

Effects of a Group E-Therapy Program on Improving Social Skills of Children with ASD

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Abstract: The purpose was to investigate the effectiveness of a group E-therapy program on improving children's social skills with ASD. Participants were (16) children between the ages of Six and eleventh. A pre-post design was used to examine the effectiveness of group therapy on developing social skills in children with Autism. Stone's social skills Scale was administered to assess children's social skills with autism spectrum disorder as a pre-post-test. The group therapy strategies were performed on the experimental group by their actual teacher during an exact 8-week lesson period with 50-minute sessions three times per week. The Z-value results for the differences in the mean post-test scores between the experimental and control groups in social skills. The table shows that the value of (Z) ranged between (2.809 - 3.354). These values are significant at (0.01) level in favor of the experimental group. The value of (Z) in Table 2 ranged between (2.617 - 2.711), which are significant values at the level (0.01). This indicates that group therapy had a positive effect on social skills in children with ASD.

Keywords: Group E-therapy, social skills, children with ASD.

INTRODUCTION

Within the framework of the "DSM-5," Autism is characterized by persistent deficits in social communication and interaction across multiple contexts, as well as patterns of behavior, interests, or repetitive restrictive activities. These deficits exist in early childhood and lead to significant functional impairment. There is also a type of Autism called "gifted syndrome", in which a child can display his outstanding skills in music, art, and numbers without training [1-13]. Self-injurious behaviors are not considered a primary characteristic of people on the autism spectrum, but approximately 50% of people with autism spectrum disorder engage in some self-injurious behavior (head noise, self-biting) and are more at risk than other groups of people with developmental disabilities. Asperger's on Autism - according to DSM-5- by not delaying language development, and individuals diagnosed with Asperger's syndrome did not have a significant cognitive delay [5]. Therefore, DSM-5 removed the four separate diagnoses: Asperger's Syndrome, Developmental Disorder Non-specific comprehensive, childhood syndrome disorder, and autism disorder were included under the diagnosis of autism spectrum disorder.

Social skills are the biggest challenge for individuals with ASD [14]. This leads to problems with friendships, romantic relationships, everyday life, and professional success [5]. These difficulties in the thinking process

are called "ToM" [15] or mental blindness, which translates to the fact that the mind faces problem in the thinking process in addition to its awareness of what is going on around it [14,16-20].

LITERATURE REVIEW

Social Skills in Children with ASD

Children with ASD are characterized by the inability to participate in social relationships and disturbances in the ability to make traditional friendships as they do not have the skills necessary for this. As a result, they lack empathy with others [17], their views and feelings, and they often do not engage in cooperative or mutual interactions and actions with others [12].

They also do not initiate a dialogue with others, and if the conversation begins, he/she will be self-centered, far from the attention of the listener, and they may flee from the middle of the conversation [2]. In addition, we notice that an individual with ASD becomes in a state of irritation and excitement when others approach him or interact with him, and he often rejects any normal social contact and interaction, even simple [9]. The child may participate in communicating with another person by speaking with affection or speaking in the manner of an insane child. His speech lacks clarity and meaning [1], and he himself suffers from a lack of eye contact and understanding of facial expressions and social gestures [7].

On the other hand, we notice that their behavior is dominated by emotional indifference and indifference to those around them. They influence isolation and

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withdrawal in social situations, indifference to social norms, ease of submission and rapidity of temptation, and a feeling of inferiority, frustration, and poor self-confidence[15], which is what leads them to aggressive behavior, whether this represents harm to oneself or others, or the destruction of possessions. It may also lead them to some other behavioral disorders or anti-social behaviors, although the most common of them is aggressive behavior in its various dimensions [12].

STATEMENT OF THE PROBLEM

ASD is a neurodevelopmental disorder affecting verbal and nonverbal communication and social interaction significantly and generally appears before three years old. Social deficits are intrinsic to the definition of ASD's original conceptualization to the most recent DSM-5. Social deficits observed in children with ASD may include: difficulties in understanding the facial expressions of others, initiating social interactions with others, lack of responding to social initiations made by others, lack of responding to the emotions of others, deficits in showing directing attention, lack interest in other children, absence of or limited use of gestures such as pointing, to share the enjoyment with others, absence of or limited imitation skills and lack of friendship seeking behavior [1-12]. Thus the present study addresses the following questions.

1. Are there differences in post-test scores mean between control and experimental groups on social skills scale?
2. Are there differences in post-test scores mean between control and experimental groups on social skills scale?

According to the above, the purpose of the article was to investigate the effects of a group e-therapy program on improving children's social skills with ASD.

METHOD

Research Method

Quasi-experimental research method is used. Quasi-experimental research is research that resembles experimental research but is not true experimental research. Although the independent variable is manipulated, participants are not randomly assigned to conditions or orders of conditions because the independent variable is manipulated before the dependent variable is measured; quasi-experimental research eliminates the directionality problem.

