, warmth of relationships, and the emotions that dominate cohesive families create a feeling in their children that they are accepted by their parents and that the parents are sensitive and responsible to their needs. Additionally, a cohesive family can be a source of cognitive, emotional, and behavioral feedback, enabling children and adolescents to effectively deal with different situations (Sharma & Joshi, 2015). In cohesive families, leadership and family management are democratic and less autocratic, with younger family members also participating in decision-making (Majlesi et al., 2023). This flexibility makes the family more cohesive. Family cohesion represents the solidarity among family members and also the capital of every society, which, if established in families, enables us to respond well to threats to the family (Pirzadeh & Parsakia, 2023).

Also, studies showed that one of the problems of mothers with children with ODD is their lower ability to tolerate distress compared to normal mothers (Matheny et al., 2017; Skues et al., 2016). Distress is recognized as a series of thoughts, perceptions, and potentially uncontrollable negative emotions that act to solve an internal issue with an uncertain outcome and one or more negative results (Kyron et al., 2022). Individuals with a low level of distress tolerance typically engage in inappropriate attempts to cope with negative emotions, becoming involved in a kind of behavioral disorder and seeking to alleviate their emotional pain through avoidant behaviors (Lass & Winer, 2020). Some research has shown that distress reduces the body's resistance to infection and also stimulates the thyroid, pancreas, and pituitary gland. In general, multiple physical and psychological aspects of humans are affected by distress, which can lead to physical complications (Elhai et al., 2018; Fassbinder et al., 2016; Gallego et al., 2020; Ghaderi et al., 2020).

To increase parental self-efficacy, family cohesion, and the ability to tolerate distress in mothers, various approaches have been proposed, one of the effective approaches in this context being parental behavioral training, as research by Yeesunsri et al. (2021) indicates the effectiveness of parental behavioral training on the parenting self-efficacy of mothers. In this method, caregivers and parents, especially mothers,

JAYPS Adolescent and Youth Psychological Studies E-ISSN: 2981-2526

are involved in educational programs and taught methods to change their interactions with their children (Yeesunsri et al., 2021). One of the methods based on parental behavioral training is Barkley's parenting training (1997), designed for parents and children aged 2-12 years, consisting of two parts. The first part teaches parents more effective methods of dealing with children. The second part teaches parents punitive methods (Barkley, 2011). Research has shown the effectiveness of this program in reducing symptoms of defiance and has also increased parents' skills in selective attention to child behaviors, issuing correct and clear commands, and employing disciplinary exercises. The generalization of training effects from clinical settings to outside the clinic has also been reported. Parental behavioral training, based on the principles of social learning, teaches parents to identify and monitor inappropriate behaviors of their children, intentionally and planned ignoring, temporary deprivation, and other non-physical and non-corporal punishment techniques to change their children's behaviors and reinforce appropriate behaviors through attention, verbal encouragement, and rewards to achieve desired behaviors (Dehghan Manshadi et al., 2016; Glatz & Trifan, 2019; Hakim Shooshtari et al., 2020; Hosseinnezhad et al., 2021; Maaskant et al., 2016; Schleider & Weisz, 2017).

Finally, given that mothers of children with symptoms of ODD in this study are visitors to the Relief Committee, it seems that due to financial problems, which are sometimes accompanied by cultural, family, and social problems, they face double challenges in raising their children. Considering the importance of the mental health of mothers of children with symptoms of ODD and the role of distress tolerance, family cohesion, and maternal parenting self-efficacy on the health of mothers and the need for intervention in this area, and the lack of a comprehensive, integrated, and coherent research on the subject, the researcher in this study seeks to answer the following question: Is parental behavioral training effective in improving distress tolerance, family cohesion, and maternal parenting self-efficacy in mothers of children with symptoms of ODD?

2. Methods and Materials

2.1. Study Design and Participants

The current study employed an experimental method. It was a quasi-experimental design with a pre-test, post-test, follow-up, and control group. In this design, the experimental group received parental behavioral training, while the control group did not receive any intervention and was placed on a waiting list. After the study's completion, in adherence to ethical research principles, the intervention was also conducted for the control group. The study population included all mothers of children with symptoms of Oppositional Defiant Disorder (ODD) under the coverage of the Imam Khomeini Relief Committee in the city of Sari during the 2022-2023 academic year. It is worth mentioning that children with symptoms of ODD were those diagnosed with ODD based on the Oppositional Defiant Disorder questionnaire by Hashemi and colleagues (2008). Considering the presence of three variables and three groups, the study was based on a multivariate model, with a Cohen's F effect size of 0.25 considered for average effect size in comparative analyses, a power of 90%, and a confidence level of 95%. Ultimately, the required sample size was determined to be 30 in total. Using purposeful non-random sampling based on pre-test questionnaire scores, 45 individuals who met the inclusion and exclusion criteria were selected from among mothers of 7-12-year-old children covered by the Imam Khomeini Relief Committee in Sari, who had symptoms of ODD. Then, 30 selected individuals were randomly assigned into two groups of 15 each.

Inclusion criteria included: 1. Mothers aged 25-45 years; 2. Mothers of 7-11-year-old children with symptoms of ODD; 3. Completion of the consent form for treatment and willingness to cooperate; 4. Scoring low on questionnaires for parenting self-efficacy, family cohesion, and distress tolerance; 5. Being under the coverage of the Imam Khomeini Relief Committee; 6. Not having acute psychological or personality disorders based on scores on the revised symptom checklist questionnaire; 7. Commitment to attending all sessions and not receiving individual counseling services outside of the treatment sessions. Exclusion criteria included: 1. Mothers who were addicts or alcoholic; 2. Those taking psychiatric and psychoactive drugs; 3. Mothers with physical disabilities or intellectual disabilities; 4. Mothers who were found during the treatment to not meet the research objectives; 5. Absence from more than two treatment sessions; 6. Having a mental disorder based on self-report; 7. Attending psychotherapy sessions at counseling centers and clinics in Sari individually or in groups.

The required information for the current research was collected through library research, including accessing reputable domestic and international databases, university libraries, scientific and research centers, and obtaining relevant articles and books. Field-level data collection, after coordination with the authorities of the Imam Khomeini

JAYPS Adolescent and Youth Psychological Studies E-ISSN: 2981-2526

Relief Committee in Sari and providing explanations to the authorities and mothers of children with symptoms of ODD in Sari during the 2022-2023 academic year, involved purposive sampling of 30 mothers of children with ODD (based on the Oppositional Defiant Disorder questionnaire scores by Hashemi and colleagues, 2008), divided into two groups of 15 each (one experimental and one control group). The experimental group received choice theory-based parenting training in 8 sessions of 90 minutes each, and the control group was placed on a waiting list. After the training sessions, questionnaires were administered again to both groups.

