

IPA
International Journal of Psychology
Vol. 16, No. 2, Summer & Fall 2022
PP. 113 -135

Iranian Psychological
Association

Effectiveness of Group Counselling based on Self-Development Resources on Depression, Anxiety, and Stress of Mothers Having Children with Autism

Article Type: Research Article

Samane Karimi, MA	Seyyed Jalal Younesi, PhD
Department of Psychology and Education of Exceptional Children, Tehran University of Rehabilitation Sciences and Social Health, Tehran, Iran	Department of Counseling, Tehran University of Rehabilitation Sciences and Social Health, Tehran, Iran

Khalil Kakavandi*
PhD student
Department of Psychology and
education of exceptional children
University of Esfahan, Iran
khalilkakavandi@gmail.com

Received: 8/1/2024 Revised: 10/5/2024 Accepted: 16/5/2024
Doi: 10.61186/ijpb.16.2.113

The aim of the present research was to examine the effectiveness of group counselling based on self-development resources on the depression, anxiety, and stress of mothers with children suffering from autism. The research design was quasi-experimental of pre-test/post-test type with control group. The statistical population consisted of all mothers having children suffering from autism in Kermanshah City. The statistical sample consisted of 30 mothers of children with autism, who were chosen through non-randomized convenient sampling. Randomly, 15 mothers were assigned to the intervention and 15 mothers to the control group. To measure the extent of anxiety, stress, and depression of mothers, Lovibond DASS-21 questionnaire (1995) was used. The intervention group

received training for 10 sessions (once a week, each session: 90 minutes) on group counselling based on self-development resources, while the control group was placed in the waiting list for intervention. The data were analyzed by univariate Covariance analysis using SPSS 22. The findings obtained from data analysis based on univariate Covariance analysis indicated that group counseling based on self-development resources had a significant effect on reducing the extent of anxiety, depression, and stress of mothers having children with autism ($p < .001$), where the extent of impact on depression, anxiety, and stress was as follows respectively: .32, .28, and .19. According to the results, group counselling based on self-development resources can be applied as a psychological interventional approach for reducing the level of anxiety, depression, and stress of mothers having children with autism.

Keywords: group counselling, self-development resources, depression, anxiety, stress, children autism

One of the issues subjecting families to a serious challenge and crisis is birth of a child with autism spectrum disorder (Enea & Rusu, 2020). Autism spectrum disorder is a neurodevelopmental disorder, where the suffer has serious defects in both social interactions and communication as well as limited and repetitive behaviors (American Psychiatric Association, 2013). Children with autism are weak in many expected skills, and the parents' attempts for training skills and new learning as well as inhibition of maladaptive behaviors usually remain futile, thus complicating their acceptance and adaptation to this reality for them (Čolić, Dababnah, Garbarino & Betz, 2022). Many families due to having such children suffer from numerous problems including high medical costs, training, educational issues, marital conflicts, fear from giving birth to a second child, sense of guilt, and isolation (Hutchison, Feder, Abar, & et al, 2016). Research has shown that presence of a child with autism affects the psychosocial status of the family. Indeed, on the one

hand due to greater involvement and taking of their child, and on the other because of sense of shame and embarrassment resulting from the existence of that child, the family reduces their social relations with others or even cut it off altogether (Matthews, Puplampu & Gelech, 2021). Also, studies in this regard suggest that having a child with ASD is associated with depression, worries, stress, shame, and embarrassment for the parents especially their mothers, and negatively affects the marital relationships. This is because it causes further quarrels between the husband and wife about the child with autism, his/her treatment as well as taking care of him/her, thus widening the distance between them (Öz, Yüksel & Nasiroğlu, 2020). In addition, some studies have noted that mothers of children with ASD suffer from a heavy sense of guilt and depression, and these mothers usually experience more psychological burden than the fathers (Kütük, Tufan, Kılıçaslan, & et al, 2021).

