

Effectiveness of Acceptance and Commitment-based Therapy on Psychological Flexibility and Resilience in Mothers of Children with Autism Spectrum Disorders

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Abstract

Background: One of the most stressful experiences for any family is managing a child with a disability, disorder, or chronic illness. The present study was conducted to evaluate the effectiveness of acceptance and commitment-based therapy on psychological flexibility and resilience among mothers with autistic children in Shiraz.

Methods: This is a quasi-experimental pretest-posttest study with a control group. The statistical population of the present study included mothers with autistic children referring to the autism community in Shiraz city at 1398. According to the semi-experimental design and the criteria for research, a sample of 36 patients (each group of 18) was selected randomly. Samples were randomly assigned to two experimental and control groups. The experimental group received 8 sessions of “acceptance and commitment therapy”. The instrument for collecting information included the Cognitive Flexibility Questionnaire (CFI) and Connor & Davidson Resilience Questionnaire. Data were analyzed through SPSS software using covariance.

Results: The results showed that Commitment-based Therapy is effective in increasing the mental flexibility and resilience of mothers of children with autism ($P=0.001$).

Conclusion: Based on the findings, it can be concluded that acceptance and commitment therapy is effective in improving the mental health of mothers with childhood autism.

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Introduction

Family plays an important role in enduring the effects of an accident or illness of one of its members, especially the child.¹ Therefore, it is quite natural for the needs of the family to be aligned with the situation of the child being supported, educated, and followed up. One of the most stressful experiences for any family is managing a child with a disability, disorder, or chronic illness.² Autism is a lifelong developmental disability that prevents a person

from understanding what he or she sees, hears, and acquires through other senses. As a result, there are severe problems in the field of social relations, communication, and behavior. Autism is a complex neurological disorder that affects the way the brain works. Symptoms of autism can manifest in many different ways and may be associated with other disabilities. Some people with autism have normal levels of intelligence, but most of them have degrees of intellectual disability that vary from mild to severe. All people with autism have difficulty with social

behavior and interaction.³ This disorder has a great impact on individuals, families, and society. The parents of these children face many problems and difficult situations. Many of them seek knowledge, skills, and learning issues as appropriate solutions to deal with the consequences of this disorder in their lives.⁴ Researchers show that parents of children with autism experience higher stress than those with normal children and children with chronic diseases.⁵ The characteristics of this disorder, late and difficult diagnosis, lack of definitive and effective treatments, and poor prognosis can impose severe psychological stress on the child's family and parents. Behavioral and communication problems of the child, mothers' worries about the permanence and stability of the child, low acceptance of society and even other family members about the child's behaviors, low social support, financial problems, isolation, and lack of parental awareness about the child's development are some of the most important factors.⁶ The reaction of mothers of children with autism depends on how flexible they are in dealing with the problem. Psychological resilience is defined as the ability to adapt to changing environmental stimuli. Research has shown that there is a relationship between psychological resilience and a wide range of psychological problems, general health, and quality of life.⁷ Increasing the child's problematic behaviors decreases the psychological acceptance of the parents and increases the psychological problems of the parents.⁸ On the other hand, the resilience of these mothers is crucial. Resilience is one of the most important human abilities that leads to effective adaptation to the risk factors. Resilience is the capacity of individuals to grow in the face of stress and disaster.⁹

One of the treatment modalities that seems to be effective in improving the mental health of parents of children with autism is compassion-focused therapy (CFT). The basics of Commitment-based Therapy point out that external soothing thoughts, factors, images, and behaviors must be internalized, and in this case, the human mind, as it responds to external factors, in the face of this The inner self also calms down.¹⁰ High levels of psychological problems such as depression, anxiety, stress, and resilience among mothers of children with autism cause most mothers to be unable to cope with the disease and focus all their attention on their child's future problems. In addition, transient mood swings, reduced quality of life, limited social activities, and economic problems are some of the factors that reduce the mental health of these parents.¹¹ Due to these problems, it is necessary to design and implement interventions to improve the mental health of mothers of children with autism. Therefore, this study was conducted to evaluate the effectiveness of compassion-focused therapy on the psychological flexibility and resilience of mothers of children with autism in Shiraz.