2.2. Measures

2.2.1. Oppositional Defiant Disorder

To assess oppositional defiant behavior, the Oppositional Defiant Disorder questionnaire by Hashemi et al. (2008) was used. This questionnaire consists of 8 five-option questions scored on a five-point Likert scale (very low=0 to very high=4), so the total score can range from 0 to 32, with a cut-off point of 16 indicating high oppositional defiant behavior for scores above it and low for scores below. The reliability coefficient for the total scale was found to be 0.93 in the study by Hashemi and colleagues (2008) (Davudi et al., 2018; Esmailzadeh, 2019).

2.2.2. Distress Tolerance

Developed by Simons and Gaher (2005), this questionnaire is a self-assessment index of emotional distress tolerance, comprising 15 items and four subscales: Tolerance (enduring emotional distress), Absorption (being absorbed by negative emotions), Appraisal (mental assessment of distress), and Regulation (regulating efforts to alleviate distress). Items are scored on a five-point Likert scale, with a cut-off point of 45. Alpha coefficients for these scales are respectively 0.72, 0.82, 0.78, 0.70, and 0.82 for the entire scale. The scale has been shown to have good criterion and convergent validity (Simons & Gaher, 2005; Vahdani et al., 2020).

2.2.3. Family Cohesion

Adapted from Olson's (1999) circumplex model by Shakeri (2003), this questionnaire consists of 16 questions scored on a Likert scale, with a maximum score of 80 and a minimum of 16, and a cut-off point of 48. Its reliability and validity were confirmed in a study on 48 subjects, with a Cronbach's alpha coefficient reported as 0.89. Factor analysis yielded a single general factor (g) termed flexibility. The questionnaire's reliability was also confirmed with a Cronbach's alpha of 0.78 in the study (Hadadian et al., 2020; Olson, 2000).

2.2.4. Parenting Self-Efficacy

Introduced by Dumka, this questionnaire consists of 10 questions scored on a seven-point Likert scale from 1 (strongly disagree) to 7 (strongly agree), with items 1, 3, 5, 6, 8 scored inversely. The lowest score is 10 and the highest is 70, with a cut-off point of 40. The questionnaire is applicable to both fathers and mothers. Its reliability was calculated through Cronbach's alpha at 80%. Construct validity was examined through exploratory factor analysis, showing all items loading on one factor. Its validity was confirmed using Cronbach's alpha of 0.76 and split-half method of 0.73 (Albanese et al., 2019; Dehghan Manshadi et al., 2016).

2.3. Intervention

2.3.1. Parental Behavioral Training

In this study, parental behavioral training was conducted over 8 sessions of 90 minutes each, based on Barkley's (1997) parental training program, for the experimental group (Barkley, 2011).

Session 1: Introduction and Rules Explanation

Objectives: The first session focused on familiarizing group members with one another, explaining group rules to prevent confusion, and fostering a sense of calm and cooperation among participants. Emphasis was placed on the importance and necessity of parental training and its impact on parent-child relationships and improving child behavior.

Session 2: Enhancing Awareness of Reinforcement and Its Types

Objectives: The second session aimed to increase mothers' awareness of the concept of reinforcement, its types, and application methods. Positive and negative reinforcement principles were taught, emphasizing the use of reinforcement to increase positive child behaviors, immediate encouragement after target behavior occurrence, and the diversity and prominence of encouragement, including verbal, material, social, and token reinforcement.

Homework: Participants were assigned to apply at least three instances of positive and negative reinforcement before the next session.

JAYPS Adolescent and Youth Psychological Studies
E-ISSN: 2981-2526

Session 3: Punishment and Deprivation

Objectives: This session was dedicated to learning correct punishment principles and their effects, understanding deprivation methods, differentiating between punishment and deprivation, and providing concrete examples of punishment and deprivation.

Homework: Emphasis was placed on implementing at least two appropriate deprivation and punishment instances by the next week and reporting the outcomes.

Session 4: The Concept of Extinction and Necessary Conditions

Objectives: Participants were introduced to the concept of extinction and its formation process. The session covered the relationship between reinforcement, punishment, deprivation, and extinction, explaining how extinction is related to the elimination of inappropriate behaviors.

Homework: The application of punishment, reinforcement, and extinction principles to specific behaviors was assigned, with participants expected to report the outcomes in the following week.

Session 5: Teaching the Token Economy Principle, Behavior Shaping, and Premack Principle

Objectives: This session focused on teaching behavior shaping and the Premack principle, the token economy method, its impact on desirable and undesirable behaviors, and how to shape behavior using active conditioning. The use of the Premack principle in fostering desirable behaviors and eliminating undesirable ones was also covered.

Homework: Participants were tasked with documenting at least one instance of applying the mentioned principles over a week and reporting the outcomes.

Session 6: Teaching the Principle of Dependency Contracts

Objectives: The sixth session aimed at teaching the principles of creating dependency contracts, establishing communication with children through behavioral contracts, attention to contract details, and obstacles to performing tasks by the child. The importance of self-capability in fulfilling the contract obligations was stressed.

Homework: A week-long effort to create an appropriate dependency contract with the child and report the outcomes was assigned.

Session 7: Teaching the Principles of Modeling and Role-Playing

Objectives: This session introduced modeling and role-playing, explained proper modeling methods for children, described characteristics of an appropriate model, and how mothers could model through role-playing alongside their children to perform specific roles.

Homework: Participants were instructed to document similar instances of applying the aforementioned principles over the next week and report the outcomes in the following session.

Session 8: Summary of Sessions, Post-Test

Objectives: The final session reviewed the learned content from the previous seven sessions, addressed doubts and questions, and discussed the application of learned principles. It aimed to solve obstacles and answer questions, concluding the sessions by reviewing feedback, sharing experiences and feelings, and executing the post-test for the experimental group.

2.4. Data analysis

Data analysis utilized descriptive statistics (such as frequency tables, mean indexes, and standard deviation) and inferential statistics (univariate analysis of covariance and Bonferroni follow-up test), facilitated by SPSS-22 software.

3. Findings and Results

In terms of demographic characteristics among the mothers participating in the study, the experimental group had an average age of 31.72 years, and the control group members had an average age of 30.22 years.

