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Effectiveness of Transactional Analysis Training on Cognitive Flexibility, Resilience and Anxiety in Mothers of Children with Externalized Behavioral Problems

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Abstract

The purpose of this study was to investigate the effectiveness of transactional analysis training on cognitive flexibility, resilience and anxiety in mothers of children with externalized behavioral problems. The method of the present study was quasi-experimental with pre-test and post-test design and a control group. The statistical population of the present study included all mothers of children with externalized behavioral problems in Isfahan in 2021, 30 of whom were selected by available sampling and randomly divided into experimental and control groups. The experimental group received 120 minutes of transactional analysis intervention (Widdowson, 2014) during two months and 8 sessions, and the control group received no training. The data which collected through the Dennis & Vander Wal cognitive flexibility inventory, the Connor and Davidson resilience Questionnaire and the Spielberger state-trait anxiety inventory, were assessed by using analysis of covariance. The results show that transactional analysis intervention leading to improved cognitive flexibility and resilience and on the other hand reduced obvious anxiety. But this intervention did not have a significant effect on reducing mothers' latent anxiety. Therefore, according to the results of the study, it can be stated that attention to psychological problems of mothers of children with externalized behavioral problems is necessary and transactional analysis intervention can be used as an effective intervention in improving the problems of mothers of children with externalized behavioral problems.

Keywords: *Transactional Analysis, Cognitive Flexibility, Resilience, Anxiety, Externalized Behavioral Problems.*

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Introduction

Childhood behavioral problems significantly impact parents' performance, family relationships, and mental health status (Bolsoni-Silva & Loureiro, 2020). The presence of externalized behavioral problems in children imposes additional demands on parents and causes increased tension, psychological pressure, and various psychological problems in them (Thongseiratch, Leijten & Melendez-Torres, 2020). On the other hand, parents of children with externalized behavioral problems face very serious pressures in trying to manage and organize the daily activities of the child, and as it was said, they face many psychological problems and stressors. (Huang, Chao, Tu & Yang, 2003). Most of the time, parents with extreme control of the child create conditions that result in parent-child conflict and intensify signs of behavioral problems in the child (Damen, Veerman, Vermulst, Westerdijk & Scholte, 2021). In the meantime, the responsibility and commitment of mothers toward fathers is greater due to having the traditional role of caregiver towards their children, which causes more pressure and psychological problems (Roccella et al., 2019).

One issue that is being considered today, along with psychopathology caused by environmental stressors such as children with externalized behavior problems, is cognitive flexibility (Bálint, Bitter & Czobor, 2015). It is one of the most important elements of executive functions, and it is called the ability of a person to change thoughts, actions and solutions in response to changing conditions (Whiting, Deane, Ciarrochi, McLeod & Simpson, 2014). Mothers with flexible thinking use alternative justifications and positively reframe their thinking. They accept

challenging situations or stressful events and are more psychologically resilient than people who are not flexible (Haglund, Nestadt, Cooper, Southwick & Charney, 2007). Therefore, it can be said that cognitive flexibility can be effective in reducing anxiety and mental pressure (Gabrys, Tabri, Anisman & Matheson, 2018). Anxiety is one of the issues that has a high prevalence among the problems of parents of children with special needs (Ren, Li, Chen, Chen & Nie, 2020). Since it is an unpleasant situation, they resort to defensive reactions, which are completely unconscious; their excessive use is undesirable and aggravates the child's behavioral problems (Bujnowska, Rodriguez, Garcia, Areces & Marsh, 2019). One of the characteristics of parents that can play a significant role in the relationship between parents and children in order to improve and reduce behavioral problems is resilience. This feature is considered as one of the effective factors in the relationship between parents and children with behavioral problems; Because resilient people have positive characteristics such as mental health (Lee, Sudom & Zamorski, 2013), problem-solving skills, flexibility, sense of hope, empathy, optimism, and a sense of belonging and do not have negative characteristics such as depression, anxiety and obsessions (Hjemdal, Vogel, Solem, Hagen & Stiles, 2011) are likely to adapt more easily to children's behavioral problems. Researchers believe that strengthening resilience in parents of children with special needs can reduce the number of psychological problems such as anxiety (Adams et al., 2018).

