

# Comparison of the Efficacy of Mindfulness-Based Parenting and Choice Theory Parenting Programs on Mother's Parenting Stress in Children with Oppositional Defiant Disorder

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## Quantitative study

### Abstract

**Background:** Oppositional defiant disorder (ODD) is one of the most common childhood manifesting disorders, and the mother's distress is an essential predictor for ODD. The present study aimed to compare the effectiveness of mindfulness-based parenting and choice theory parenting programs on parenting stress in mothers of children with ODD.

**Methods:** This semi-experimental study was conducted with a pretest-posttest design with the control group. The population consisted of all mothers with children of 7-12 years old with ODD in Tehran, Iran. Forty-five mothers were selected and then randomly divided into two experimental groups (each group with 15 people) and one control group (15 people) using the convenience sampling method. The experimental groups underwent mindfulness-based parenting (8 sessions of 90 minutes) and choice theory parenting (12 sessions of 90 minutes) programs, but the control group remained on the waiting list. To collect the data, Hommersen et al.'s Oppositional Defiant Disorder Rating Scale (ODDRS) and Abidin's Parenting Stress Index-Short Form (PSI-SF) were used. Data analysis was performed using SPSS software.

**Results:** Mindfulness-based parenting and choice theory parenting programs were effective on decreasing parenting stress in mothers ( $P < 0.05$ ). In addition, the results showed that mindfulness-based parenting was more effective than the choice theory parenting program ( $P < 0.05$ ).

**Conclusion:** It can be concluded that mindfulness-based parenting and choice theory parenting programs can be used as a treatment method for parenting stress in mothers with children with ODD in counseling centers.

**Keywords:** Mindfulness; Choice theory; Parenting stress; Oppositional defiant disorder

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## **Introduction**

The concern in the field of children's mental health and its impact on the evolution and psychological and behavioral functions has increased significantly with the prevalence of children's mental disorders in recent years (Mohammadi, Zadhasan, Rahimi, & Amini, 2023). In the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), oppositional defiant disorder (ODD) is characterized as argumentative or defiant behavior, vindictive or irritable mood, and these behaviors must exist for at least six months and are reflected as a destructive behavior (American Psychiatric Association, 2013); these children are characterized by social problems or limited prosocial emotions (Chrysosferidis, Burns, Becker, Beauchaine, & Servera, 2023). They suffer from vicious communication (Braenden, Coldevin, Zeiner, Stubberud, & Melinder, 2023). The prevalence of this disorder is reported to be 1.4%-16% in the general population and 28%-50% in clinical samples (Demmer, Hooley, Sheen, McGillivray, & Lum, 2017). It is believed that ODD is a risk factor for conduct disorder (Gosh, Rai, & Basu, 2017; Dehghani, Farhangi, & Rahmani, 2022). In addition, more than 14% of children with ODD have anxiety, and more than 9% of them have depression (Jones, 2018). Moreover, about 50% of patients with ODD are associated with suffering from attention deficit and hyperactivity disorder (ADHD) (Vetter, Beckhausen, Bossi, Rosner, and Smolka, 2020). It can also be said that the symptoms of this disorder lead to social, emotional, and academic defects in childhood, which, if not treated, continue until adulthood (Burke, Rowe, & Boylan, 2014) and spread throughout life (Nock, Kazdin, Hiripi, & Kessler, 2007). Parent-focused therapies based on behavioral elements, such as positive reinforcement of desired child behavior, have been identified as evidence-based treatments for ODD (Kaminski & Claussen, 2017). However, one-third to one-half of children with ODD do not respond to these treatments (Hawes, Price, & Dadds, 2014).

Due to its pervasiveness, resistance to change, and financial burden of its treatment (Foster & Jones, 2005), families of these children experience various problems, including distress and stress in the field of parenting (Ding, Lin, Hinshaw, Liu, Tan, & Meza, 2022). Parental stress has been defined as the result of inconsistency between the perceived demands of parents and the availability of resources needed to meet these demands (Abidin, 1995; Cochrane, Ronaghan, Cadieux, Ward, Henrikson, & Theule, 2023). In this context, mothers tend to experience higher levels of parenting stress than fathers, which is the result of mothers' more significant involvement in the daily care of children (Dabowska & Pisola, 2010; Hayes & Watson, 2013; van Steijn, Oerlemans, van Aken, Buitelaar, & Rommelse, 2014). Considering the existence of these problems, including parenting stress and psychological distress, providing new parenting interventions can help mothers cope better with the damage caused by a child with ODD. In addition, they are maintaining their psychological health benefits to improve the symptoms of ODD in their child.