Research has shown that 44.6% of mothers of the children with ASD suffer from depression (Jahan, Araf, Griffiths, Gozal & Mamun, 2020). Depression and mood disorders in these parents are among their quality-of-life predictors (Öz & et al, 2020). In addition to incidence of depression symptoms in parents of children with ASD, high levels of anxiety disorders including generalized anxiety disorder, panic, phobia, and obsessive-compulsive disorder have also been observed in the parents of these children (Murphy, Prentice, Walsh, Catmur & Bird, 2020). According to reports, 20-32% of mothers of children with autism suffer from anxiety disorders (Ayhan, Teze & Türkmen, 2022). It should be noted that existence of anxiety symptoms in parents can negatively affect the treatment of the

child with ASD (Murphy, & et al, 2020). Also, excessive anxiety of parents can provide the ground for their over-supportiveness and reduced autonomy of the child (Ivey, 2014). Ultimately, existence of anxiety problems in the parents of children with autism also affects their quality of life in a negative way (Öz & et al, 2020). Studies suggest that mothers of children with autism have higher levels of stress and tension (Mohtashami, Ebrahimi, Aliakbari Dehkordi, & Chimeh, 2015). Overall, studies indicate that parents of children with ASD are far more vulnerable to stress, and high levels of parental stress cause them to find greater tendency to use parental inflexible, threatening, and aggressive methods, and benefit less from the healthcare programs offered for their child. Thus, they may fail in decision-making about the most suitable therapeutic solutions for their child (Enea & Rusu, 2020). Therefore, methods that can reduce the stress, anxiety, and depression of families having children with autism, especially their mothers who are more involved in their education, can be helpful. So far, different methods have been devised in recent years for improving the negative emotions of families having children with special needs, including training social skills, training life skills, immunization methods, cognitive therapies, etc. One of the therapeutic methods that can be effective in this regard is the method based on self-development resources (Schoneman, 1981).

Self-development-based psychotherapy was designed and developed by Schoneman (1981). By reviewing numerous studies performed on the elf, he could mention three resources as the main resources for self-development: 1) self-observation, 2) Social comparison, and 3) Social feedback. This psychologist

believes that application of each of these resources is based on the requirements of different stages of psychological development. However, if we have a quick look at the self of humans, we observe presence of these three resources generally or specifically in the self-development process. In this regard, there are individual differences in all humans, such that they have salient differences with each other given the extent of use of these resources and how much each of these resources contributes to the self-development. Accordingly, the extent of health or psychological abnormality of individuals can be specified at both personal and social levels (Kazemi, 2013). In the self-observation resource, individuals observe themselves and with this observation, in addition to awareness of their states, thoughts, and emotions, they can establish important changes in them (Wells, 2001). In the social comparison resource, individuals compare themselves with others. Some researchers believe that social comparison is an important resource in self-development and appraisal. They believed that this resource would help individuals to reduce and control any inconsistency in their assessment (Schoneman, 1981). In the social feedback resource, the concept of self in individuals can form by social feedback they receive, and be influenced. Some researchers who believe in interpersonal interaction theory have great emphasis on social feedback as the factor creating the concept of self (Schoneman, College, Taber & Nash, 1984). Numerous studies have shown that group counselling based on self-development resources would improve self-respect, social anxiety, marital conflicts, self-esteem, happiness, and psychological well-being (Nikoy kouhpas, 2016, Kazemi, 2013,

Amirjan, Soltani Aliabad, Younesi, Azkhosh & Asgari, 2011, Simi Kivi, 2009).

Thus, considering existence of anxiety, depression, and stress in mothers of children with ASD, and given the fact that enhancing the psychological wellbeing and improving the quality of life of parents play a key and effective role in the treatment of these children, interventional programs should be developed and executed to improve their depression, anxiety, and stress, as well as quality of life. In addition, given the suitable effectiveness of group psychotherapy based on self-development resources in previous studies, this psychotherapy can be helpful for treatment of families having children with special needs alongside other therapies. Accordingly, the present research tried to examine the effectiveness of group counseling based on self-development resources on the depression, anxiety, and depression of mothers having children with autism.

Method

The present research was a quasi-experimental study with pretest/posttest design with control group. The statistical population consisted of all mothers whose autism-suffering child had been studying in 2018-2019 in Besharat Autism School in Kermanshah. In this research, nonrandomized convenient sampling method was used. Briefly, considering the aim of the research, the only autism school in Kermanshah province was Besharat school, which was chosen conveniently. Considering the type of research and the limitations in performing experimental studies, and since the sample size in experimental research should be at least 15 in each group (Delavar, 2021), out of 44 mothers with minimum education of fifth grade primary

school, 30 mothers who obtained scores above the cut-off point (equal to or greater than 13) in the depression, anxiety, and stress scale were selected. Fifteen mothers were randomly assigned to the intervention group and 15 to the control group. The mean age of mothers in the intervention and control groups was 32 and 32.5 years. Also, in both groups, 83% were housewives and 17% were employed. The intervention group received the group counseling program based on self-development resources in 10 sessions, once every week, with each session lasting 90 min. At the end, both groups filled in the depression, anxiety, and stress scale and the data were analyzed.