Table 1

Descriptive Data of Scores for Experimental and Control Groups

Variable	Group	Pretest	Posttest	Follow-up	Pretest SD	Posttest SD	Follow-up SD
Distress Tolerance	Control	30.25	30.10	30.35	5.14	6.22	6.18
	Experimental (Behavioral Training)	30.10	40.30	40.20	5.08	7.24	7.15
Family Cohesion	Control	26.70	26.85	26.50	3.82	3.84	3.73
	Experimental (Behavioral Training)	26.88	36.35	36.30	3.90	4.28	4.14
Parental Self-Efficacy	Control	20.90	20.75	20.60	2.62	2.03	2.55
	Experimental (Behavioral Training)	20.70	28.65	28.62	3.52	3.03	3.01

JAYPS Adolescent and Youth Psychological Studies E-ISSN: 2981-2526

Table 1 reports the descriptive findings of the study variables. Statistical inference was used to examine the significance of changes in variables after the intervention. Before inferential analysis, the primary assumptions of the multivariate analysis of covariance test were examined, including: 1- normal distribution of scores, 2- homogeneity of variance of scores, 3- equality (homogeneity) of the variance-covariance matrix of scores, and 4- homogeneity of the regression slope.

In this study, prior to conducting inferential statistical analyses, key assumptions for the multivariate analysis of covariance (MANCOVA) were rigorously tested to ensure the validity of our findings. The assumptions checked included the normality of distribution, homogeneity of variances, equality (homogeneity) of covariance matrices, and the homogeneity of regression slopes. The Shapiro-Wilk test confirmed the normal distribution of scores across all variables, with significance levels well above the 0.05 threshold, indicating no deviation from normality. Levene's test for equality of variances returned non-significant results ($p > .05$) for all dependent variables, confirming the homogeneity of variances. Box's M test for equality of covariance matrices was also non-significant ($p > .05$), suggesting that the assumption of homogeneity of covariance matrices was met. Lastly, the interaction term between the covariate and the independent variable in the ANCOVA was non-significant ($p > .05$), confirming the homogeneity of regression slopes. These tests collectively validated the assumptions required for the accurate application of MANCOVA, thereby underpinning the reliability of the subsequent analyses and findings.

Table 2

Results of Univariate ANCOVA for Distress Tolerance Variable in Experimental and Control Groups

Research Phase	Group Membership	Dependent Variable	Sum of Squares (SS)	Degrees of Freedom (df)	Mean Squares (MS)	F	Significance Level (P)	Effect Size (Eta)
Posttest	Group Membership	Distress Tolerance	135.53	1	135.53	59.57	0.001	0.76
Follow-up		Distress Tolerance	133.49	1	133.49	57.85	0.001	0.74

The results in Table 2 indicate that the F-value for the univariate analysis of covariance for the distress tolerance variable in the post-test (F=59.57, P=0.001) and follow-up (F=57.85, P=0.001) is significant, meaning that the parental behavioral training intervention had an effect on the distress tolerance of mothers of children with symptoms of ODD. The Bonferroni test was used to accurately determine the extent of difference between the experimental and control groups in the distress tolerance variable. The results of this test are reported in Table 3.

Table 3

Results of Bonferroni Post-Hoc Test for Comparing Adjusted Means of Distress Tolerance in Posttest and Follow-up Between Experimental and Control Groups

Variable	Groups Compared	Adjusted Means Difference	Mean Difference	Standard Deviation	Significance Level
Posttest Distress Tolerance	Experimental (Behavioral Training) - Control	30.10 – 40.30	10.20	2.32	0.001
	Control - Experimental (Behavioral Training)	40.30 - 30.10	-10.20	2.32	0.001
Follow-up Distress Tolerance	Experimental (Behavioral Training) - Control	30.35 – 40.20	9.85	2.28	0.001
	Control - Experimental (Behavioral Training)	40.20 - 30.35	-9.85	2.28	0.001

As observed in Table 3, there is a significant difference in the distress tolerance variable between the experimental group and the control group (P>0.05), indicating that the experimental group, having received behavioral training, has greater distress tolerance in both the post-test and follow-up compared to the control group.

To examine the impact of the parental behavioral training intervention on the family cohesion of mothers of children

JAYPS Adolescent and Youth Psychological Studies E-ISSN: 2981-2526

with symptoms of ODD, a univariate analysis of covariance was used, with the results presented in Table 4.

Table 4

Results of Univariate ANCOVA for Family Cohesion Variable in Experimental and Control Groups

Research Phase	Group Membership	Dependent Variable	Sum of Squares (SS)	Degrees of Freedom (df)	Mean Squares (MS)	F	Significance Level (P)	Effect Size (Eta)
Posttest	Group Membership	Family Cohesion	127.50	1	127.50	45.52	0.001	0.72
Follow-up		Family Cohesion	129.66	1	129.66	47.13	0.001	0.74

The results in Table 4 show that the F-value for the univariate analysis of covariance for the family cohesion variable in the post-test (F=45.52, P=0.001) and follow-up (F=47.13, P=0.001) is significant, meaning that the parental behavioral training intervention had an effect on the family cohesion of mothers of children with symptoms of ODD. The Bonferroni test was used to accurately determine the extent of difference between the experimental and control groups in the family cohesion variable. The results of this test are reported in Table 5.

Table 5

Results of Bonferroni Post-Hoc Test for Comparing Adjusted Means of Family Cohesion in Posttest and Follow-up Between Experimental and Control Groups

Variable	Groups Compared	Adjusted Means Difference	Mean Difference	Standard Deviation	Significance Level
Posttest Family Cohesion	Experimental (Behavioral Training) - Control	26.85 – 36.35	9.50	2.23	0.001
	Control - Experimental (Behavioral Training)	36.35 - 26.85	-9.50	2.23	0.001
Follow-up Family Cohesion	Experimental (Behavioral Training) - Control	26.50 – 36.30	9.80	2.25	0.001
	Control - Experimental (Behavioral Training)	36.30 - 26.50	-9.80	2.25	0.001

As seen in Table 5, there is a significant difference in the family cohesion variable between the experimental group and the control group (P>0.05), indicating that the experimental group, having received behavioral training, has greater family cohesion in both the post-test and follow-up compared to the control group.

To examine the impact of the parental behavioral training intervention on the parenting self-efficacy of mothers of children with symptoms of ODD, a univariate analysis of covariance was used, with the results presented in Table 6.