Nowadays, mindfulness-based parenting (Algandi et al., 2021; Aslani, Mardani, & Shiralinia, 2021) and choice theory parenting (Nili Ahmadabadi, Bagheri, & Salimi Bajestani, 2019; Nili Ahmadabadi, Baqeri, & Salimi Bajestani, 2019) programs were considered. Mindfulness-based parenting is a multifaceted approach that can increase parents' awareness of their child's needs and feelings, listening to the child with full attention, recognizing their reactions to situations related to their child, and learning to respond compassionately. The parents help themselves and their children with compassion (Ruth and Green, 2020; Hosseinimotlagh, Rahimi, & Aminimanesh, 2023). Based on prior studies, parenting training based on mindfulness reduces the

stress of parenting in mothers (Algandi et al., 2021; Aslani et al., 2021) and reduces the psychological problems of their children (Emerson, Biesters, Bruin, & Bogels, 2021; Bondar Kakhki, Mashhadi, & Amin Yazdi, 2019).

Moreover, another research illustrated that this training had long-lasting effects on improving parents' parenting. Therefore, parenting training based on mindfulness is efficacious in improving mothers' stress and psychological flexibility (Sharif). Another educational intervention to empower mothers' parenting style is the choice theory parenting program (Nili Ahmadabadi et al., 2019; Nili Ahmadabadi et al., 2019). In this educational approach, teaching and using principles such as avoiding punishment, paying attention to the logical and natural results of behavior, responsibility, self-discipline, communication skills, distinguishing between discipline and punishment, and choosing simple educational methods for children reduce the behavioral problems of affected children and increase their behavioral performance and relationships with their parents (Seyyed Mahmoodian, Alizadeh, Pezeshk, Barajali, & Farrokhi, 2016). In confirmation of the choice theory parenting program, the results of a study have shown that parenting education with emphasis on choice theory has a significant effect on improving the parent-child relationship and mothers' life satisfaction, and this program can improve the relationship (Nili Ahmadabadi et al., 2019). Besides, another research has shown that parenting training emphasizing the choice theory increases parental self-efficacy, and a parenting training program focusing on the choice theory increases parental self-efficacy (Nili Ahmadabadi et al., 2019). Previous research usually pays less attention to related comparative studies. Therefore, our question is whether there is a difference between the effectiveness of mindfulness-based parenting and choice theory parenting programs on parenting stress in mothers with children suffering from ODD.

## Methods

The research was semi-experimental, with a pre-test, post-test, and follow-up with a control group. The statistical population was all mothers with 7 to 12-year-old children suffering from ODD in Tehran, Iran, in 2022-2023. Based on the convenience sampling method, among the mothers referring to counseling centers and psychological services in Tehran, forty-five mothers whose children had a score of 12 and above on the Oppositional Defiant Disorder Rating Scale (ODDRS) of Hommersen et al. (2006) were selected, and these 45 mothers were randomly replaced in 3 groups of 15 people. It should be noted that Cohen's table was used to determine the sample size in this study. This way, at the 95% confidence level, the effect size was 0.70, and the statistical power was 0.91 for each group. However, since there was a possibility of dropping some samples and to generalize the results more, 15 mothers were considered for each group.

*Inclusion and exclusion criteria:* The inclusion criteria were: the age range of 7 to 12 years, having a higher score (cut-off point 12) in the ODDRS, and not having physical, personality, and psychological diseases axis 1 and 2 according to the mother's report. Besides, the absence of more than two sessions from training sessions, simultaneous participation in other psychological sessions, and failure to complete the post-test questionnaires or follow-up were criteria for excluding from the research.