Instruments

Depression, Anxiety, and Stress Scale (DASS-21)

The 21-item depression, anxiety, and stress scale were developed by Lovibond in 1995, measuring the symptoms of depression, anxiety, and stress in a four-degree scale ranging from 0 to 3. This test consists of three subscales of depression, anxiety, and stress. The subject's score in each subscale is measured based on seven items specific to that scale. This scale is one of the valid instruments for measuring the symptoms of negative emotions, whose reliability and validity have also been confirmed in different studies. Each of the DASS-21 subscales includes 7 items, and the final score of each of them is obtained through summing up the scores of the relevant items. Each item is scored from zero (does not apply to me at all) to 3 (it absolutely applies to me). Regarding the cut-off point of the scale, those who obtain scores equal to or greater than 13 in each subscale suffer from high levels of Depression, anxiety, and stress, scores 7-12 medium, and scores lower than 7 show low

levels of Depression, anxiety, and stress. Antony, Bieling, Cox, Enns, & Swinson (1998) performed factor analysis on the mentioned scale, and they again found three factors of Depression, anxiety, and stress. The results of this study indicated that 68% of the total variance of the questionnaire is measured by these three factors. The specific value of Depression, anxiety, and stress factors in the mentioned study was found 9.07, 2.89, and 1.23, and the alpha coefficient for these factors was .97, .92, and .95, respectively. Also, the results of calculating the correlation between the factors in the study by Antony et al. (1998) revealed correlation coefficient of 0.48 between depression and stress, .54 between anxiety and stress, .53 between anxiety and stress, and 0.28 between anxiety and depression. The validity of this questionnaire has been examined by Samani, Jokar, Sahragard (2007) in Iran, where the retest validity of the depression, anxiety, and stress scale was reported .80, .76, and .77, and Cronbach alpha for the scale as .81, .74, and .74, respectively. Sahebi, Asghari & Salari (2005) in samples consisting of 278 general people and 194 clinical subjects, reported Cronbach alpha coefficient as .87 and .89 for depression, .85 and .91 for anxiety, and .89 and .87 for anxiety, together with .91 and .93 for the total scale.

The protocol of the group counseling based on self-development resources was adapted from Schoneman group counseling session (1981); in this research, its content was customized for mothers having child with autism, and in the research by (Kazemi, 2013) and by Nikoy kouhpas, (2016). Maleksaiedi, Younesi & Sohrabi (2014) has been employed in Iranian population, and its content validity has been confirmed. A summary of the program is presented as follows.

Table 1
Summary of the Group Training Program based on Self-Development Resources Adapted from Schoneman Program (1981) – the Subjects in each Session

session	Description
1	In the first session, the psychologist explained the aims of group formation, rules, and manner of formation of sessions to the members. Also, the self-development resources were collected for the members clearly and with objective as well as comprehensible examples.
2	In the second session, the assignments of the previous session were investigated and the members explained the assignments of each other. Further, the concept of self was explained to the mothers, and through question and answer, attempts were made to help each of them have an active role in the session
3	In the third session, after reviewing the previous session, the counselor and members discussed on alienation. In the theory of self-development resources, alienation means caring too much about others' opinions and lack of attention to self-observation and one's own opinion.
4	In the fourth session, after reviewing the previous session, the members discussed on the situations where they have had a sense of pride. Each mother was asked to explain their situations and use the techniques of sessions.
5	In the fifth session, the members discussed on self-appraisal from others' views, for which some assignments were set for the next session. Also, mothers were allowed to choose their desired assignments.
6	In the sixth session, the previous session was reviewed and the members discussed on good deeds they have had over the previous year, and scored each other from 10 to 20.
7	The seventh session was initiated with discussion on keeping up with the joneses in the form of social comparison, and the members expressed their opinions. Next, each member dealt with self-appraisal regarding social comparison, and some assignments were set for the next session about social comparison.
8	The eighth session dealt with role playing, where each member adopted a character such as hero or ..., and expressed their feelings. Further, discussions were done on social issues and self-

	development resources. Next, discussion was done on social comparison about the life of acquaintances such as parents and relatives. For the next session, the members specified which of the subscales of self-development resources has influenced them most.
9	The ninth session began with review of the previous session, and then the members discussed on adjustment of resources of other members. The members also scored the self-confidence of other members. For the next session, the subjects were asked to write ways of enhancing self-confidence as their assignment.
10	The tenth session began with the review of the previous session, and then the members discussed on enhancing self-belief. Finally, the members dealt with conclusion under supervision of the counselor, and discussed its utility or lack of utility.