Methods

This is a quasi-experimental study that was performed

using a pre-test-post-test and control group. The population was among mothers of children with autism who were referred to the Autism Society in Shiraz in 1398. A sample of 36 subjects was selected randomly according to the inclusion criteria and randomly divided into experimental (n=18) and control (n=18) groups. Inclusion criteria were being at least 30 years old and at most 50 years old, having an autistic child, being literate, and not having neurological diseases and mental retardation according to clinical interview and informed satisfaction. Exclusion criteria were people who had experienced family crises or the death of loved ones while studying and unwillingness to participate in the study. Before administering the questionnaire, the purpose of the research and the confidentiality of the information obtained from it were explained. After the implementation of the protocol, the questionnaires were repeated in the statistical sample and the data were collected. The subjects in the experimental group were treated with Commitment-based Therapy for 8 sessions which lasted 90 minutes once a week. After all treatment sessions, post-tests were taken from both test groups.

Compassion-based Treatment Sessions

First Session

Pre-test performance - Familiarity between the therapist and group members - Familiarity with the general principles of Commitment-based Therapy.

Second Session

Explain the function of this treatment and what compassion is and how to overcome problems through it.

Third Session

Familiarity with mindfulness training and physical examination practice, familiarity with the characteristics of compassionate people, compassion for others, cultivation of a feeling of warmth and kindness towards oneself, and cultivating and understanding that others also have problems. Training to increase mindfulness, acceptance, wisdom and power, and non-judgment.

Fourth Session

Encourage subjects to self-knowledge and examine their personality and identify and apply the exercises of "cultivating a compassionate mind", the value of compassion, empathy, and sympathy for oneself and others.

Fifth Session

Teaching methods of expressing compassion and applying these methods in daily life for parents, children, and friends.

Sixth Session

Teaching compassion skills to participants in the areas of Commitment attention, Commitment reasoning, Commitment behavior, Commitment feeling, and

Commitment perception, playing the role of the individual in the three dimensions of self-criticism, self-criticism, and self-Commitment using the Gestalt empty chair technique, finding the tone and tone of the self-critical and self-Commitment voice during internal conversation and its similarity to the conversation pattern of important people in life such as parents, filling in the weekly table of critical thoughts, Commitment thoughts, and Commitment behavior.

Seventh Session

Work on fears of self-Commitment and barriers to cultivating this trait. Rhythmic soothing breathing, mindfulness, and writing a letter of Commitment.

Eighth Session

Summarizing, concluding, and answering the members' questions and evaluating the whole session, thanking and appreciating the members for participating in the sessions, conducting a post-test.

In this study, two tools were used to collect the data.

A) Cognitive Flexibility Questionnaire (CFI):

The *Cognitive Flexibility Inventory* is a 20-item measure that assesses two aspects of cognitive flexibility: (1) the ability to perceive multiple alternative explanations for life occurrences and generate multiple alternative solutions to difficult situations (*alternatives*), and (2) the tendency to perceive difficult situations as controllable (*control*). Each statement was rated on a scale ranging from 1 (strongly disagree) to 7 (strongly agree). Scores for each subscale were computed by first reversing the item scores where relevant and then summing the appropriate items for each subscale. The internal reliability for the *alternatives* and *control* subscales was 0.91 and 0.83, respectively.¹² In Iran, Sharae et al. (2013) reported a total retest coefficient of 0.71 and Cronbach's alpha coefficients of a total scale of 0.90.

B) Connor & Davidson Resilience Questionnaire:

this questionnaire has 25 questions scored using a Likert scale (always, often, sometimes, rarely, and never which are scored 4, 3, 2, 1, and 0 respectively). The maximum score for this questionnaire is 100 and the minimum zero. The cut-off point for normal people is 80.4 and for those with post-traumatic stress disorder 47.8; the higher the person's score, the more resilience it indicates (Mohammadi 1384; quoted by Kiani, 1389). The reliability of Cutter and Davidson Resilience Questionnaire based on has been reported 0.89 by Mohammadi (1384), using Cronbach's alpha; Jokar's research (1386) has also reported a reliability of 0.89. In this study, the reliability of the Cairo-Davidson resilience questionnaire using Cronbach's alpha was 0.85.