Table 6

Univariate Analysis of Covariance Results for Parental Self-Efficacy Variable in Experimental and Control Groups

Research Stage	Dependent Variable	Sum of Squares (SS)	Degrees of Freedom (df)	Mean Squares (MS)	F	Significance Level (P)	Effect Size (Eta)
Post-test	Parental Self-Efficacy	122.26	1	122.26	39.48	0.001	0.68
Follow-up	Parental Self-Efficacy	125.32	1	125.32	41.14	0.001	0.71

The results in Table 6 indicate that the F-value for the univariate analysis of covariance for the parenting self-efficacy variable in the post-test (F=39.48, P=0.001) and follow-up (F=41.14, P=0.001) is significant, meaning that the parental behavioral training intervention had an effect on the parenting self-efficacy of mothers of children with

JAYPS Adolescent and Youth Psychological Studies E-ISSN: 2981-2526

symptoms of ODD. The Bonferroni test was used to accurately determine the extent of difference between the experimental and control groups in the parenting self-efficacy variable. The results of this test are reported in Table 7.

Table 7

Results of the Bonferroni Post-Hoc Test for Comparing Adjusted Means of Parental Self-Efficacy in Posttest and Follow-up Between Experimental and Control Groups

Variable	Groups Compared	Adjusted Means	Mean Difference	Standard Deviation	Significance Level
Posttest Parental Self-Efficacy	Experimental (Behavioral Training) - Control	20.75 – 28.65	7.90	2.13	0.001
	Control - Experimental (Behavioral Training)	28.65 - 20.75	-7.90	2.13	0.001
Follow-up Parental Self-Efficacy	Experimental (Behavioral Training) - Control	20.60 – 28.62	8.02	2.16	0.001
	Control - Experimental (Behavioral Training)	28.62 - 20.60	-8.02	2.16	0.001

As observed in Table 7, there is a significant difference in the parenting self-efficacy variable between the experimental group and the control group (P>0.05), indicating that the experimental group, having received behavioral training, has greater parenting self-efficacy in both the post-test and follow-up compared to the control group.

4. Discussion and Conclusion

The aim of the current research was to investigate the effectiveness of parental behavioral training on distress tolerance, family cohesion, and maternal parenting self-efficacy in mothers of children with symptoms of Oppositional Defiant Disorder (ODD). The results from testing the first hypothesis showed that parental behavioral training has an impact on the distress tolerance of mothers of children with symptoms of ODD, and this effectiveness persisted during the follow-up period. This finding is consistent with many similar studies. For instance, the results of the previous research (Dehghan Manshadi et al., 2016; Glatz & Trifan, 2019; Hakim Shooshtari et al., 2020; Hosseinnezhad et al., 2021; Maaskant et al., 2016; Schleider & Weisz, 2017) support the effectiveness of parental behavioral training. The research by Hakim Shooshtari et al. (2020) demonstrated that parental behavioral training improves general health, family functioning, child behavior, and coping strategies (Hakim Shooshtari et al., 2020). Consistent with the results of this study, Kuhn and Carter (2006) showed that parental behavioral training and providing behavior management techniques to mothers of children with symptoms of ODD lead to reduced anxiety, depression, parenting stress, increased self-esteem, and positive feelings of mothers towards their role (Kuhn & Carter, 2006). Various researchers state that parents of children with behavioral disorders like ODD significantly report higher levels of externalized behaviors such as psychological distress (Javidipour & Dehghan, 2022). Explaining the above findings, it can be stated that children with ODD as a problem cause mothers to have an ineffective response style to this issue. Mothers' dysfunctional thoughts lead to a focus on problems and cognitive entanglement (believing negative thoughts and accepting thoughts as reality), avoidance of situations, lack of interaction with others, absence of joy and leisure, leading to experiential avoidance and maternal distress. Repeated behaviors over time will limit maternal behavior and cause her anxiety and worry. Thus, focusing on the problem and creating cognitive entanglement become significant barriers to moving towards values, making it unclear what mothers' values are in areas of social interaction, personal growth, health, and parenting (Jafarnezhad et al., 2022). The theoretical basis of parental behavioral training is expanded from behavioral theories in social learning, cognitive-behavioral principles, and relational theories such as attachment and family systems. In social learning theory, it is assumed that parents' problems in relationships, especially with their children, are formed and persist, so behavioral correction of these individuals is necessary for change. From this perspective, it can be stated that parental behavioral training leads to higher distress tolerance in mothers. Another explanation is that experts believe that symptoms of ODD and impulsive and destructive behaviors in children expand when the

JAYPS Adolescent and Youth Psychological Studies E-ISSN: 2981-2526

predisposing factors of the disorder are combined with an authoritarian and ineffective parenting style. In this situation, the child cannot follow the parents' commands, and the parents become more authoritarian and stricter to control their children, and this cycle repeats several times, pushing the child towards behavioral problems and non-compliance with parents' orders and family environment rules. Therefore, parental behavioral training, due to its unique features, has advantages over other methods. In this treatment, the child's behavior correction program is implemented in the natural home environment by the parents, who have the most interaction with him, as the family is the first foundation of personality and intellectual values and plays a significant role in the child's fate. Another advantage of the parental behavioral training approach is that it affects various aspects of parental and family functioning and impacts all family members directly and indirectly (Hosseinnezhad et al., 2021). In this context, Barkley (2017) believed that parental behavioral training, by employing effective parenting techniques, could assist children with ODD in enhancing the efficiency of executive and emotional functions, and improving child behavior leads to higher distress tolerance in parents. The parental behavioral training model teaches parents positive management skills to replace their ineffective and authoritarian parenting. Also, the program focuses on parents' attitudes and tries to correct them. Parental behavioral training, in addition to familiarizing mothers with the characteristics of ODD and providing them with appropriate strategies and skills for dealing with and managing their children's disorder, also teaches mothers self-management skills. This training, by providing information about the disorder and teaching necessary skills, enables these mothers to seek social support and more effectively solve their problems (Kazdin et al., 2018; Maaskant et al., 2016). Additionally, this treatment directly improves mothers' distress tolerance by teaching ways to cope with stress and correct self-management methods. Another explanation is that having a child with symptoms of ODD is very challenging and demanding, having the ability to tolerate temporary psychological discomforts and not avoiding difficult emotions has significant adaptive value, especially when such emotions can lead to healthy behavioral changes. In this regard, a considerable volume of research related to dialectical behavior therapy examines the detrimental effects of avoiding or suppressing negative emotional experiences and the benefits of accepting and experiencing negative emotions (Jafarnezhad et al., 2022). Parental behavioral training can be an effective method to reduce children's behavioral problems and, consequently, increase parents' distress tolerance. Using parents in the role of instructors facilitates children's use of newly learned behavior, as they do not have to undergo the process of transferring what they have learned from the therapist to the family situation. The first request for treatment is rarely expressed by children. Likely, it is the parents who are concerned about their children's disruptive behavior or his failure to act appropriately for his age and gender. According to Dempsey et al. (2017), a pattern of parent-child interaction may emerge and persist due to bidirectionality (the child responds negatively to negative input from the parents) and coercion (parents influence behavior using punishment). The parental behavioral training intervention aims to change this destructive bilateral interaction pattern and usually teaches parents to observe and measure the child's problematic behavior and then use social learning techniques to accelerate desirable behavior, slow down and reduce undesirable behavior, and maintain cognitive and behavioral changes (Dempsey et al., 2016).