Method

Regarding the implementation, after receiving permission from the exceptional educational organization, in the school we had chosen purposefully (Besharat School), the mothers who had at least fifth grade primary school education were tested using DASS-21 questionnaire. Out of the 44 mothers who filled in the questionnaires, 30 who acquired higher scores than the cut-off point (equal to or greater than 13) were selected, and assigned into control and intervention groups (15 in the control and 15 in the intervention group). Next, the intervention group underwent group counselling training based on self-development resources for 10 sessions (90 min each session) once every week. However, the control group did not receive any training. Note that these sessions were held in group and at the end of each session, a summary of the contents presented in the session would be provided to the participants. Also, one sheet of homework was set for each session, entitled awareness of daily psychological burdens; the participants were supposed to do the assignments at the interval between the sessions. Once the sessions were completed, the subjects in both groups responded

to the DASS-21 items again, where its resulting scores (posttest) were compared with the scores obtained in the pretest stage (before the initiation of training sessions). Note that written consent was taken from both intervention and control groups, and they were explained that they could withdraw from the sessions at each of the research. Also, counselling sessions were held for the control group after the final stage, so that this group could also benefit from the therapeutic sessions.

Results

As observed in Table 2, there are some differences between the mean scores of the intervention and control groups in the pretest and posttest stages. To test the significance of the difference obtained as changes in the scores, univariate covariance analysis was used.

Table 2

Mean and Standard Deviation of the Experimental and Control Groups before and after the Intervention in Depression, Anxiety and Stress Variables

Variables	Group	Pre-Test		Post-Test	
		Mean	Standard Deviation	Mean	Standard Deviation
Depression	Control	19.66	4.99	19.66	4.08
	Experimental	20.53	4.88	17.66	3.53
Anxiety	Control	17.13	4.15	17.86	4.88
	Experimental	18.46	4.42	14.93	3.01
Stress	Control	13	2.97	13.26	2.78
	Experimental	16.60	4.91	13.20	3.60

To respond to the research hypotheses, the levels of depression, anxiety, and stress scores of both groups were analyzed using

univariate covariance analysis in the form of pretest and posttest. After this analysis, its presumptions were investigated.

Table 3
Investigation of the Assumption of Homogeneity of the Regression Slopes

Variable	Source of effect	Sum of Squares	Degree of freedom	Mean square	F number	Statistical Significance
Depression	Group	.29	1	.29	.07	.788
	Pre-test	297.18	1	297.18	73.88	.001
	Interaction group and pre-test	4.98	1	4.98	1.24	.276
	Error	104.58	26	4.02		
	Total	10892	30			
Anxiety	Group	1.03	1	1.03	.10	.745
	Pre-test	208.97	1	208.97	21.94	.001
	Interaction group and pre-test	8.47	1	8.47	.89	.354
	Error	247.61	26	9.52		
	Total	14264	30			
Stress	Group	1.49	1	1.49	.33	.573
	Pre-test	161.97	1	161.97	35.96	.001
	Interaction group and pre-test	7.76	1	7.76	1.72	.201
	Error	117.10	26	4.50		
	Total	5545	30			

Table 3 presents the results of homogeneity test of the regression coefficients of depression, anxiety, and stress. The significance level for the interaction of group and pretest of depression ($p=.276$), anxiety ($p=.354$), and stress ($p=.201$) has been larger than .05. Thus, the data support the assumption of homogeneity of the regression slopes.

Table 4
Assumption of Homogeneity of Variance of Depression, Anxiety and Stress Variables using Leven's test

Variables	F	Degree of freedom 1	Degree of freedom 2	Statistical Significance
Depression	.856	1	28	.363
Anxiety	1.43	1	28	.231
Stress	.019	1	28	.892

Table 4 reports the results of homogeneity of variance of variables using Levin test. The significance level for depression ($p=.363$), anxiety ($p=.231$), and stress ($p=.892$) has been larger than .05. Thus, the assumption of homogeneity variances has been verified.

