

## Effectiveness of Resiliency Components- Based Training Program on Resiliency in Mothers and Communication Skills in Children with Autism Disorder

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### Abstract

The study aimed to investigate the effect of the resiliency components training on mothers' resiliency and improving the communication skills of their children with autism disorder. The statistical population of the study consisted of all mothers with children with autism disorder who referred to a counseling center in Tehran in 2018. Thirty of them were selected by purposive non-probability sampling method and were divided into experimental and control groups by random assignment. Research tools included Conner-Davidson Resilience Scale and Gilliam Autism Rating Scale (GARS). Data were analyzed using repeated measures multivariate analysis of covariance. The results showed that resiliency components training had a significant effect on mothers' resiliency and the communication skills of their children with autism disorder. Based on the findings of the present study, it can be concluded that resiliency components training can be used as an effective method to increase resiliency in mothers and improve the communication skills of their children with autism disorder.

**Keywords:** Resiliency, communication skills, Autism spectrum disorder

### Introduction

Autism Spectrum Disorder is a neurological developmental disorder characterized by deficits in the fields of communication, social interaction, and stereotyped behaviors (American Psychiatric Association, 2013). The characteristics of autistic children impose a great deal of stress on their parents. Numerous studies have shown that parents of autistic children have higher stress and more inadequate mental health than parents of normal children (Shing chan, et al., 2018). Meanwhile, many experts believe that mothers of these children are further at risk of psychological disorders than fathers (Ping Ang, et al., 2019). In this context, another notable point is that not only the condition of an autistic child affects his/her mother's mental health but also the way the mother interacts with the autistic child has an effect on the severity or reduction of symptoms of the child's disorder (Bradshaw, et al., 2017). On this basis, it can be argued that implementation of programs aimed at enhancing mother's mental health, in addition to the above mentioned goal, can positively influence on improving the communication skills of autistic children. One of the most important interventions to increase mental health is the attempt to increase resiliency (Vest, et al., 2017). In Iran, to date, some studies focusing on resiliency have been conducted, however, most of these studies have been conducted to find variables related to resiliency or have been performed on other groups of exceptional children. This makes it difficult to generalize the results. The present study seeks to fill a research gap in this field by formulating a comprehensive resiliency program which is specifically about mothers of autistic children. The hypotheses of the present study were:

- Resiliency component-based training program affects mothers' resiliency.
- Resiliency component-based training program affects communication skills in children with autism spectrum disorder.

## Method

The present study is an applied research and of quasi-experimental type. The statistical population consisted of all mothers with children with autism disorder who referred to a counseling center in Tehran in 2018. After preliminary interviews, 30 mothers were selected based on purposive sampling. Then they were randomly divided into experimental and control groups. The resiliency components training program in the present study was based on a cognitive-behavioral approach and related theories, designed with a look at the subscales and components of Conner-Davidson tool as well as Garmezy's protective factor resiliency model (1984). Data were analyzed using repeated measures multivariate analysis of covariance. The tools of this study were:

**The Conner-Davidson Resilience Scale**-This tool was designed by Connor and Davidson (2013). Reliability of this scale was reported 0.89 using Cronbach's alpha method (Mohammadi, 2005). To determine the validity of this scale, the correlation of each item with total score was calculated and then factor analysis was used. Calculation of the correlation of each score with the total score except for item 3 showed coefficients between 0.41 and 0.64 (Mohammadi, 2005).

**Gilliam Autism Rating Scale (Garz)**-The Gilliam Autism Rating Scale was designed by Gilliam in 1994. This scale consists of 4 subscales and each subscale contains 14 items that are scored on a Likert scale between zero (never) to three (frequently). The Garz scale has been standardized by Ahmadi, et al. (2010) in Isfahan. Reliability was estimated at 0.89 using Cronbach's alpha coefficient.

## Findings

The results of multivariate analysis of covariance indicated that F was significant in all tests with degrees of freedom 2 and 23 at  $P < 0.01$ . Results showed that there was a significant difference in the score profiles of resiliency and communication skills variables between the two groups (experimental and control) after removing the pre-test effect: ( $\eta^2 = 0.56$ ) and ( $p < 0.05$ ) and ( $p < 0.05$ ). And ( $df = 2$  and  $23$ ) and ( $F = 350.3$  and Pillai's Trace =  $0.56$ ). Therefore, it can be said that there was a significant difference in one of the variables of resiliency and communication skills in group conditions. The results of Table 1 indicated that the mean of modified post-test scores of resiliency and communication skills variables after removing the effect of pre-test scores were significantly different between the two experimental and control groups ( $P < 0.05$ ). This indicated a positive effect of intervention. It can be said that resiliency components training has an effect on mothers' resiliency and communication skills of children.

Table 1. Results of the intergroup effect of resiliency and communication skills tests in the experimental and control groups

Variable	The third type of squares	Degrees of freedom	F	Significance
Resiliency	1160.59	1	589.22	0.001
Communication Skills	252.46	1	148.75	0.001

## Discussion and conclusion

In this research, during the implementation of resiliency training program, mothers became familiar with items such as anger control, stress control, learning constructive thinking, etc., and were asked to practice learned skills using homework. The cognitive-behavioral approach of this research also helped mothers to gradually rebuild their thoughts and replace flexible thinking with stiff and maladaptive thinking, so that enhancing mothers' resiliency and consequently improving their autistic child's skills can be achieved. This study, like any research, has some limitations. Therefore, in terms of education level and economic and social status, one should be cautious about the generalizations of the findings. Also, this study is a cross-sectional study and it is suggested to conduct longitudinal studies to evaluate the effectiveness durability of this program. The results of this study can be used to improve mothers' resiliency, an important achievement that can lead to improve autistic children situation.

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Ahmadi, J., Safari, T., Hashemian, M. and Khalili, Z. (۲۰۱۱). The psychometric properties of Gilliam

autism rating scale(GARS). *Journal of researches of cognitive and behavioral sciences*, 1(1): 87-104, (Text in Persian).

Bradshaw, J., Koegel, L. K. and Koegel, R. L. (2017). Improving functional language and social motivation with a parent- mediated intervention for toddlers with autism spectrum disorders. *Journal of Autism and Developmental Disorders*, 47(8): 2443-2458.

Connor and Davidson (2013)

Garnezy, N., Masten, A. S. and Tellegen, A. (1984). The study of stress and competence in children: A building block for developmental psychology. *Journal of Child Development*, 55(1): 97-111.

Gilliam, J. E. (2014). *Gilliam Autism Rating Scale* (3rd ed). Texas, Austin: Pro-Ed.

Mohammadi, Masoud. (۲۰۱۵). *Factor affecting resiliency in people at risk of drug abuse*. Doctoral dissertation, University of Social Welfare and Rehabilitation (Text in Persian).

- Ping Ang, K. Q. and Ru Loh, P. (2019). Mental health and coping in parents of children with autism spectrum disorders(ASD) in Singapore: An examination of gender role in caring. *Journal of Autism and Developmental Disorders*, 49(5):2129-2145.
- Shing Chan, K. K., Lam, C. B., Law, C.W. and Ming Cheung, R. Y. (2018). From child autistic symptoms to parental affective symptoms: A family process model. *Research in Developmental Disabilities*, 75:22-31: doi:[10.1016/j.ridd.2018.02.005](https://doi.org/10.1016/j.ridd.2018.02.005)
- Vest, B. M., Heavy, S. C., Homish, D. L. and Homish, G. G. (2017). Marital satisfaction, family support and pre- deployment resiliency factor related to mental health outcomes for reserve and national guard soldiers. *Journal of Military Behavioral Health*, 5(4): 107-110.