Considering the importance of educating parents, especially mothers, and the impact of the parent-child relationship on the prevention and treatment of children's

behavioral problems, training the necessary skills to improve interactions with children becomes more necessary. In this regard, one of the most effective techniques is transactional analysis (TA) (Widdowson, 2017), which Eric Berne presented in 1950. Transactional analysis is a helping relationship in which the qualified therapist, using transactional analysis methods, increases the "mature" awareness of the client's problem-solving perspective. The method of transactional analysis is used to create change through appropriate methods based on the here and now, and its purpose is to increase the cognitive and emotional awareness of the client regarding the specific damaged area (problems in relationships and emotional regulation) (Kim, Bang & Ko, 2017). The reason for choosing the transactional analysis intervention is that the training of parents, especially mothers, and the effect of the parent-child relationship on the prevention and treatment of children's behavioral problems is important, and the said intervention is aimed at interpersonal relationships, which in this article means parent-child interactions. In addition, providing solutions in the field of interpersonal issues seemed beneficial. This intervention offers simple and comprehensible methods for parents and families who want healthier relationships based on mutual understanding of the relationship parties. Finally, with correct and logical methods and based on "adult" facts, it regulates the application of limits and the parenting framework in a way that leads to preserving the "child's" dignity.

In many researches, the effectiveness of transactional analysis intervention has been investigated. For example, Farhangi and Agha Mohammadian Sherbaf (2006) concluded that with a probability of 95%, the

mentioned method is effective on the coping methods of teenagers and causes a decrease in emotion orientation and an increase in problem orientation in coping methods. Momeni (2007) showed that the group training of mothers using the transactional analysis method positively improved the parent-child relationship (especially in the aspect of positive affect). In Javadi's study (2006) on the mothers of female students in the 2nd district of Tehran, it was found that transactional analysis training effectively improves the functioning of the family and its components. Sekhavat and Attari (2021) also investigated the effectiveness of transactional analysis in improving mother-child relationships and concluded that transactional analysis training improves parent-child relationships. In the research of Akbari et al. (2012), it was reported that group therapy using transactional analysis increases satisfaction, compatibility, positive emotions, intimacy, and reduces depression and anxiety in couples who have experienced emotional divorce. Rinaldi and Howe (2012) also showed in their research that educating and informing parents with this approach helps them to understand the high-level connection of children's behavioral problems in their relationships with ineffective parenting styles. Ciucur (2012) in examining the effect of transactional analysis on the ability of psychologists, concluded that transactional analysis improves self-satisfaction, sociability, empathy, emotional control, resilience, acceptance and right thinking in them. Widdowson (2014), examining the effectiveness of transactional analysis on people suffering from anxiety and depression, showed that transactional analysis could have effective therapeutic results.

Considering the high prevalence of behavioral problems among children, the role of parent education, especially mothers, and the impact of the parent-child relationship on the prevention and treatment of children's behavioral problems, it seems necessary to provide solutions to improve these issues. Therefore, the current research seeks to answer the question of whether transactional analysis training affects the cognitive flexibility, resilience and anxiety of mothers of children with externalized behavioral problems.

Method

The present research method was a quasi-experimental pre-test-post-test type with a control group. The statistical population included mothers with female children with externalized behavior problems before elementary school in Isfahan city in 2021. 86 mothers who referred to counseling centers and psychological services in the 8th and 9th regions of Isfahan due to their child's externalized behavioral problems were selected using available sampling. Then, the Ayberg child behavior list was implemented as a screening test and clinical interview to ensure the diagnosis of the disorder. By determining the scores in behavioral problems, 30 people were selected as sample people and were randomly placed in experimental (15 people) and control (15 people) groups. Due to the use of quasi-experimental research method, the optimal size for each group is 15 people. Entry criteria include: having a 4-6 year old daughter; the presence of behavioral problems based on the Ayberg child behavior list; the child living with both parents; mother's willingness to participate in training sessions; mother's education at least diploma; Not receiving other psychological treatment at the same time as this treatment.

