



# Designing and Developing a Combined Program based on the Theory of Mind Method and the Floortime Method and its Effectiveness on Social-Communication Skills and Stereotypical Behaviors of Children with Autism Disorder

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## Abstract

**Aim:** The present research was conducted with the aim of designing and compiling a combined program based on the theory of mind method and the floortime method and its effectiveness on social-communication skills and stereotyped behaviors of children with autism spectrum disorder. **Method:** The present research method is mixed (qualitative-quantitative) of sequential exploratory type. In the qualitative part with the approach of inductive content analysis, socio-statistics included all the valid scientific sources and articles indexed and related in the databases, and theoretical sampling and the saturation rule were used. In the quantitative part, the population of this research was all children aged 2 to 5 years with autism spectrum disorder who referred to Autism Center of Rafsanjan, who were willing to cooperate and participate in the meetings on behalf of themselves and their families. The sample included 5 children aged 2 to 5 years with autism spectrum disorder. These people were selected by purposeful sampling and investigated in a single-group study with a single-subject design. The research tool was Gilliam Gazer's (1994) questionnaire. **Results:** The results of the qualitative part of the research led to the development of a 12-session combined therapy package based on the theory of mind method and floortime method. The results of the quantitative part showed that the combined training method based on the theory of mind method and the floortime method had an effect on the social-communication skill components with an improvement percentage between 25 and 55%. The theory of mind method and the Floortime method have had an effect on the scores of stereotyped behaviors with a recovery percentage between 14 and 46%. **Conclusion:** The conceptual model of the combined program based on the theory of mind method and the floortime method was developed based on the dimension of communication skills, the dimension of motor speech skills, the dimension of interpersonal skills and social interaction, and the dimension of emotion recognition. The results showed that the teaching method of the combined program based on the theory of mind method and the floortime method had an effect on social-communication skills and stereotyped behaviors.

**Keywords:** *theory of mind, floortime method, social-communication skills, stereotypical behaviors, autism.*

## Introduction

Children with autism spectrum disorders have severe and permanent damage in social interactions and communication skills and have limited interests or repetitive behavior patterns (Kaplan & Sadock, 2015). These problems interfere with their ability to participate in daily activities such as play, school, leisure and personal care activities. According to the 2008 statistics of the US National Institute of Mental Health, out of every 1,000 American children aged 3-10, 3-4 people have autism spectrum disorders, including autism, Asperger's, and pervasive developmental disorder. This means that every child with autism spectrum disorders has a unique situation in terms of strengths or challenges in cognitive, sensory, emotional and social fields. Therefore, intervention in these children should include a treatment approach that considers their unique characteristics in the mentioned fields instead of following a standard treatment plan for all children with a diagnosis (Hogan & Meikochi, 2020). In addition, treatment programs for children with autism spectrum disorders, which are based on behavioral models, increase desirable behaviors by reinforcing and ignoring undesirable behaviors. Scientific evidence shows that deficits in social skills in children with autism disorder affect many abilities, including; It affects their social, academic, etc. abilities and leads to their academic failure (Seronets & Maston, 2015).

In general, the importance of communication deficits and social interaction of autistic children are valid reasons that show the importance of developing and applying effective interventions for these factors. According to the above and based on the summary of the researches, the preliminary evidence indicates the usefulness of applying the theory of mind treatments and the Floortime method to improve the psychological characteristics of children with autism. Considering the point that each of the mentioned treatments, by emphasizing their special techniques, try to improve the subject's conditions, it seems that in many cases, the theory of mind method and the Floortime method can complement each other. Therefore, considering the importance of having a comprehensive program in the field of improving social and communication skills and stereotyped behaviors of children with autism, the present research, in the first stage, aims to formulate the components of a combined treatment based on the theory of mind and the floortime method. In the second stage, the validity and appropriateness of the combined program of theory of mind and Floortime method will be examined based on the opinion of experts, and finally the effectiveness of the combined treatment package of theory of mind and Floortime method on social and communication skills and stereotyped behaviors of children with autism will be investigated.

## Method

The present research method is mixed (qualitative-quantitative) of sequential exploratory type. In the qualitative part with the approach of inductive content analysis, socio-statistics included all the valid scientific sources and articles indexed and related in the databases, and theoretical sampling and the saturation rule were used. In the quantitative part, the population of this research was all children aged 2 to 5 years with autism spectrum disorder who referred to Autism Center of Rafsanjan, who were willing to cooperate and participate in the meetings on behalf of themselves and their families. The sample included 5 children aged 2 to 5 years with autism spectrum disorder. These people were selected by

purposeful sampling and investigated in a single-group study with a single-subject design. The research tool was Gilliam Gazer's (1994) questionnaire.

### **Results**

The results of the qualitative part of the research led to the development of a 12-session combined therapy package based on the theory of mind method and floortime method. The results of the quantitative part showed that the combined training method based on the theory of mind method and the floortime method had an effect on the social-communication skill components with an improvement percentage between 25 and 55%. The theory of mind method and the Floortime method have had an effect on the scores of stereotyped behaviors with a recovery percentage between 14 and 46%.

### **Conclusion**

The conceptual model of the combined program based on the theory of mind method and the floortime method was developed based on the dimension of communication skills, the dimension of motor speech skills, the dimension of interpersonal skills and social interaction, and the dimension of emotion recognition. The results showed that the teaching method of the combined program based on the theory of mind method and the floortime method had an effect on social-communication skills and stereotyped behaviors. Considering that the samples used in this research are limited to autistic children, one should be cautious in generalizing the findings. This research is only a cross-sectional study and the positive effects of this program have been examined only through a single subject study. The research should be carried out in a larger sample size in different periods, in order to increase the possibility of generalizing it to different societies. The results of this research can be used to improve the social-communication skills and mental well-being of autistic children and prevent them from having more severe problems. Holding educational workshops based on the proposed package of this research for counselors and psychologists in the field of children's disorders is one of the other suggestions.

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