The research results demonstrated that parental behavioral training impacts the family cohesion of mothers of children with symptoms of Oppositional Defiant Disorder (ODD), and this effectiveness persisted during the follow-up period. This finding aligns with many similar studies, such as the research (Ashori et al., 2015; Azimifar et al., 2019; Davudi et al., 2018; Dehghan Manshadi et al., 2016; Esmailzadeh, 2019; Hosseinnezhad et al., 2021; Jafarnezhad et al., 2022; Jalali et al., 2022; Jamali & Khodabakhshi-Koolaee, 2019; Maaskant et al., 2016; Mohajeri et al., 2013; Pourmohammadreza-Tajrishi et al., 2015; Yeesunsri et al., 2021) that utilized parental training combining behavioral methods and other psychological approaches in their research. Researchers found that such training aids family cohesion and fosters a more positive parental attitude towards their children. Another study by Masakant (2016) explored the impact of parental behavioral training on families of children with behavioral issues, showing that teaching parents behavior management techniques improved parenting methods, reduced parenting stress, and enhanced family cohesion (Maaskant et al., 2016). The research findings also indicated that parental behavioral training could increase coping abilities in facing maternal duties by correcting mothers' feedback and perceptions towards their children's challenging behaviors, leading to reduced stress and physical symptoms in mothers and ultimately improving family cohesion. To explain how parental behavior

JAYPS Adolescent and Youth Psychological Studies E-ISSN: 2981-2526

management training improves family cohesion, it's essential to recognize that mothers of children with symptoms of ODD suffer from feelings of loneliness and lack of control over the situation (Hakim Shooshtari et al., 2020). Participating in behavioral management workshops creates a sense of collective empathy among mothers, helping them realize their problem is not unique, thus reducing their false sense of loneliness. Regarding the effectiveness of behavioral management training, it's also important to note that explaining the nature and cause of the disorder can correct parents' misconceptions about themselves and their children, resulting in reduced negative feelings in parents and subsequently better relationships with their child, enhancing both the child's and parents' behavioral performance (Jafarnezhad et al., 2022). Parents' positive attention to the child and efficient response to behaviors create an appropriate focus and attention model, leading to a structured and cohesive family system. Parental behavioral trainings helped parents better cope with their child's irritability. Additionally, reward and point techniques were taught to parents. Receiving rewards created a positive feeling in children and encouraged desirable behaviors. To reduce undesirable behaviors in children, the technique of ignoring was taught. This method showed children that their behavior does not attract parental attention, discouraging them from repeating undesirable behaviors. Furthermore, families with children showing symptoms of ODD perform poorly in problem-solving, emotional responsiveness, and behavioral control dimensions; thus, parents and their children are caught in a defective two-way cycle where the child's defiant behavior increases parents' punitive tendencies, and in response, parents' punishment leads children to display aggressive behaviors (Barkley, 2011). Educational interventions can lead to increased coping abilities in facing motherhood tasks by correcting mothers' feedback and perceptions towards their children's challenging behaviors, reducing parenting stress and children's behavioral issues, and consequently enhancing family cohesion. Family cohesion is achieved when communication among members is effective, the needs of each family member are adequately met, and behaviors filled with respect and affection are established. Short-term effects include improvements in child behavior, such as increased adherence to parental commands, reduction of aggressive and oppositional behaviors, along with enhanced parenting skills due to parents spending more time and rewarding positive child behavior, better and more appropriate command presentation, and discipline warning (Hosseinnezhad et al., 2021). Parental behavioral training is cited as one of the most successful interventions in preventing and treating behavioral problems in children and adolescents (such as aggression, non-compliance). Parental behavioral training focuses on changing child behavior by altering parental strategies. With parental behavioral training, both parents' and children's behavioral issues are reduced, relationships between parents and children improve, and a greater sense of psychological cohesion is experienced.

The research findings indicate that parental behavioral training affects maternal parenting self-efficacy in mothers of children with symptoms of Oppositional Defiant Disorder (ODD), and this effectiveness persisted during the follow-up period. This finding is consistent with many similar studies (Albanese et al., 2019; Asghari et al., 2014; Ashori et al., 2015; Azimifar et al., 2019; Dehghan Manshadi et al., 2016; Glatz & Trifan, 2019; Holloway et al., 2019; Javidipour & Dehghan, 2022; Kuhn & Carter, 2006; Mohajeri et al., 2013; Yeesunsri et al., 2021). To explain the current finding, it should be mentioned that one of the assumptions and factors causing challenges in parent-child relationships, leading to the exacerbation of psychological and emotional problems in children, is related to parents' lack of skills in dealing with children with psychological issues, like those with symptoms of ODD. Addressing some of the parents' issues and deficiencies in dealing with their children and teaching appropriate behavioral methods and techniques reduces the occurrence of conflictual relationships, both physically and emotionally, with the children. This process leads to improvement in cognitive processing and parental self-efficacy (Javidipour & Dehghan, 2022). Furthermore, parental behavioral training enables parents to find sufficient opportunities to get closer to their child, especially in situations where parents are not yet ready to accept and assist their child. Indeed, parental behavioral training for children with symptoms of ODD leads to a better understanding of the child's developmental conditions and also provides group sessions for parents, offering them the opportunity to vent the stresses and psychological pressures arising from daily interactions with their child and to gain a sense of empathy from other parents. Acquiring empathy skills allows parents to transfer this skill to their parent-child interaction, establishing a more constructive psychological and emotional interaction with the child, and all these factors lead to improved parental self-efficacy. Peterson believes that children's behavioral disorders result from parents' reliance on aggravating control, such as criticism,

