



Effect of the Family-based Art Therapy Program on the Social Interactions, Verbal Skills and Stereotypic Behaviors of Children with Autism Spectrum Disorders (ASD)

Kaveh MOGHADDAM¹, *Ali ZADEH MOHAMMADI², Parviz SHARIFI DARAMADI³, Gholamali AFROOZ⁴

1. *Dept. of Exceptional Children Psychology, Science and Research Branch, Islamic Azad University, Tehran, Iran*
2. *Family Research Center, Shahid Beheshti University, Tehran, Iran*
3. *Dept. of Exceptional Children Psychology, Allame Tabatabaee University, Tehran, Iran*
4. *Dept. of Exceptional Children Psychology, Tehran University, Tehran, Iran*

***Corresponding Author:** Email: Azadeh@gmail.com

(Received 10 Apr 2015; accepted 16 Jun 2015)

Dear Editor- in- Chief

Parents of children with autism maybe anxious about the future of their child, along with anxiety, they may experience guilty feelings for having such a child. These issues can cause problems in normal family life procedure of families with autistic children (1). Due to the complex behaviors of these children, parents tend to decrease their communication and avoid from ceremonies and parties and they may be isolated (2).

Family training or family- centered programs and educational interventions can cause to decrease of stress, anxiety, depression, guilt and disappointment. The families have to know that they are not the cause of disorders; therefore, they improve their communication and interaction with child and professional groups (3, 4).

Among the typical strategies , Studies show that using of different forms of art therapy programmes like Painting ,clay and music, can improve cognitive, perceptual, behavioral, communication and verbal problems of children with special needs (5, 6). The art includes auditory and visual stimulus and with activating brain lobes and reinforcement of brain functions, reinforces the learning and cognition (7). The art leads to a better relationship of autistic children with environ-

ment. Moreover, the art helps the autistic children to experience their senses, and then they communicate better with others.

According to the discussed issues and weakness of applied family- based programs in our country about autistic children, this study aimed to investigate how designing and performing of the family-based art therapy program affect the social interactions, verbal skills and stereotypic behaviors of these children.

This study was an applicable and semi-experimental research. Pre-test and post-test with control group was used and results were followed up. Population of study includes all autistic children along with their parents who referred to exceptional schools of Tehran. Among all referred clients, 20 autistic children along with their parents select as an in access sample.

In this study, the Gilliam Autism Rating Scale (GARS) was used. After randomized sampling into two groups (experimental and control), all of autistic children and their parents complete the pre-test. Then, during 15 sessions 10 children in experimental group along with their parents complete the family- based art therapy program. Moreover, the parents perform all 15 trained ses-

sions at home, simultaneously. After completion of all 30 sessions, all subjects complete post-test. After all, the subjects are followed 1 month up. For analyzing data, the Bonferroni follow up test and covariance were used. According to Table 1, obtained F stand for 13.940 (df 1: 15, $\alpha=0.05$) which was significant ($P<0.05$).

Therefore, it can be concluded that family-based art therapy has a significant effect on signs of autism. Eta square shows that the effect of family-based art therapy on signs of autism is 48/2 %. So, the hypothesis is approved ($\alpha=0.05$).

Table 1: Covariance for total autism signs

Index Variable Resources	S.S	df	Mean of Squares	F	α	Eta Squares	β
Effect of Pre-test	.003	1	.003	.000	.992	.000	.050
Effect of Group	417.133	1	417.133	13.940	.002	.482	.936
Error	448.867	15	29.924				
Total	8363	17					

As it is shown in Table 2, obtained F stand for 26.083 (df 1:15, $\alpha=0.05$) and it is significant. It means that, during time, the change is significant. Results of follow up show that there are signifi-

cant difference between the mean of pre-test, post-test and follow up. Therefore, during time, the effect of family-based art therapy is stable.

Table 2: Results of F in relation with repeated assessment of follow up

Index Variable Resources		S.S	df	Mean of squares	F	α
Time Effect	Hypothesised	593.765	2	296.882	26.083	0.000
	Krowit					
	Grin Hose-Gaser	593.765	1.599	371.314	26.083	0.000
	Hewin-Felt	593.765	1.749	339.524	26.083	0.000
Error	High Limit	593.765	1.000	593.765	26.083	0.000
	Hypothesised	364.235	32	11.382		
	Krowit					
	Grin Hose-Gaser	364.235	25.585	14.236		
	Hewin-Felt	364.235	27.981	13.017		
	High Limit	364.235	16.000	22.765		

According to analysis, durability of the art's effects on the brain can be discussed. Repetition of family-based art therapy decreases the practices like verbal interaction, imitation and phonation in autistic children, then this practice reinforces the functions of perceptual, language, cognitive and movement parts. These practices help the autistic children to use art for expressing their meanings

and feelings. Applying the family-based art therapy can be effective in changing stereotypical behaviors of autistic children, because these practices are so attractive, flexible and diverse. Although, the autism's signs, especially stereotype behaviors, lead to limitation of their communication and interaction with others and environment, the practices like painting, melody, drawing and diversity

of applying these methods help them to be flexible and more adaptive.

Acknowledgements

The authors declare that there is no conflict of interests.

References

1. Ozonoff S, Partland J, Dauvson J (2007). *The Guidelines of the Parents of the High-function Autistic & Asperger Children*. Translated by: Sharifi Daramadi P, Haj Nouroozi M. Tehran: Sepahan Publication. (In persian).
2. American Psychiatric Association (2013). *Diagnostic & Statistical Manual of Mental Disorders (DSM V)*. Washington DC: American Psychiatric Association.
3. Samadi SA (2014). *The Autistic Children. The Guideline for Education of the Trainers & Parents*. Tehran: Fararavan Publication. (In Persian).
4. Samadi SA, Mcconkey R (2011). *Autism Spectrum Disorders*. Fararavan Publication. (In Persian).
5. American Art Therapy Association (2009). *About Art Therapy*. Available from: <http://www.art-therapy.org/aboutart.html>. Accessed: February 17, 2014.
6. Silvers J (2013). *Art Therapy for the Autistic Children & Adolescents*. Translated by: Tavakoli Toroghi A, Shafiee Far A. Tehran: Fararavan Publication. (In Persian).
7. Case C, Dalley T (2008). *Art Therapy with Children from Infancy to Adolescence*. USA: Routledge.