Exclusion criteria include: simultaneous diagnosis of psychological disorder in the child (screening was done by clinical diagnostic interview); Absence of more than three sessions in training sessions and expressing unwillingness to cooperate.

Materials

Cognitive Flexibility Inventory (CFI). This 20-question questionnaire was created by Dennis and Vanderwaal (2010) and is scored based on a seven-point Likert scale from one to seven. Since the subject's total score varies from seven to 140, therefore, a continuum is used to interpret it, which has high flexibility on one side and lack of flexibility on the other side. Therefore, if the subject's score is higher than the average total score of 74, the degree of flexibility is higher, and the lower than 74, it shows less flexibility or lack of flexibility (Zare et al., 2017). Dennis and Vanderwal (2010) showed in a research that the correlation of this questionnaire with the Beck depression questionnaire was $r=39$ and Martin's cognitive flexibility scale was $r=0.75$. It was also shown in this research that this questionnaire has a suitable factorial structure, convergent validity and concurrent validity. These researchers obtained the internal consistency of this questionnaire by Cronbach's alpha method for the whole scale of 0.91 and with the retest method at 0.81. In Iran, Soltani, Share and Farmani (2012) reported the reliability coefficient of the entire scale to be 0.77. Also, the reliability coefficient in the present study was obtained using Cronbach's alpha method for the total score of the questionnaire at 0.86.

Connor and Davidson Resilience Scale (CD-RISC). This scale was created by Connor and Davidson (2003) and includes 25 questions to measure coping power and adaptation to stress and injury. For each question, a five-point Likert scale ranging

from 0 (not true at all) to 4 (always true) is considered, so that a score of 0 indicates the low limit and 4 indicates the high limit of resilience. Although this scale measures different dimensions of resilience, it has a total score. Therefore, the range of test scores is between 0 and 100 (Connor and Davidson, 2003). Higher scores indicate more resilience of the subject. This scale has been standardized in Iran by Mohammadi (2005). He used Cronbach's alpha method to determine the reliability of Connor and Davidson's resilience scale and reported a reliability coefficient of 0.89 (Mohammadi et al., 2006). In the research of Samani, Jokar and Sahra Gard (2007), Cronbach's alpha coefficient of 0.78 was obtained for its reliability. In the present study, a reliability of **0.75 was obtained.**

Spielberger state-trait anxiety inventory (STAI). This questionnaire was presented by Spielberger et al. (1980). It includes separate scales for measuring overt and covert anxiety, which have been used after translation and assimilation with Iranian society (Behadani, Sargolzaei, and Ghorbani, 2019). The number of questions in the questionnaire is 40 questions and a score between 1 and 4 is assigned to each of the statements of this questionnaire, according to the answer given by the person. A score of 4 indicates high anxiety, and ten statements of the overt anxiety scale and eleven statements of the hidden anxiety scale are scored accordingly. For the scoring of other terms, the high rank of each term indicates the absence of anxiety, which includes ten overt anxiety items and nine covert anxiety scale items. The standardization of the Spielberger test and the reliability coefficient of the test in Iran have been examined separately in two groups, norm and criterion. According to Cronbach's alpha, the reliability level for the

norm group was 90.84 and 90.25 in the overt and covert anxiety scale, respectively, and this level was observed in the criterion group as 0.94. In Iran, Enadi (2013) reported the validity of this questionnaire as 0.87. Also, the reliability of this questionnaire in the present study was 0.89.

Eyberg Child Behavior Inventory. This list is a self-report tool and includes 36 items that was designed in 1978 by Eyeberg and Ross to measure common problematic and harmful behaviors in children and adolescents aged 2-16 years in two scales of severity and difficulty. This list is scored by parents on a 7-point Likert scale. Also, by grading each item as yes or no, it is determined whether the child's behavior is problematic. The score of the severity component is determined from the sum of the ratings of the frequency of behaviors, and the score of the behavioral problems component is determined from the sum of the yes answers (Weiz, 2005). In the study of Connors, Edwards and Grant (2007), the alpha coefficient of the severity component was 0.95 and the problem component was 0.91. In Iran, in the research of Haji et al. (2012), the validity of the questionnaire was calculated in a sample of 200 people, and the alpha coefficient of the intensity component was 0.93 and the problem component was 0.92.