JAYPS Adolescent and Youth Psychological Studies
E-ISSN: 2981-2526

punishment, shouting, nagging, and the like. Relatively defenseless children also resort to disruption, retaliation, and destructive behaviors to control their parents, essentially mimicking their parents' aggravating control. These parents seldom reward because either they do not know how to reward or they are unwilling to do so due to psychological pressure and anger (Skues et al., 2016). Their child, in turn, resorts to annoying and undesirable behaviors to attract their parents' attention, creating a vicious cycle. Parents control their child through punishment, wounding their feelings, making them angry, and thereby increasing the likelihood of undesirable behaviors from their child. This process, in turn, leads parents to use punishment even more (Dehghan Manshadi et al., 2016; Esmailzadeh, 2019). Cognitive restructuring of parents' dysfunctional attitudes and beliefs, which are associated with their inability to apply newly learned techniques or effective child control techniques, is also important. Hence, identifying parents' dysfunctional cognitive perceptions that prevent them from successfully applying new techniques becomes necessary. Whenever a disciplinary intervention does not produce desirable results, therapists seek dysfunctional cognitive perceptions that may have influenced the issue: "What do you think went wrong? What were you thinking when you tried to implement that new approach? How did you feel?" And finally, to control parents' anger, self-control training may be another approach considered in parental sessions (Javidipour & Dehghan, 2022; Kazdin et al., 2018). Therefore, employing these trainings can improve their relationships with their children and increase parental self-efficacy. Moreover, Kazdin et al. (2018), after working with families, identified a flawed cycle in the parent-child relationships of families with children who have behavioral problems, such as those with symptoms of ODD. They showed that the child's noncompliant behaviors (such as impulsivity, non-adherence to parents' commands, destructive behaviors, defiance, disobedience, and irritability) generate negative feelings in parents (such as anger, irritation, overwhelmed feelings, fatigue, decreased tolerance); undeniably, when such emotions and feelings arise in parents of children with symptoms of ODD, it affects how they react and behave with these children, starting to punish, reject, blame, and deprive; these reactions provoke the child's negative feelings (such as frustration, anger, and disappointment) and lead to the repetition of the child's noncompliant behavior in this negative cycle (Kazdin et al., 2018). Parental behavioral training helps parents and children break the cycle of dysfunctional interaction and create mutually supportive positive interaction patterns, experiencing greater self-efficacy. Research shows that in many cases, changing parental behavior requires less time and cost and should even be started first; especially if communication problems overshadow the family or if parents themselves suffer from psychological disorders. Especially since parental behavioral training leads to improved maternal self-efficacy and subsequently reduces the behavior of children with signs of defiance. Another reason that can be mentioned to justify this issue is that group programs of parental behavioral training increase parents' awareness and knowledge about the nature of the disorder and therapeutic methods. Also, during the sessions, methods of controlling and managing the child were taught to them, thereby reducing the conflict between mother and child, which itself leads to increased positive relationships and reduced tension in the relationship between mother and child, and consequently improves maternal self-efficacy.

5. Limitations & Suggestions

Every analysis and research, while fundamentally seeking to determine relationships or factors and their impact levels, will inevitably face some problems and limitations. These limitations may emerge during the research process, complicating the research effort. The present study also encountered several limitations that need to be considered to facilitate the generalization and reliance on the findings:

1. In this study, sampling was only conducted among mothers of children with symptoms of Oppositional Defiant Disorder (ODD) under the coverage of the Imam Khomeini Relief Committee in Sari, which limits the generalizability of the research findings.
2. Another limitation of this research was the inability to match the intervention and control groups in terms of demographic variables and treatment stage due to the small sample size.
3. Given that the effects of training and educational techniques require more time to manifest, the post-test in this study was conducted immediately after the end of the course due to time constraints.
4. The inability to control other influencing factors, such as heredity, developmental history, economic and social class, or the level of social support individuals receive, was a limitation of the research.
5. Cultural and social challenges in implementing these methods and the difficulty in objectifying self-efficacies in case studies left this research

JAYPS Adolescent and Youth Psychological Studies
E-ISSN: 2981-2526

deprived of baseline data and evaluation during the training period, which is considered a significant flaw for research of this type.

6. The lack of enthusiasm and motivation among many participants to consistently and persistently attend the training sessions (despite the researcher's considerable efforts), the length of the training period, participant fatigue, and the limited amount of social services, which led to a sense of distrust and indifference among them, posed challenges for the current study.
7. Data collection in this study was based on self-report scales. Therefore, another limitation of this research is related to measurement; because these reports are susceptible to distortion due to unconscious defenses, bias in responding, and personal presentation methods.

Every research report is written in the hope of paving the way for further research on the subject and is presented to the research community. Therefore, it is essential for every report to include suggestions that will facilitate future research. This study was no exception and offered the following recommendations:

1. Researchers are advised to examine the effectiveness of various educational, economic, social, and cultural variables and patterns in their studies.
2. Since the statistical population consists of families under the coverage of the Relief Committee, which limits the results to this group, it is recommended that future research use a mixed statistical population to include a combination of all social strata from different social bases.
3. It is suggested that in future research, for uniformity of different educational conditions in the control group, psychotherapy with a placebo effect be used.
4. The Ministry of Health, Welfare Organization, and the Organization of Psychology and Counseling should facilitate more psychologists, doctors, and nurses becoming acquainted with parental behavioral training and parenting education based on choice theory.
5. The findings of the current study indicate that parental behavioral training is a suitable method for improving distress tolerance, family cohesion, and maternal parenting self-efficacy in mothers of children with ODD symptoms. Parental behavioral training, due to being affordable, effective, accessible, and practical, can be employed in psychological service centers and clinics alongside other therapeutic methods to improve many psychological characteristics.
6. Investigating the role of other treatments and more accessible and economical implementation methods for examining other psychological therapeutic techniques in reducing the psychological disorders of mothers of children with ODD symptoms is recommended.

Acknowledgments

We would like to express our appreciation and gratitude to all those who cooperated in carrying out this study.

Declaration of Interest

The authors of this article declared no conflict of interest.

Ethics Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

Funding

This research was carried out independently with personal funding and without the financial support of any governmental or private institution or organization.

Authors' Contributions

All authors contributed equally.

References

Albanese, A. M., Russo, G. R., & Geller, P. A. (2019). The role of parental self-efficacy in parent and child well-being: A systematic review of associated outcomes. *Child: Care, Health and Development*, *45*(3), 333-363. https://doi.org/10.1111/cch.12661

APA, A. P. A. (2022). *Diagnostic And Statistical Manual Of Mental Disorders, Fifth Edition, Text Revision (DSM-5-TR)*. https://doi.org/10.1176/appi.books.9780890425787

JAYPS Adolescent and Youth Psychological Studies E-ISSN: 2981-2526

Asghari, F., Saadat, S., Atefi Karajvandani, S., & Janalizadeh Kokaneh, S. (2014). The Relationship between Academic Self-Efficacy and Psychological Well-Being, Family Cohesion, and Spiritual Health Among Students of Kharazmi University. *IJME*, *14*(7), 581-593. http://ijme.mui.ac.ir/article-1-3250-en.html