Table 5
Assuming Normal Distribution of Variables Using the Kolmogorov-Smirnov Test

Variables	Stage	Kolmogorov-Smirnov z	Statistical Significance
Depression	Pre-test depression	.958	.318
	Post-test depression	.920	.365
Anxiety	Pre-test Anxiety	.590	.878
	Post-test Anxiety	.788	.563
Stress	Pre-test Stress	.757	.616
	Post-test Stress	1.193	.115

Table 5 shows the results of normal distribution of variables using Kolmogorov-Smirnov test. The significance level in the pretest and posttest in all variables has been larger than 0.05. Thus, the assumption of normality of distribution has also been observed, and univariate covariance analysis can be executed.

Table 6
Results of Multicovariance Test for the Variables of Depression, Anxiety and Stress in the Post-test

Variable & Source of Effect	Value	F	Hypothesis Df	Error df	P	Eta
Pillai's Trace	.762	24.483	3	23	.000	.762
Wilk's Lambda	.762	24.483	3	23	.000	.762
Hovelling's Trace	.762	24.483	3	23	.000	.762
Roy's Largest Root	.762	24.483	3	23	.000	.762

Based on the data observed in Table 6, the two- group effects on the linear combination of the dependent variables are significant. To test which variables are significantly affected by this effect covariance analysis has been used, with its results presented in Table 7.

Table 7

The Results of the Univariate Ancova for the Depression, Anxiety and Stress at Post-test Group

Variable	Source of effect	Sum of squares	Degree of freedom	Mean square	F number	Statistical Significance	Eta parabola squared
Depression	Pre-test Effect	299.09	1	299.09	73.70	.001	.73
	Group Effect	49.26	1	49.26	12.14	.002	.32
	Error	109.56	27	4.05			
	Total	10892	30				
Anxiety	Pre-test Effect	204.57	1	204.57	21.56	.001	.44
	Group Effect	104.09	1	104.09	10.97	.003	.28
	Error	256.09	27	9.48			
	Total	14264	30				
Stress	Pre-test Effect	166.46	1	166.46	35.99	.001	.57
	Group Effect	30.76	1	30.76	.016	.016	.19
	Error	124.86	27	4.62			
	Total	4555	30				

As observed in Table 7, by considering the pretest scores of depressions, anxiety, and stress as the covariate (auxiliary variable), the difference between individual performance in the intervention and control groups has been significant as follows: depression ($F=12.26$, $p<.05$), anxiety ($F=10.97$, $p<.05$), and stress ($F=6.65$, $p<.05$). In other words, it can be stated that the difference between the scores of the two groups indicates the

fact that group counseling based on self-development resources has reduced the depression, anxiety, and stress in the intervention group compared to the control, and the extent of effect was as follows: depression: .32, anxiety: .28, and stress: .19.

Discussion

The present research was performed to investigate the effectiveness of group counseling based on self-development resources on the depression, anxiety, and stress of mothers having a child with ASD. The results of the research hypotheses indicated that training the group counseling based on self-development resources was effective on the depression, anxiety, and stress of mothers having children with ASD. This means that group counseling based on self-development resources can reduce the depression, anxiety, and stress of such mothers. These results are in line with the findings of Nikoy kouhpas, (2016), Kazemi, (2013), and (Ede, Anyanwu, Onuigbo, & et al, 2020). The group counseling sessions by presenting the necessary information and doing suitable assignments such as participation in the fears, hopes, and wishes in a group manner, familiarity with the self-development resources, alienation, drawing the circles of self and others, coping with cognitive distortions such as black and white thinking and its conversion to realistic cognitive beliefs, problem-solving skills, etc. lead to self-esteem and reduction of anxiety in individuals ((Nikoy kouhpas, 2016). Meanwhile, in psychotherapy based on self-development resources, self-awareness plays a key role. What differentiates humans from animals is self-awareness and at a higher degree is awareness of actions and manners of

performing one's actions, which is known as metacognition. This piece of awareness can be the origin of the effectiveness of this treatment for many positive and negative changes in individuals through the self-regulation system (Ede, Anyanwu, Onuigbo, & et al, 2020). In line with this finding, Kazemi (2013) indicated that in psychotherapy based on self-development resources, the person self-awareness increases, and this very self-awareness leads to self-expression and enhancement of self-confidence in individuals. Furthermore, self-regulation causes the person to prevent from incidence of special behaviors. This resource by applying the self-regulation system can control many thoughts and emotions and overall cognition of the person (Ede et al., 2020).