Participants

The participants were 16 autistic children, aged 6 to 10 years, who were enrolled in a school for children with intellectual education. All children attended the same semester inside the school. Parent consent forms were sent home by the principal and school psychologist to the parents of the prospective participants to inform them about the study and ask them to give permission for their children to participate. Through a previous comprehensive psychological evaluation, each target child received an initial diagnosis of Autism. All children were unable to communicate using speech that was previously assessed through the school.

Data Collection Tools

Social Skills Assessment Scale

The social skills rating form is a subscale of triad social skills assessment (TSSA) - second edition developed by Stone *et al.* [21] to assess 6-12 year children with an autism spectrum disorder. This instrument was developed originally to address the need for a relatively brief, easy-to-administer tool for evaluating the complex social profiles of children with autism spectrum disorder, identifying strengths and challenges in the social domain, and providing recommendations for intervention planning through individualized goals and specific strategies. The social skills rating form contains descriptors of social behaviors in areas that include affective understanding/perspective-taking, initiating interactions, responding to interaction, and maintaining interactions. The respondent (parent or teacher) rates the child's ability to perform each behavior on a four-point scale, ranging from "not very well" to "very well". Stone *et al.* [21] reported its reliability as 0.92 for parents rating and 0.94 for rating teachers through Cronbach alpha. They also confirmed its content validity. The parents' form was used in this study. The construct validity was 0.79-0.93 through the correlation method between the whole test and its subscales. The reliability for the whole scale was 0.86 by the Cronbach alpha coefficient.

Group E-Therapy Program

A group E-therapy program specifically designed to teach and encourage social interaction skills while providing exciting language-enhancing activities for children with a PDD or ASD diagnosis. Group E-therapy is an effective treatment for those who suffer from shyness or who suffer from social meditation.

Group therapy is also characterized by the opportunity to build new relationships with new individuals and contact them. Group therapy represents an opportunity to drain a person's energy, and the following has been followed:

1. Catharsis - invoking the painful pent-up experiences of consciousness and life in it again with the group.
2. Satisfaction - the person expressing his feelings and thoughts in an atmosphere of general acceptance and sympathy causes a lot of comfort to the person.
3. Acceptance - acceptance from others despite the difference, no confiscation of opinions, no preaching, no advice.
4. Imitation - the conscious imitation of behavior acceptable to another person and vice versa, the role of Muddling.
5. Otherness - placing the needs of the other before the self's need and taking into account that there is value in giving to others.
6. Collusive dependency - is the situation of the other's need and the neglect of the self's need.
7. Solidarity - Not long over time, the group feels solidarity or unity due to interaction and a sense of common purpose.
8. Inspiration - if one member, or change that takes place in it, is a source of inspiration and optimism for another member, that raises hope in the possibility of changing it as well.
9. Interaction - the free exchange of ideas and feelings helps insight and change.
10. Subtractive relationships: presenting feelings and internal conflicts to other individuals to help solve them.
11. Generality - the patient's awareness that he is not alone in what he is in, as many people have problems.
12. Correction - Correcting concepts that may be wrong or making sure that other concepts are correct by comparing others. (Correcting false prophecies).

13. Interpretation - when the therapist interprets a behavior or a symbol as part of the group, which gives the patient a framework that helps him understand himself and his behavior.
14. Insight - insight into psychological conflicts, symptoms of negative behaviors, and a genuine desire for change.

EXPERIMENTAL DESIGN

An experimental group design was used in this study. In this design, two groups were formed by allocating (8) children to the experimental and (8) to the control groups. The experimental and control group students were pre-tested and post-tested in the same way and at the same time in the study. The bivalent independent variable was the group therapy program and assumed two values: the presence of the group therapy program (for the experimental group) versus the absence of the group treatment program (for the control group). The dependent variables were gains in social problem-solving scores between pre-test and post-test.

RESULTS

The first objective of the study was to determine if a group E- therapy program would be more effective for improving the social skills of the treatment group compared to the control group. For this purpose, the post-intervention scores of both treatment and control groups were analyzed. Table 1 shows the Z Values result for the differences in post-test mean rank scores between experimental and control groups in dimensions of social skills scale and total score. The table shows that (Z) values were significant at the level (0.01) in favor of the experimental group.

The study's second objective was to determine the effect of a group E-therapy for improving dimensions of social skills scale and total score of children with Autism in post-test compared to the pre-test.

The children's performance on verbal communication was measured pre and post-intervention. Table 2 shows the Z Value result for the differences in pre and post-test mean rank scores for the experimental group in dimensions of social skills scale and total score.