SPSS 22 software was used for data analysis. Before performing the inferential statistics tests, Kolmogorov-Smirnov and Levin tests were used to check the normality of the data and the homogeneity of variances. The study was approved in the ethics committee of Islamic Azad University, Marvdasht branch, with the code of 107346.

Results

To check the normality of the distribution of the scores of resilience and psychological well-being variables in the experimental group (pre-test-post-test and control (pre-test-post-test), we used a single-sample Kolmogorov-Smirnov test; since the significance level obtained is higher than 0.05, the distribution of dependent variables was normal; therefore, the default of normal scores was confirmed. Analysis of covariance difference between adjusted means of Commitment scores of treatments which focused on Commitment to resilience is shown in Tables 1 and 2.

Discussion

The results showed that Commitment-based Therapy

Table 1: Difference between adjusted means of Commitment scores of treatments which focused on Commitment on resilience

Source of change	Total squares	df	Average squares	F	P value
Pre-test	2210.09	1	2210.09	185.97	0.000
Independent group	4912.72	1	4912.72	451.97	-
Error	307.41	27	11.29	-	
Total	245745	30	-		
The amount of effect			0.95		

Table 2: Difference between the mean scores of the effectiveness scores of Commitment-focused treatments on the mental flexibility of mothers of children with autism in the experimental and control groups

Source of change	Total squares	df	Average squares	F	P value
Pre-test	3142.45	1	3142.45	257.83	0.000
Independent group	6815.21	1	6815.21	546.82	0.000
Error	329.01	27	12.25	-	
Total	275378	30	-		
The amount of effect			0.96		

significantly increased the psychological flexibility and improved the resilience of mothers of children with autism. This result is consistent with those of a study carried out by Boersma et al.,¹³ Braehler et al.,¹⁴ and Andersen et al.¹⁵ Also, the results showed that Commitment-based Therapy increased the level of psychological flexibility among mothers of children with autism. This part of the research consists of the findings of other research such as Sheikholeslami et al.,¹⁶ Kobayashi.¹⁷ Psychological resilience refers to the ability of individuals to focus on the current situation and use the opportunities of that situation to move toward inner goals and values despite the presence of challenging or unintended psychological events.^{18, 19} In summary, individuals with high psychological resilience display their behavior in any given situation, more based on their values and goals and less based on their current events or dependencies.²⁰ The results of this study showed that Commitment-based therapy increased the level of psychological flexibility in the mothers of children with autism, and these mothers can overcome problematic issues by increasing their sense of cohesion and psychological resilience in the face of severe stressors and depressing events, or at least show clear and relevant behavior when faced with a sudden event. The results of Weiss et al.'s research also showed that Commitment-focused therapy was effective in improving the quality of life and self-efficacy of mothers of autistic children; it was concluded that Commitment-focused therapy as a new treatment may be a suitable intervention option for reducing psychological problems and increasing the mental health of mothers of autistic children.²¹

The results of this present study also indicate that Commitment-based Therapy has a positive and constructive role in the mental health of mothers of children with autism and strengthens their resilience. There are many factors that can directly or indirectly affect the resilience structure of individuals and one of these effective factors is Commitment-based Therapy.²² As to the effectiveness of Commitment-focused therapy in improving resilience and psychological resilience of mothers with children with autism, researchers have concluded that strengthening self-Commitment in individuals in the face of self-critical tendencies, interpersonal interactions and kindness contributes with self and mental flexibility. People who are more likely to condemn themselves in stressful life events and unsuccessful life experiences have negative self-esteem.²³ People who have self-commitment do not take themselves as hard as those who are not self-Committed; also, commitment helps people not to run away from painful and upsetting feelings, and by using mindfulness, they experience their own emotional experience and then find a commitment attitude towards their negative emotions.

One of the limitations of this study was the lack of long-term effects of the treatment program

implemented in the follow-up phase.

Conclusion

Mental health in mothers with children with autism plays an important role in the children's healthy growth and development. As mentioned in the research problem, psychological flexibility is one of the factors affecting the mothers' mental health. According to this finding, it is recommended that counselors and therapists, if accepting clients with similar problems, should first evaluate these people in terms of psychological flexibility and if there is a weakness in this area, from acceptance and commitment-based therapy to improve the use of this skill.

Conflicts of interest: None declared.

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