Implementation

After announcing the call to hold this training course in counseling centers and psychological services in the 8th and 9th regions of Isfahan, 30 people were randomly selected and placed in the experimental and control groups according to the entry criteria. After clarifying the ethical principles including the goals and process of the research, the confidentiality and confidentiality of the participants'

information, the pre-test was conducted for both groups. Transactional analysis training sessions were conducted for two months and eight 120-minute sessions for the experimental group, and finally, the post-test phase was conducted for both groups. At the end, the data obtained from the research were analyzed with SPSS-25 software and univariate covariance analysis. However, before that, the required assumptions including the normality of the data with the Kolmogorov-Smirnov and Shapiro tests and

the homogeneity of variances with the Levine test were used. After confirming the non-significance of these tests ($P > 0.05$), univariate covariance analysis was used. Transactional analysis intervention sessions were implemented according to Widdowson's (2014) eight-session protocol, which was translated by Golshan, Zargham Hajebi, and Sobhi Gharamaleki (2019) in Iran, and its reliability was reported as acceptable, as follows.

Table 1: Content of TA sessions

| Session | Content | Goal |
|---------|--|--|
| 1 | The introduction and presentation of the topic of the educational sessions and the introduction of Eric Burn's theory and emotional states (parent, adult and child) were discussed. Then the incomplete sentences about the way of thinking were expressed and the members were asked to complete them and the effect of negative thoughts on the attitude was explained. | Introduction |
| 2 | "I" states (parent, adult and child) were implemented. A person may think like one of their parents, act like an emotional nut, or be rational like an adult. The members played the role of a scolding parent and a moody and intolerant child, and at the end of the session, feedback was received and they were asked about their feelings. | Implementing my modes and correcting the way of thinking |
| 3 | The nature of complementary and cross communication, as well as the problems that cross communication creates in relationships and causes differences, were explained. Members were then asked to implement these connections in class. | Complementary and cross communication training |
| 4 | Types of caressing, positive and negative caresses, conditional and non-conditional caresses, verbal and non-verbal, external and internal, direct and indirect caresses, purposeful caresses and self caresses, were explained. The members were asked to perform a variety of caresses. | Teaching types of caressing |
| 5 | Regarding self-knowledge, it was explained that dysfunctional feelings, beliefs, thoughts and behavior should be identified and replaced with correct methods, and Eric Burn's six methods for organizing time (allocating time for solitude, rituals and ceremonies, spending time, occasion psychological games and intimacy) were described. | Teaching self-awareness and organizing time |
| 6 | Analyzes of life plays and winning, losing and non-winning plays were explained. Eric Byrne describes people as human beings who are actors in a play who play their part on the stage of life. | Analysis of the play of life |
| 7 | The drama triangle (victim, savior and abuser) was explained. The abuser ignores the value of others, the savior ignores their abilities, | Explaining the play triangle and |

| | | |
|---|--|---------------------------|
| | and the victim ignores his own. Usually, someone who plays mental games starts with one role and then switches to another role. The members were asked to talk about the psychological roles and games they had at different stages of life. | psychological games |
| 8 | The summary and conclusion of the topics discussed in the previous meetings, the review of the changes made, the extent to which the members achieved their goals and what they had learned in the group were evaluated. | Evaluation and conclusion |

Findings

The mean and standard deviation of the age of mothers in the experimental group was 32.38 (4.72) years, and the mean and standard deviation of the mothers in the control group was 32.10 (3.55). 16.7% of mothers in the experimental group had a diploma, 25% had an associate's degree, 41.7% had a bachelor's degree, and 16.6% had a master's degree. In the control group,

20% had a diploma, 26.7% had an associate's degree, 46.6% had a bachelor's degree, and 6.7% had a master's degree. The results showed that the two groups are almost homogeneous regarding age and education. The results of the chi-square test also show that the difference between the two groups is insignificant in terms of age ($X^2=0.19$ and $p=0.96$) and education ($X^2=0.48$ and $p=0.90$).

