The effectiveness of mentalization-based therapy on parent-child interaction and parenting stress: a randomized controlled trial study on children with symptoms of tic disorders and their mothers

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Abstract
Aim: The main objective of this research was the effectiveness of mentalization-based therapy on parent-child interaction and parenting stress in a randomized controlled trial study on children with symptoms of tic disorders and their mothers. Methods: The method of the current research was quasi-experimental with a pre-test, post-test and follow-up plan with a control group. The research sample consisted of 30 mothers and their children with symptoms of tic disorders who had referred to counseling centers and clinics in Mako city in the second half of 2022. They were selected as available and randomly divided into two groups. Experiment and control (15 people in each group) were assigned. The experimental group participated in 15 sessions of the mentalization-based therapy group intervention program, and the control group did not receive any intervention. The subjects of both groups answered the questions of the parent-child relationship scale and the short form of the parental stress scale in the pre-test and post-test phases. Data analysis was done using mixed multivariate analysis of variance test. Results: The results of mixed multivariate analysis of variance indicated the effectiveness of mentalizing group therapy on improving the dimensions of parent-child relationship and parenting stress of children (P<0.001). Also, the results showed that mentalization intervention reduces the parenting stress scores of children with tic disorder symptoms (P<0.001). Conclusion: It can be concluded that the therapeutic mentalization group intervention is effective in improving the dimensions of the parent-child relationship and parenting stress of children with symptoms of tic disorder, and this treatment can be used to reduce the psychological problems of children with tic disorder. Symptoms of tic disorder. Keywords: tic disorder, mentalization, mothers, parent-child relationship and parenting stress.
Tic disorder is a neurodevelopmental movement disorder characterized by symptoms of sudden, rapid, repetitive, nonrhythmic, and vocal movements (American Psychiatric Association, 2013). Tic disorders include four diagnostic categories: transient tic disorder, persistent (chronic) vocal or motor tic disorder, Tourette's disorder, and other specified and unspecified tic disorders (American Psychiatric Association, 2013). Tic symptoms usually begin around 6 to 8 years of age and are common in schoolchildren, affecting 15 to 25 percent (Cohen et al., 2013). However, tic symptoms are in most cases transient and decrease sharply during adolescence (American Psychiatric Association, 2013).

One of the treatments that is used recently to reduce the problems of children with developmental disorders is the treatment based on mentalization. Mentalization-based therapy is a special type of psychodynamic psychotherapy that was invented by Bateman and Fonagy and is based on two basic concepts: Balby's attachment theory and mentalization. Mentalization is defined as a form of imaginative mental activity that is often semi-conscious, in other words, it is understanding and interpreting one's own and others' behavior that is derived from intentional mental states (such as needs, desires, feelings, and beliefs). This mental activity includes a person's ability to distinguish internal from external reality and internal emotional and mental processes from interpersonal events (Fonagy and Target, 2006). Lieberman identified four dimensions: automatic versus controlled mentalization, self versus other mentalization, internal versus external characteristics mentalization, and cognitive versus emotional mentalization for mentalization (Lieberman, 2006). The ability to mentalize requires that people can not only maintain a kind of balance in these dimensions, but also must be able to use the dimensions appropriately according to the environmental conditions. This treatment is based on several principles: 1) the therapist's awareness of the primary states of thinking (non-mentalizing states), which include psychological equivalence state, teleological state, and pretend state; In a state of psychological equivalence, thoughts and feelings become too real to the point where it is very difficult for the patient to consider possible alternative perspectives. In the teleological state, states of mind are known and believed only if their consequences are objectively observable. In pretend mode, thoughts and feelings are separated from reality. They reach an extreme that may lead to feelings of reality distortion and detachment (Bettman and Fonagy, 2016). 2) The therapist must carefully control arousal levels, to ensure that anxiety is neither too low nor too high, as both interfere with mentalization. 3) The therapist must be sure that his personal mentalization is maintained. If the therapist's subjectivity is compromised, effective treatment delivery will not be possible (Bettman & Fonagy, 2016). The main focus of this therapy is to help the client to bring their mental experiences to the level of consciousness and to facilitate a coherent and complete sense of psychological agency. The goal of therapy is to grow and strengthen the mentalizing capacity through therapeutic relationships and increase the capacity of the patient to recognize the thoughts and feelings he experiences (Oliveira et al., 2016).

So far, there has been no research on the effectiveness of mentalizing intervention in reducing problems related to children and adolescents with tic disorders. Therefore, this research is conducted in order to expand the literature of this field.
and fill the research gap and introduce effective treatment to reduce issues related to tic disorders. The effectiveness of treatment based on mentalization on parent-child interaction and parenting stress will be established in a randomized controlled trial study on children with symptoms of tic disorders and their mothers.

**Method**
The method of the current research was quasi-experimental with a pre-test, post-test and follow-up plan with a control group. The research sample consisted of 30 mothers and their children with symptoms of tic disorders who had referred to counseling centers and clinics in Mako city in the second half of 2022. They were selected as available and randomly divided into two groups. Experiment and control (15 people in each group) were assigned. The experimental group participated in 15 sessions of the mentalization-based therapy group intervention program, and the control group did not receive any intervention. The subjects of both groups answered the questions of the parent-child relationship scale and the short form of the parental stress scale in the pre-test and post-test phases. Data analysis was done using mixed multivariate analysis of variance test.

**Results**
The results of mixed multivariate analysis of variance indicated the effectiveness of mentalizing group therapy on improving the dimensions of parent-child relationship and parenting stress of children (P<0.001). Also, the results showed that mentalization intervention reduces the parenting stress scores of children with tic disorder symptoms (P<0.001).

**Conclusion**
The main goal of this research was the effectiveness of mentalization therapy on parent-child interaction and parenting stress in a randomized controlled trial study on children with symptoms of tic disorders and their mothers. It can be said that parents who consider the child's mind and think about the child's behavior while doing homework in relation to underlying mental states, respond to the child's needs in a sensitive and possible way and respect and encourage the child's competence and independence; Thus, this problem can be effective in reducing parenting stress. On the other hand, mothers with a sufficient level of mentalization tend to explain their inner world and others in terms of psychological states to the child, which allows the child to better understand himself and others and, as a result, have less stress.

**References**