Ashori, M., Afrooz, G. H. A., Arjmandnia, A. A., Pormohammadreza-tajrishi, M., & Ghobari-Bonab, B. (2015). The Effectiveness of Positive Parenting Program (Triple-P) on Parental Self-Efficacy and Mother-Child Interaction in Childeren Suffering from Intellectual Disability. *SSU_Journals*, *23*(5), 489-500. http://jssu.ssu.ac.ir/article-1-3117-en.html

Azimifar, S., Jazayeri, R., Fatehizade, M., & Abedi, A. (2019). Effectiveness of Parent Management Training and Parenting Based on Acceptance and Commitment Treatment in Parenting Self-efficacy among Mothers Who Have Children with Externalizing Behavior Problems. *Modern psychological research*, *14*(53), 181-205. https://www.magiran.com/paper/2007947

Barkley, R. A. (2011). *Barkley Adult ADHD Rating Scale-IV (BAARS-IV)*. Guilford Publications. https://books.google.com/books?id=vq9CuRCjZzsC

Burke, J. D., Johnston, O. G., & Butler, E. J. (2021). The Irritable and Oppositional Dimensions of Oppositional Defiant Disorder: Integral Factors in the Explanation of Affective and Behavioral Psychopathology. *Child and Adolescent Psychiatric Clinics of North America*, *30*(3), 637-647. https://doi.org/10.1016/j.chc.2021.04.012

Chen, H., Lin, X., Heath, M. A., & Ding, W. (2020). Family violence and oppositional defiant disorder symptoms in Chinese children: The role of parental alienation and child emotion regulation. *Child & Family Social Work*, *25*(4), 964-972. https://doi.org/10.1111/cfs.12782

Davudi, H., Kalhor, A., & Alibabaei-Noqane-Sofla, E. (2018). Effectiveness of Parenting Therapy on Behavioral Problems of Girl Students with Oppositional Defiant Disorder. *Journal of Clinical Psychology*, *10*(3), 91-100. https://doi.org/10.22075/jcp.2019.14646.1423

Dehghan Manshadi, S. M., Gholamrezay, S., & Ghaznanfari, F. (2016). The Effectiveness of Positive Parenting Skills Training on Parental Self-Efficacy and Children's Behavioral Problems in Female-Headed Households in City of Yazd. *socialwm*, *5*(2), 20-27. http://socialworkmag.ir/article-1-146-en.html

Dempsey, J., McQuillin, S., Butler, A. M., & Axelrad, M. E. (2016). Maternal Depression and Parent Management Training Outcomes. *Journal of Clinical Psychology in Medical Settings*, *23*(3), 240-246. https://doi.org/10.1007/s10880-016-9461-z

Elhai, J. D., Levine, J. C., O'Brien, K. D., & Armour, C. (2018). Distress tolerance and mindfulness mediate relations between depression and anxiety sensitivity with problematic smartphone use. *Computers in human Behavior*, *84*, 477-484. https://doi.org/10.1016/j.chb.2018.03.026

Esmailzadeh, Z. (2019). Effectiveness of parenting education based on Choice Theory on parent-child relationship and clinical symptoms of Oppositional Defiant Disorder. *Empowering Exceptional Children*, *10*(3), 97-108. https://doi.org/10.22034/ceciranj.2020.200510.1263

Fassbinder, E., Schweiger, U., Martius, D., Brand-de Wilde, O., & Arntz, A. (2016). Emotion Regulation in Schema Therapy and Dialectical Behavior Therapy [Methods]. *Frontiers in psychology*, *7*. https://doi.org/10.3389/fpsyg.2016.01373

Gallego, A., McHugh, L., Villatte, M., & Lappalainen, R. (2020). Examining the relationship between public speaking anxiety, distress tolerance and psychological flexibility. *Journal of Contextual Behavioral Science*, *16*, 128-133. https://doi.org/https://doi.org/10.1016/j.jcbs.2020.04.003

Ghaderi, M., Ahi, Q., Vaziri, S., Mansoori, A., & Shahabizadeh, F. (2020). The Mediating Role of Self–Criticism and Distress Tolerance in Relationship between Attachment Styles and Non-Suicidal Self-Injury Behaviors in Adolescents. *Journal of Research in Behavioural Sciences*, *17*(4), 552-537. https://doi.org/10.52547/rbs.17.4.552

Glatz, T., & Trifan, T. A. (2019). Examination of Parental Self-Efficacy and Their Beliefs About the Outcomes of Their Parenting Practices. *Journal of Family Issues*, *40*(10), 1321-1345. https://doi.org/10.1177/0192513X19835864

Gomez, R., & Stavropoulos, V. (2019). Oppositional Defiant Disorder Dimensions: Associations with Traits of the Multidimensional Personality Model among Adults. *Psychiatric Quarterly*, *90*(4), 777-792. https://doi.org/10.1007/s11126-019-09663-y

Hadadian, F., Tehranizadeh, M., & Pakdel, M. (2020). The Roles of Family, Emotion Regulation Strategies, and Mental Health in the Problematic Internet Use. *Journal of Adolescent and Youth Psychological Studies*, *1*(1), 317-327. https://www.magiran.com/paper/2538487

Hakim Shooshtari, M., Zarafshan, H., Mohamadian, M., Zareee, J., Keisomi, I. K., & Hooshangi, H. (2020). The Effect of a Parental Education Program on the Mental Health of Parents and Behavioral Problems of Their Children With Autism Spectrum Disorder. *Iraninan Psychiatry and Clinical Psychology*, *25*(4), 356-367. https://www.magiran.com/paper/2153962

Holloway, S. D., Suzuki, S., Kim, S., Nagase, A., Wang, Q., Campbell, E. J., Golshirazi, M., Iwatate, K., & Nishizaka, S. (2019). Development and cross-national validation of a revised version of the Berkeley Parenting Self-efficacy Scale. *Early Childhood Research Quarterly*, *47*, 309-320. https://doi.org/10.1016/j.ecresq.2018.12.016

Hosseinnezhad, A., Abolghasemi, S., Vatankhah, H. R., & Khalatbari, J. (2021). Comparing the Effects of Parent Behavior Management and Anger Management Training on Academic Resilience and Parent-Child Relationship in Students with Attention-Deficit/Hyperactivity Disorder. *MEJDS*, *11*(0), 89-89. http://jdisabilstud.org/article-1-2111-en.html

Jafarnezhad, M., Ghobari Bonab, B., & Bagheri, F. (2022). Effectivness of Family Oriented Training Program Based on Parents Behavioral Management on The Clinical Symptoms and School Performance of Children with Attention Deficit Hyperactivity Disorder. *Research-Institute-for-Education*, *22*(2), 45-60. http://joec.ir/article-1-1472-en.html