Table 2. Mean and standard deviation of variables in two experimental and control groups

| Variable | Stage | Group | | | |
|-----------------------|-----------|-------|--------------------|---------|--------------------|
| | | Exp. | | Control | |
| | | Mean | Standard deviation | Mean | Standard deviation |
| Cognitive flexibility | Pre-test | 41/20 | 9/10 | 44/40 | 8/23 |
| | Post-test | 48/98 | 9/29 | 40/56 | 8/76 |
| Overt anxiety | Pre-test | 55/76 | 8/34 | 52/63 | 9/45 |
| | Post-test | 47/87 | 11/55 | 53/87 | 9/34 |
| Covert anxiety | Pre-test | 53/20 | 6/77 | 52/40 | 6/59 |
| | Post-test | 51/89 | 6/88 | 53/96 | 8/10 |
| Resilience | Pre-test | 37/40 | 6/77 | 37/23 | 6/16 |
| | Post-test | 45/88 | 7/96 | 36/55 | 6/28 |

The information in Table 2 indicates an improvement in cognitive flexibility and resilience in the experimental group compared to the control group in the post-test phase and a decrease in the overt and hidden anxiety scores in the experimental group compared to the control group in the post-test phase. To perform the analysis of covariance, the normality of the data was measured using the Kolmogorov-Smirnov test. Since the values of the Kolmogorov-Smirnov test for the variables of cognitive flexibility

($p=0.20$), anxiety ($p=0.20$) and resilience ($p=0.10$) are not significant in the experimental group. Therefore, it can be concluded that the distribution of scores in these variables is normal.

Next, to enter the covariance analysis, the homogeneity of the variances for the variables had to be measured. The results of homogeneity of variances indicated that the condition of equality of variances was established, which means that the data obtained from the Levene test were: Pre-test

flexibility was 0.34, pre-test overt anxiety was 0.69, pre-test hidden anxiety was 0.80, and pre-test resilience was 0.73. Therefore, rejecting the null hypothesis ($P < 0.05$) indicates a violation of the pre-assumption of variance dispersion inequality. In other words, if the significance level of Levene's test is greater than ($P > 0.05$), it can be

concluded that the variance of the groups is homogenous. The homogeneity test of the regression slope also showed that the obtained number (0.46) is greater than ($P < 0.05$). Therefore, the assumption of the homogeneity of the regression slope is also met, and there is no problem in performing covariance analysis.

Table 3. Results of univariate covariance analysis to compare experimental and control groups in cognitive flexibility and resilience variables

| Variable | Source | F | Sig | Effect size |
|---------------------------|----------|-------|-------|-------------|
| Psychological flexibility | Pre-test | 88/50 | 0/001 | 0/78 |
| | Group | 15/60 | 0/001 | 0/39 |
| Resilience | Pre-test | 50/89 | 0/001 | 0/68 |
| | Group | 33/26 | 0/001 | 0/58 |

Table 3 shows a significant difference between the experimental and control groups in terms of cognitive flexibility ($P = 0.001$, $F = 15.60$) and resilience ($P = 0.001$, $F = 33.26$). Also, the effectiveness of transactional analysis intervention on cognitive flexibility

and resilience was found to be 0.39 and 0.58, respectively. To investigate the effectiveness of transactional analysis intervention on overt and hidden anxiety, multivariate covariance analysis was used, the results of which are reported in Table 4.