*The ODDRS by Hommersen et al. (2006):* This scale has eight questions to diagnose children with ODD, including eight symptoms of ODD. It follows the fourth edition of DSM, and parents answer each symptom that describes their child during the last six months on a 4-point Likert scale. In this way, the options of "never" are given one

mark, "sometimes" two marks, "often" three marks, and "almost" and "always" four marks. The higher the person's score, the greater the severity of the disorder (Sharifi Awadi et al., 2012), that is, a score higher than 12 points is considered the scale's cut-off point. The scale creators have calculated its reliability and reported 0.92 and a retest coefficient of 0.95 using Cronbach's alpha method (Hommersen, Murray, Ohan, & Johnston, 2006). In Iran, Cronbach's alpha was used to check the scale's reliability, and the coefficient was 0.81 (Esmailpour, Mir, & Zarei, 2016). Moreover, in research to match the scale's reliability, Cronbach's alpha was used, and the coefficients ranged from 0.94 to 0.97 (Lee et al., 2022), and the Cronbach's alpha coefficient was reported as 0.91 (Rice, Prout, Walther, & Hoffman, 2022). In the present study, the scale's reliability was calculated using Cronbach's alpha method; the total coefficient of the questions in the pre-test stage was 0.71, the post-test was 0.80, and the follow-up stage was 0.90.

*Parenting Stress Index-Short Form (PSI-SF) by Abidin (1995)*: This questionnaire has 36 questions and three components of parental confusion with questions 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12, child's dysfunctional interactions with questions 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, and 24, and the characteristics of the problematic child with questions 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, and 36. The scoring of the questionnaire is based on a 5-point Likert scale. In this way, 5 points are given for completely agreeing, 4 points for agreeing, 3 points for having no opinion, 2 points for disagreeing, and 1 point for completely disagreeing. In a study, the Cronbach's alpha coefficient was between 0.59 and 0.86, and the retest reliability coefficient was between 0.92 and 0.97 during the 16 days after the first round (Shirzadi, Framarzi, Ghasemi, & Shafiee, 2015). Moreover, the internal homogeneity of the questionnaire was calculated to check the reliability with Cronbach's alpha coefficient of 0.86 (Sheykholeslami, Mohammad, & Seyedesmali Ghomi, 2016). Cronbach's alpha coefficient was used in the research to check the internal consistency of the questionnaire. The coefficient for parents' confusion was 0.88, the child's ineffective interactions 0.78, the problematic child's characteristics 0.81, and all questions 0.73 (Zamani, Jalali, & Pourahmadi, 2018). In a foreign study, the internal consistency of the questionnaire on samples from China was 0.79 (Lu, Wang, Lei, Shi, Zhu, & Jiang, 2018). Further, the coefficient of the subscales was in the range of 0.84 to 0.90. (Wang, Huang, & Kong, 2020). In the present study, the scale's reliability was calculated using Cronbach's alpha method; the total coefficient of the questions in the pre-test stage was 0.80, the post-test was 0.82, and the follow-up stage was 0.92.

Table 1 shows mindfulness-based parenting sessions adapted and table 2 shows parenting sessions based on choice theory adapted.

This research used descriptive statistics such as mean, standard deviation (SD), and inferential statistics, including analysis of covariance (ANCOVA). In addition, the Bonferroni follow-up test and SPSS software (version 24, IBM Corporation, Armonk, NY, USA) were used to compare mindfulness-based parenting with the choice theory parenting program and to compare pre-test and post-test.

## **Results**

The mean  $\pm$  SD of the age of children in the mindfulness, choice theory, and control groups were  $9.20 \pm 1.74$ ,  $9.00 \pm 1.41$ , and  $9.67 \pm 1.23$ , respectively. The F obtained from comparing the averages of the three groups in the age variable was equal to 0.804, which was not statistically significant ( $P = 0.454$ ), indicating that the three groups were similar in age.

**Table 1.** Mindfulness-based parenting sessions adapted from Bogels and Restifo (2013)

Sessions	Aim	Content
1	Automatic parenting	Determining the goals of the meeting, setting the general policy, taking into account the confidentiality and personal life of the people, inviting the participants to form groups of two, and introducing themselves
2	Parenting with a beginner's mind	Physical examination exercise, exercise review, homework review, discovering positive experiences in the child-parent relationship
3	Establishing a new relationship with the body as a parent	Awareness of the five senses, understanding of pleasant events, awareness of bodily sensations when experiencing parenting stress, practicing "seeing" or "hearing"
4	Reacting vs. not reacting to parenting stress	Awareness of the tension of parenting and its acceptance, how stress is exacerbated by thoughts, clarifying the advantages and disadvantages of reacting and not reacting to stress, doing sitting meditation, deep and conscious breathing for three minutes, awareness of breathing, body, voice, and thoughts
5	Schemas and practices of parenting	Recognizing parents' childhood parenting patterns, how the quality of parents' parenting affects the type and quality of their current parenting
6	Conflict and parenting	Investigating parent-child conflicts, seeing the conflict situation as challenging instead of stressful and difficult
7	Love and limitations	Self-compassion, setting limits and defining boundaries consciously, preparing to finish the course, and practicing physical examination
8	Mindful parenting	Using insight and introspection to change the attitude towards life and their children, predicting possible obstacles to failure and progress in the future, reviewing past materials, summarizing the completion of post-test questionnaires, and determining the time for implementing the follow-up phase