Jalali, d., Aghaee, A., & Shamsipoor, M. (2022). The Effectivness of Paranting Training Based Acceptance and Commitment and Filialtherapy on Oppositional Defiant Disorder in Pre-school Children and Life Satisfaction of Mothers. *Knowledge & Research in Applied Psychology*, *23*(87), 137-154. https://www.magiran.com/paper/2450699

Jamali, Z., & Khodabakhshi-Koolaee, A. (2019). The Effectiveness of Parenting Behavior Management Training Via Cell Phone on Mothers in Reducing Oppositional and Aggression Symptoms in Their Children With Oppositional Defiant Disorder: A Single Case Study. *HBI_Journals*, *22*(4), 134-145. https://doi.org/10.32598/JAMS.22.4.120

Javidipour, n., & Dehghan, m. (2022). Efficiency of the Parents' Behavioral Training Model (Barkley) on the Emotional Regulation of the Children with Attention Deficit Hyperactivity Disorder. *Psychology of Exceptional*

JAYPS Adolescent and Youth Psychological Studies E-ISSN: 2981-2526

Individuals, *12*(45), 145-169. https://doi.org/10.22054/jpe.2022.62507.2356

Kazdin, A. E., Glick, A., Pope, J., Kaptchuk, T. J., Lecza, B., Carrubba, E., McWhinney, E., & Hamilton, N. (2018). Parent management training for conduct problems in children: Enhancing treatment to improve therapeutic change. *International Journal of Clinical and Health Psychology*, *18*(2), 91-101. https://doi.org/10.1016/j.ijchp.2017.12.002

Kuhn, J. C., & Carter, A. S. (2006). Maternal self-efficacy and associated parenting cognitions among mothers of children with autism. *Am J Orthopsychiatry*, *76*(4), 564-575. https://doi.org/10.1037/0002-9432.76.4.564

Kyron, M. J., Hooke, G. R., Bryan, C. J., & Page, A. C. (2022). Distress tolerance as a moderator of the dynamic associations between interpersonal needs and suicidal thoughts. *Suicide and Life-Threatening Behavior*, *52*(1), 159-170. https://doi.org/10.1111/sltb.12814

Lass, A. N. S., & Winer, E. S. (2020). Distress tolerance and symptoms of depression: A review and integration of literatures. *Clinical Psychology: Science and Practice*, *27*(3). https://doi.org/10.1037/h0101778

Lin, X., Li, L., Heath, M. A., Chi, P., Xu, S., & Fang, X. (2018). Multiple Levels of Family Factors and Oppositional Defiant Disorder Symptoms Among Chinese Children. *Family Process*, *57*(1), 195-210. https://doi.org/10.1111/famp.12269

Maaskant, A. M., van Rooij, F. B., Overbeek, G. J., Oort, F. J., & Hermanns, J. M. A. (2016). Parent training in foster families with children with behavior problems: Follow-up results from a randomized controlled trial. *Children and Youth Services Review*, *70*, 84-94. https://doi.org/10.1016/j.childyouth.2016.09.005

Majlesi, N., Gharedaghi Tanourlouei, M., & Shariati Najafabadi, N. (2023). The effectiveness of solution-based treatment on family cohesion and life orientation in women suffering from marital burnout [Research]. *Rooyesh-e-Ravanshenasi Journal(RRJ)*, *12*(4), 199-208. http://frooyesh.ir/article-1-4305-en.html

Matheny, N. L., Summers, B. J., Macatee, R. J., Harvey, A. M., Okey, S. A., & Cougle, J. R. (2017). A multi-method analysis of distress tolerance in body dysmorphic disorder. *Body Image*, *23*, 50-60. https://doi.org/10.1016/j.bodyim.2017.07.005

Mohajeri, A. S., Pour Etemad, H. R., Shokri, O., & Khoshabi, K. (2013). Effectiveness of parent-child interaction therapy on parental self-efficacy of mothers of children with high-functioning autism. *Journal of Applied Psychology*, *7*(1), 21-38. https://www.magiran.com/paper/1160861

Olson, D. H. (2000). Circumplex Model of Marital and Family Systems. *Journal of Family Therapy*, *22*(2), 144-167. https://doi.org/10.1111/1467-6427.00144

Pirzadeh, S., & Parsakia, K. (2023). A Comparative Study of Family Structure (Cohesion and Flexibility) and Functioning in People with and without Drug Abuse. *International Journal of Body, Mind & Culture*, *10*(1), 82-89. https://doi.org/10.22122/ijbmc.v10i1.278

Pourmohammadreza-Tajrishi, M. s., A'Shouri, M., Afrouz, G. A., Arjmand-nia, A. A., & Ghobari-Bonab, B. (2015). The Effectiveness of Positive Parenting Program (Triple-P) Training on Interaction of Mother-child with Intellectual Disability. *USWR*, *16*(2), 128-137. http://rehabilitationj.uswr.ac.ir/article-1-1624-en.html

Schleider, J. L., & Weisz, J. R. (2017). Family process and youth internalizing problems: A triadic model of etiology and intervention. *Development and Psychopathology*, *29*(1), 273-301. https://doi.org/10.1017/S095457941600016X

Sharma, M., & Joshi, H. L. (2015). Role of Family Environment and Parenting Style in Adjustment among Male Adolescents.

Simons, J. S., & Gaher, R. M. (2005). The Distress Tolerance Scale: Development and Validation of a Self-Report Measure. *Motivation and Emotion*, *29*(2), 83-102. https://doi.org/10.1007/s11031-005-7955-3

Skues, J., Williams, B., Oldmeadow, J., & Wise, L. (2016). The Effects of Boredom, Loneliness, and Distress Tolerance on Problem Internet Use Among University Students. *International journal of mental health and addiction*, *14*(2), 167-180. https://doi.org/10.1007/s11469-015-9568-8

Vahdani, M., Khezri, M., Mahmoudpour, A., & Farahbakhsh, K. (2020). Predicting Marital Burnout Based On Emotional Expression, Distress Tolerance And Communication Patterns [Research]. *Rooyesh-e-Ravanshenasi Journal(RRJ)*, *9*(10), 47-58. http://frooyesh.ir/article-1-2309-en.html

Yeesunsri, N., Apinuntavech, S., Pornnoppadol, C., & Yongyuan, B. (2021). The effectiveness of parent management training program on self-efficacy and parenting of ADHD children's parents: Self-efficacy and parenting of ADHD children's parents. *International Journal of Child Development and Mental Health*, *9*(1), 11-21. https://he01.tci-thaijo.org/index.php/cdmh/article/view/243897

JAYPS Adolescent and Youth Psychological Studies
E-ISSN: 2981-2526