Table 4. Results of multivariate covariance analysis to compare test and control groups in overt and covert anxiety variables

| Variable | Test | Value | F | df | Df error | Sig | Effect size | Power |
|----------------|--------------------|-------|-------|----|----------|-------|-------------|-------|
| Overt anxiety | Pillai's trace | 0/60 | 16/69 | 3 | 36 | 0/001 | 0/40 | 0/89 |
| | Wilks' Lambda | 0/40 | 16/69 | 3 | 36 | 0/001 | 0/40 | 0/89 |
| | Hotteling's trace | 1/51 | 16/69 | 3 | 36 | 0/001 | 0/40 | 0/89 |
| | Roy's largest root | 1/51 | 16/69 | 3 | 36 | 0/001 | 0/40 | 0/89 |
| Covert anxiety | Pillai's trace | 0/89 | 42/81 | 6 | 33 | 0/001 | 0/68 | 0/89 |
| | Wilks' Lambda | 0/11 | 42/81 | 6 | 33 | 0/14 | 0/08 | 0/89 |
| | Hotteling's trace | 7/78 | 42/81 | 6 | 33 | 0/001 | 0/68 | 0/89 |

| | | | | | | | | |
|--|--------------------|------|-------|---|----|-------|------|------|
| | Roy's largest root | 7/78 | 42/81 | 6 | 33 | 0/001 | 0/68 | 0/89 |
|--|--------------------|------|-------|---|----|-------|------|------|

According to Table 4, in terms of apparent anxiety (Wilks lambda = 0.40, $p = 0.001$), there is a significant difference in the two experimental and control groups at the level of $p < 0.01$. However, in terms of hidden anxiety (Wilks lambda = 0.11, $p = 0.14$), there is no significant difference between the two experimental and control groups at the level of $p < 0.01$. Also, the effectiveness of transactional analysis intervention on overt anxiety was found to be 0.40.

Discussion

The present study was conducted to investigate the effectiveness of transactional analysis training on cognitive flexibility, resilience and anxiety of mothers of children with externalized behavior problems. The results showed that transactional analysis increases cognitive flexibility and resilience and reduces obvious anxiety in mothers, but it did not affect the level of hidden anxiety in mothers, which will be explained further. The findings of this research are indirectly aligned with the results of various studies (Farhangi & Agha Mohammadian Sherbaf 2006; Momeni 2007; Javadi 2007; Sekhavat & Attari 2011; Akbari et al. 2012; Rinaldi & Howe 2012; Ciucur 2012; Widdowson, 2014)

The first finding of the research showed that transactional analysis intervention effectively increases cognitive flexibility. In its explanation, it can be said that one of the conditions that strengthen cognitive flexibility in people is being aware of how to communicate, the factors involved in it, and reducing biases in human relationships. The transactional analysis approach follows this goal well. By having a systemic view of communication, mothers will be aware of

their contribution in communication by being aware of the effect of their type of communication on the child, which can be a reason for reducing conflicts. Therefore, they can deal with their children's behavioral problems more flexibly, not only as a problem. Mothers will realize that in the created situation, they were one of the communication actors and they, consciously or unconsciously, participated in the initiation and continuation of mental games that ended in problems and disputes (Widdowson, 2014).

In another explanation of the above research findings, it can be said that one of the issues and problems seen in mothers with children with externalized behavior problems is the lack of self-differentiation. According to the point of view of the systemic approaches of the family (Bowen), one of the problems and problems of people who remain in stressful situations and cannot free themselves from these situations is the lack of self-differentiation. Self-differentiation, which refers to people's ability to balance intimacy and independence in their relationships with other people, and is known to create a balance between reason and emotion in people, especially when they deal with stressful situations (Boen, 1998; quoted by Agha Yousefi et al., 2016). The depth of the experience of helplessness in these people may be so high that they have reached the fundamental belief that there will be no change. It is also possible that the stability of the therapeutic effect of transactional analysis on cognitive flexibility is highly dependent on the amount of positive or reconstructed experiences of mothers in their daily life.