DISCUSSION

The purpose was to study group therapy on social skills for each of the children with ASD. The research

Table 1: Z Values Results for the Differences in Post-Test Mean Rank Scores between Experimental and Control Groups in Dimensions of Social Skills Scale and Total Score

subscale	Groups	N	Mean Ranks	Sum Ranks	Z Value	Sig.
Affective Understanding/ perspective Taking	Ex	8	12.31	98.50	3.247	0.01
	Cont.	8	4.69	37.50		
initiating interaction	Ex.	8	12.25	98.00	3.354	0.01
	Cont.	8	4.75	38.00		
Responding to interaction	Ex.	8	12.38	99.00	3.510	0.01
	Cont.	8	4.63	37.00		
maintaining interaction	Ex.	8	11.63	93.00	2.809	0.01
	Cont.	8	5.38	43.00		
total score of social skills	Ex.	8	12.5	100.00	3.411	0.01
	Cont.	8	4.50	36.00		

Table 2: Z Values Results for the Comparison of Mean Rank Scores of Experimental Groups at Pre-and Post-Intervention in Dimensions of Social Skills Scale and Total Score

Variables	Negative Ranks		Positive Ranks		Z Value	Sig.
	Mean	Sum	Mean	Sum		
Affective Understanding/ perspective Taking	Zero	Zero	4.5	36.0	2.691	0.01
initiating interaction	Zero	Zero	4.5	36.0	2.689	0.01
Responding to interaction	Zero	Zero	4.0	28.0	2.617	0.01
maintaining interaction	Zero	Zero	4.00	28.0	2.678	0.01
total score of social skills	Zero	Zero	4.50	36.00	2.711	0.01

results revealed that treatment in groups could significantly improve the social skills of children with ASD. Moreover, the results show that group therapy can substantially improve sub-measures of emotional understanding / perspective-taking, initiation of interactions, and maintenance of interactions in children with ASD.

Participants learned to follow instructor orders in group work, enhancing children's focus, listening skills, communication, and social interaction [22]. Moreover, successful mastery of teamwork skills improves self-efficacy, self-concept, self-esteem, and self-control and positively affects children's social skills with an autism spectrum disorder. In general, group E-therapy improves sensorimotor processing and thus leads to

more regular sensory-motor experiences and helps individuals with autism function better in the cognitive, physical, emotional, and social domains.

Since in group therapy, the child is forced to communicate and tell his name and is trained to listen to the trainer, repeat commands verbally and execute them practically. All these activities reinforce the basis of social skills such as active listening, obedience to commands, effective cooperation, and response and lead to improved social skills.

To confirm this clarification, Bass *et al.* [23] emphasized that therapeutic horseback riding is an enhanced stimulus that improves motivation and cooperation in children with Autism. Of course, Bass *et*

al. [23] believe that an individual's cognitive, emotional, and social functions are influenced by cerebellar function. Impotence Children with ASD attributed to cerebellar dysfunction and explained that therapeutic horseback riding improves cerebellar performance and positively affects the social functioning of children with ASD. The group therapy stimulates children with autism brain through the regular and orderly movement of the Broca area (its role in verbal language), and in the following helps to develop social skills in children with Autism. Moreover, in the therapeutic intervention, children are encouraged to freely disclose emotions and interpret other children's feelings, which leads to improved emotional understanding and social skills.

Studies also concluded that children with autism spectrum disorder, through group therapy, learn how to reveal their feelings and emotion and reveal mutual feelings with a warmth acceptable to parents, academic trainers, and those who participated in group therapy. These emotional and cognitive changes in children with autism spectrum disorder lead to emotional understanding from these children. Group therapy improves emotion and cognition. Children with ASD assess new stimuli [24-27], and thus, they establish a mutual emotional and cognitive relationship with their parents and others.

Children with ASD on group therapy start laughing and showing their happiness through their gestures. Then they become interested in demonstrating a feeling of happiness through brief, incomplete speech and at a more advanced level through physical activity and words. They are also encouraged to convey their feelings to their parents and seek positive emotional responses through eye contact with their parents [22]. All of these activities lead to improving the social skills of children with an autism spectrum disorder.

In general, group E-therapy reduces negative emotions in children with Autism, such as fear, anger, mistrust, and unhappiness through a safe and warm environment. Therefore, it activates brain functions such as unpleasant feelings, shared interest, imitation, and feelings of empathy in children with autistic mindsets and leadership. To develop their social and communication skills [22]. Moreover, communication has an impact on developing social skills in children with ASD. As we know, this type of response is very important for cause-and-effect and objective learning styles for individuals with ASD. In fact, the mentor responds to the behavior of the autistic child and helps

him to have a better social understanding and become aware of his social and communicative behavior.

FUTURE RESEARCH AND RECOMMENDATIONS

As a result, group E-therapy training is important in improving social skills, self-skills, and life skills of those with autism spectrum disorder and improving their self-reliance. In this context, it is suggested that counselors in intellectual education institutions should give utmost importance to therapy in groups and rely on Group psychotherapy sessions in the psychological rehabilitation stages for people with mental disorders. As for the research that may be conducted in the future, the effect of treatment in groups on people with mental disorders and other disorders. The results of this study supported the claim of the effectiveness of group therapy in enhancing the social and life skills of people with ASD. As a result of the strong evidence presented in this study, it is hoped that the application of group therapy may improve outcomes for autistic reactions in the future. Pedagogical knowledge should be evidence-based. The research and practice communities need to continue to work together to support autistic people to be ready for their future.

Further research on the effects of group E-therapy on cognitive and motor skills, behavioral stereotypes in children with ASD, and social, cognitive, motor, and behavioral skills of others is advised for children with disabilities. In general, it is suggested that parents, professionals, educators, and coaches use group therapy to improve the social skills of children with ASD.

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