The chi-square test resulting from comparing the frequency and percentage of 3 groups in the education variable was equal to 3.252, which was not statistically significant ( $P = 0.777$ ), and indicates that the three groups were similar in terms of education.

Table 3 shows the mean and SD of parenting stress in mothers with children with ODD. Since the Shapiro-Wilk test values were insignificant in each of the stages ( $P < 0.05$ ), it can be concluded that the distribution of scores was normal. Levene's test was also used to check the homogeneity of variances. According to the results, the index of Levene's test was not statistically significant in the three evaluation stages ( $P < 0.05$ ); thus, the assumption of equality of variances was confirmed.

**Table 2.** Parenting sessions based on choice theory adapted from Nili Ahmadabadi et al. (2019)

Sessions	Content
1	Parenting and the role of parents in the formation of self-esteem
2	Explaining the main concepts of choice theory, bad relationships, and its strategies
3	Good relationship and entrance into the desired world of the child
4	Investigating strategies for establishing a good relationship
5	Investigating strategies for establishing a good relationship
6	Introduction about the growth in different dimensions of the child, strengthening the mental dimension
7	Strengthening the mental dimension
8	Strengthening the emotional and social dimension
9	Strengthening the behavioral dimension
10	Strengthening the behavioral dimension
11	Strengthening the physical dimension
12	Posttest and final assessment

**Table 3.** Mean and standard deviation (SD) of parenting stress in mothers with children suffering from oppositional defiant disorder (ODD)

Dependent variables	Stages	Mean ± SD		
		Mindfulness	Choice theory	Control
Parental confusion	Pre-test	35.21 ± 2.13	33.21 ± 1.95	30.12 ± 2.54
	Post-test	30.12 ± 0.12	29.12 ± 1.54	30.54 ± 2.36
Child dysfunctional interactions	Pre-test	31.87 ± 2.26	31.27 ± 0.70	32.27 ± 2.46
	Post-test	27.53 ± 3.13	28.60 ± 1.59	31.80 ± 3.09
Problematic child characteristics	Pre-test	32.60 ± 2.13	32.13 ± 1.80	32.53 ± 1.95
	Post-test	27.73 ± 3.21	28.07 ± 2.25	32.07 ± 2.25
Total parenting stress	Pre-test	99.20 ± 2.98	96.40 ± 3.39	99.07 ± 5.36
	Post-test	83.73 ± 5.71	87.00 ± 4.24	97.93 ± 5.91

SD: Standard deviation

The significance level of the interaction between the group and the pre-test was more than 0.05, indicating the homogeneity of the slope of the regression line. Thus, multivariate ANCOVA (MANCOVA) tests can be implemented, the results of which have been summarized in table 4.

The results of table 4 indicate that considering the combined variable introduced into the MANCOVA model, there was a statistically significant difference between the experimental and control groups (Eta = 0.350, P < 0.01, F = 6.201). According to the Eta coefficient, it was found that about 35% of the changes between the experimental and control groups were due to the intervention. The power of the test is due to the significance of Pillai's trace test.

Table 5 reveals the results of the ANCOVA of parental confusion (F = 11.401), child dysfunctional interaction (F = 12.854), problematic child characteristics (F = 10.251), and parenting stress (F = 25.312), as well as the difference between the control group and the two experimental groups in terms of post-test at the level of P < 0.01. Table 6 lists the results of the Bonferroni post hoc test plus the difference in parenting stress score and its components between the experimental and control groups.