In the explanation of the second finding of the research regarding the effectiveness of transactional analysis training on the resilience of mothers of children with externalized behavioral problems, it can be said that the main key to improving resilience in transactional analysis intervention is the training of communication modes between mother and child. This research finding is in line with the results of Ciucur's (2012) research on the effectiveness of transactional analysis on the resilience of psychologists. By identifying her position in communication and being aware of how her psychological state affects the flow of communication with the child, the mother increases her communication skills, which significantly strengthens resilience (Sonda, 2018). By learning the teachings of transactional analysis theory, the participating mothers in this research were able to exercise better control in conflict situations with their children. Mothers' understanding of their inner state and conditions, which aspect of their personality they are communicating with which aspect of their child's personality and what advantages this communication style has for the mother were valuable insights. It helped mothers to identify and apply management to increase resilience. The teachings of transactional analysis in the field of caressing and strategies for caressing, intimacy and free expression of feelings and self-disclosure in an atmosphere combined with psychological security and mutual empathy can reduce the negative confrontation between mother and child and increase resilience. By teaching how to analyze relationships, especially the types of complementary, intersecting and latent relationships, transactional analysis introduces mothers to how to communicate effectively. In other words, it equips people

with appropriate communication skills to establish proper complementary communication by recognizing the states of themselves and others (child, parent and adult), especially regarding verbal and non-verbal cues. In addition, by teaching the techniques of pushing back the other party's parent, it enables a person to manage the situation in possible conflict-causing situations with his adult supervision and can provide the conditions for establishing constructive relationships (Kazemi et al., 2012).

The third finding of the research showed that the intervention of transactional analysis is effective on the obvious anxiety of mothers of children with externalized behavior problems. This finding is in line with the results of the study by Akbari et al. (2012) and Widdowson (2014) regarding the improvement of anxiety due to the implementation of transactional analysis. Transactional analysis training reduces the prejudices, prejudgments and impulsivity of mothers and reduces their stress and anxiety because the mother's "adult self" is strengthened and developed and the assessment of situations improves under the influence of training. Adult reinforcement and a more accurate and thoughtful assessment of the situation in which the child shows externalized behavioral problems such as aggression and disobedience will allow the mother to have more control over her behavior. This means that the occurrence and experience of anxiety in the mother are reduced.

By knowing my moods, mothers participating in this research came to the knowledge that in stressful situations, how "my moods" manifest in their children. They learned to control their anxiety by creating a correct relationship, solve conflicts and

issues, which increases the solidarity and closeness between mother and child and makes them ignore the child's mistakes. In fact, by being aware of my moods and interactions in the relationship, constructive communication is established in the family environment, which changes the situation of "you are not good"; The situation that was created due to the child's mistake and creates the situation of "I am fine - you are fine" in the mother, which reduces the tension and anxiety of the mother. In this way, when the mother is offended and upset with the child, she finds the view that "you are not good". It may even form the view of "I'm not good" due to the interactions that have developed, which increases the mother's anxiety. Now, when mothers are trained and familiarized with the concepts of transactional analysis, they try to change these formed views.

The research findings showed that transactional analysis intervention could not affect hidden anxiety in mothers. In its explanation, it can be said that hidden anxiety is a permanent pattern of anxiety and a person's temperament. Latent anxiety refers to the persistent tendency of people to experience anxiety and is dependent on situational factors. In other words, hidden anxiety is a kind of hidden aspects of the personality, and changing the complex dimensions of the human psyche is not easily possible and requires fundamental changes and a longer period, such as psychoanalytic treatments. Short-term meetings cannot have positive and successful effects in this direction. Therefore, it is better to spend more, more detailed and longer investigations to change this dimension of anxiety.

Finally, the limitations and shortcomings of the research should be mentioned. The time limit, which means the impossibility of

follow-up and the unisex nature of the sample under study, makes it difficult to generalize. It is suggested to carry out follow-up studies to check the stability of the effects of the independent variable. It is also suggested to implement the intervention on the group of fathers or a group composed of mothers and fathers and compare their results with the current research, repeating this issue on male children and students of other grades. In the practical proposals, it is briefly suggested that the intervention of transactional analysis should be considered as one of the intervention programs in counseling and psychology centers.

Ethics

In this research, ethical standards including obtaining informed consent, ensuring privacy and confidentiality were observed.

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Conflict of Interest

According to the authors, this article has no financial sponsor or conflict of interest.

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