The results of the table 6 showed that the difference between mindfulness-based parenting and parenting based on choice theory was not significant in the variables of parental confusion (mean = 0.618, P > 0.05), child dysfunctional interaction (mean = 0.850, P > 0.05), problematic child characteristics (mean = 0.910, P > 0.05), and total parenting stress (mean = 0.541, P > 0.05). As a result, both interventional methods were effective in reducing parenting stress and its components with no significant difference.

## Discussion

The purpose of this research was to compare the effectiveness of mindfulness-based parenting and choice theory parenting programs on parenting stress in mothers with children with ODD.

**Table 4.** The results of multivariate analysis of covariance (MANCOVA) to compare the composition of the dependent variable in the experimental and control groups

Test	Value	F	df	Effect size	P-value
Pillai's trace	0.705	6.201	8	0.350	0.0001
lambda	0.325	9.900	8	0.452	0.0001
Hotelling's trace	2.190	15.104	8	0.517	0.0020
Roy's largest root	2.502	28.114	4	0.695	0.0001

df: Degree of freedom

**Table 5.** The results of analysis of covariance (ANCOVA) to compare the differences between experimental and control groups in parenting stress scores and its components

Source	SS	df	MS	F	P-value	Effect size
Parental confusion	142.021	2	71.010	11.401	0.0001	0.301
Child dysfunctional interaction	185.205	2	92.602	12.854	0.0001	0.354
Problematic child characteristics	136.201	2	68.100	10.251	0.0001	0.387
Total parenting stress	402.310	2	201.155	25.312	0.0001	0.412

SS: Sum of squares; DF: Degree of freedom; MS: Mean squares

The results showed that mindfulness-based parenting and parenting based on theory significantly reduced parenting stress. Moreover, the results showed that the average difference between the parenting group based on mindfulness and the control group was greater than the average difference between the parenting group based on the choice theory and the control group, which indicates that the parenting group based on mindfulness was more effective than the choice theory parenting program. This result can be compared with the results of Aliakbari and Aslezaker (2022), Khazaei et al. (2021), Sharif Mohammady et al. (2020), Mohri et al. (2017), and Ghazanfari et al. (2016), which are aligned and consistent, and have shown the effectiveness of mindful parenting on mothers. Additionally, no inconsistent finding was found for the result obtained from this hypothesis.

In explaining this result, it can be said that mindfulness-based parenting may help mothers show more empathy and compassion towards themselves and their children, tolerate their and their child's complex emotions and show more acceptance towards themselves and their child, recognize the patterns of their upbringing that have entered into the here and now relationship with their child, and as a result, achieve a better resolution of conflicts and create a stronger bond with their child (Bogels & Restifo, 2013). One of the mediators of the influence of mindfulness is the role of attention in this process (William and Wahler, 2010; Yaghoubian & Babakhani, 2019). Mothers' attention can be biased due to the child's problems. For example, mothers of children with ODD may selectively pay attention only to the child's negative behaviors. Mothers' mental issues can also cause biased attention towards the child's negative behaviors.

For example, mothers suffering from psychological stress and depression may find mental rumination about their child's negative behaviors and be less mentally present. Mothers of children with ODD may generally pay less attention to their children except when their children show behavior that requires attention.

**Table 6.** Bonferroni post hoc test of the difference in the effectiveness of interventions on parenting stress

Variable	Group	Mean difference	P-value
Parental confusion	Mindfulness-choice theory	0.618	0.0200
	Mindfulness-control	1.107	0.0001
	Choice theory-control	1.459	0.0001
Child dysfunctional interaction	Mindfulness-choice theory	0.850	0.2010
	Mindfulness-control	1.801	0.0001
	Choice theory-control	1.314	0.0001
Problematic child characteristics	Mindfulness-choice theory	0.910	0.1110
	Mindfulness-control	3.695	0.0001
	Choice theory-control	2.523	0.0001
Total parenting stress	Mindfulness-choice theory	0.541	> 0.9999
	Mindfulness-control	3.120	0.0001
	Choice theory-control	2.058	0.0001

Totally, biased maternal attention towards the child's negative behaviors may be an unintended consequence of the child's involvement in mental health services because negative behaviors are the focus of diagnosis and treatment (Bogels & Restifo, 2013) in the sense that mental health professionals may teach mothers to pay attention to their children's negative behaviors and use diagnostic labels for the child's behavior or himself (Khazaei, Shairi, Azadfalsh, & Jalali, 2021). Therefore, mothers' perspective is limited to negative aspects of their child's behavior (Kabat-Zinn & Kabat-Zinn, 2021). When mothers pay attention to all the child's manifestations without judgment, they can better respond to the child with sensitivity. Therefore, it is reasonable to say that there is a significant difference between the effectiveness of mindfulness-based parenting and choice theory parenting program on the stress of parenting in mothers with children with ODD.

While the current research has strengths, such as a control group and a follow-up study, it also has limitations. First, the present study was conducted only on mothers, and fathers with children suffering from ODD were not examined and studied. Due to the time limit, this research could not carry out a longer-term follow-up phase to investigate the continuity and permanence of the effects of mindfulness-based parenting and choice theory parenting programs and was limited to only a two-month follow-up measurement phase. This research could have been done on mothers and fathers at the same time, but due to the lack of conditions, only the sample of mothers of children with ODD was limited. Limitations of data collection tools to questionnaires and non-use of other measurement tools are other limitations and problems of this research. Because there is a possibility of bias in the mothers' answers and they may have given society-friendly answers to the questions, it is suggested that this research be repeated in other samples, including the fathers of children with ODD and some of the questions arising from this study and the background of the research should be scientifically investigated and answered with more certainty. It should be given whether these parenting methods are potent and effective compared to common parenting interventions to reduce the problems caused by parenting stress and psychological distress of the mothers of these children. The follow-up stage in this study was two months. On this basis, it is suggested that the continuation of parenting be considered based on a more prolonged follow-up stage in future studies. In this study, the number of each group was 15 people. It is suggested that future researchers expand the sample and conduct research on both parents, along with paying attention to other variables related to the effectiveness of mindfulness-based and theory-based parenting. Choosing and comparing it with other existing parenting programs can help in understanding the point of these parenting methods on mothers with children suffering from ODD.

Despite the limitations, the present study has important clinical implications. Conscious parenting and choice theory parenting programs can be considered new intervention methods for mothers of children with ODD, which is one of the symptoms of externalizing problems in a wide range of externalizing disorders, such as stubbornness and oppositional disobedience disorder. The lack of sample dropout in the parenting courses based on mindfulness and choice theory parenting programs and the mothers' overall positive evaluation of these interventions in the present study show that the parenting programs carried out in this study are acceptable and effective in the mental health programs of the mothers of these children. The improvement in the mother's parenting behavior and the reduction of the child's behavioral and emotional problems (including stubbornness-confrontational



disobedience disorder) show the effectiveness of these methods in a range of problematic factors in the family of these children.

The results showed that there was a significant difference between the effectiveness of mindfulness-based parenting and choice theory parenting programs on parenting stress in mothers with children with ODD, in such a way that mindfulness-based parenting has been more effective than the parenting group based on the choice theory on reducing the stress of parenting of mothers with children suffering from ODD. In this regard, it can be said that in recent years, treatments based on mindfulness and acceptance have increased in Iran. Because of these interventions' unique characteristics, it is recommended that metaphors and multiple stories be used to understand their concepts better. These metaphors and stories are derived from ideas, traditions, and teachings of non-Iranian cultures, and the techniques and concepts of these models must be adapted to the culture and linguistics of Iranian society to obtain better results. Therefore, counselors and psychologists in the field of the family can help parents by emphasizing parenting packages based on Iranian culture by holding workshops and training sessions in counseling centers and even training sessions on TV programs to reduce the stress of parenting.

## Conclusion

The study results showed that the post-test of mindfulness-based parenting and choice theory parenting programs had a significant effect on parenting stress in mothers, and the parenting group based on mindfulness was more effective than the choice theory parenting program. Despite the limitations, the present study has important clinical implications. Mindfulness-based parenting and choice theory parenting programs can be considered new intervention methods for mothers of children with ODD who suffer from symptoms of externalizing problems in a wide range of externalizing disorders (such as ODD). The lack of sample dropout in the parenting courses based on mindfulness and choice theory parenting programs, along with the mothers' overall positive evaluation of these interventions in the present study, show that the parenting programs conducted in this study are acceptable and effective interventions in the mental health programs of the mothers of these children. The improvement in the mother's parenting behavior and the reduction of the child's behavioral and emotional problems (including ODD) show the effectiveness of these methods in a range of problematic factors in the family of these children.

## Conflict of Interests

Authors have no conflict of interests.

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