Also, in another interpretation regarding the effectiveness of psychotherapy based on self-recognition resources on depression, anxiety, and stress of mothers having child with autism, it can be stated that once the psychological energy of people flows into the self-observation containers, the effects of inflation of social comparison and social feedback diminish; instead of excessive focus on social comparison, the person would also pay attention to their inner resources, thereby recognizing their own power and capacity (Simi Kivi, 2009). When the social comparison of the person is inflated such that the person cannot see their inner abilities and constantly emphasizes the opinions of others and how they judge him or her, the person neglects the abilities and capacities that exist in him or her which are not found in others, and he or she constantly proceeds his/her daily affairs to please others. This can lead to what has been called inflated persona according to Jung. Here, in order to get the confirmation of others, the person

constantly has to wear different masks so that they can feel self-value inside them, and since its realization in all situations is impossible, when facing different individuals, the person will experience the stress and anxiety that I may not be approved by this group. During the psychotherapy sessions of recognizing self-recognition resources, when the psychic energy increases in self-observation, the person pays more attention to their abilities and talents previously neglected by them. This causes the person when facing different individuals while paying attention to their own conditions and abilities compare themselves with others. Furthermore, in paying attention to the judgments and opinions of others, in case of establishing a balance in self-recognition resources, the person may reject the opinions of others that are not in line with his own opinions without experiencing much resent and respectfully, and do the thing they think is the best possible in the situation they are in (Amirjan et al., 2011). In quasi-experimental research, many factors may endanger the internal and external validity of the research. In the current research, as far as possible, important factors including; random selection (random selection of subjects in two control and experimental groups), simultaneity (no training or other simultaneous intervention to the two groups), interference of experimental actions (subjects in the control group did not know that their performance was compared with the other group so as not to try to show their superiority) show) was controlled. However, due to the fact that the mothers with autistic children were selected only from the mothers of Kermanshah province, caution should be observed in generalizing the results. One of the limitations of this research was the purposive and cross-sectional sampling. Thus, caution should be applied when

generalizing the results. Therefore, future research is suggested to use long-term follow-ups for investigating the persistence of the effect of method of self-recognition resources and randomized sampling. It is also suggested to compare the effects of group counseling based on training the concepts of self-recognition resources against other therapeutic approaches such as metacognitive therapy, cognitive behavioral therapy, reality therapy, spiritual therapy, etc., in order to determine and use the most suitable therapeutic approaches for enhancing the psychological health of parents having children with autism.

Acknowledgements

The principal and Deputy of Besharat autism school in Kermanshah province and all mothers having children with autism in the school who participated patiently and as planned in the consultation program and fully cooperated with the researcher are highly appreciated.

References

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (DSM-5®)*. American Psychiatric Pub.
- Amirjan, S., Soltani Aliabad, M., Younesi, S. J., Azkhosh, M., & Asgari, A. (2011). Efficacy of Group Counseling on Self-Esteem of High School Female Students. *Refah, Journal*, 11(40), 189-215 (In Persian).
- Antony, M. M., Bieling, P. J., Cox, B. J., Enns, M. W., & Swinson, R. P. (1998). Psychometric properties of the 42-item and 21-item versions of the Depression Anxiety Stress

- Scales in clinical groups and a community sample. *Psychological Assessment*, 10(2), 176-181. [link]
- Ayhan, F., Teze, S., & Türkmen, A. S. (2022). The relationship between the presence of depression and attachment styles of mothers with autistic children. *The American Journal of Family Therapy*, 50(2), 131-143 [link]
- Čolić, M., Dababnah, S., Garbarino, N., & Betz, G. (2022). Parental experiences raising children with autism spectrum disorder in Eastern Europe: a scoping review. *International Journal of Developmental Disabilities*, 68(1), 1-13.
- Delavar, A. (2021). *Research methods in psychology and educational sciences* (5th edition). Publishing viriaesh. [link]
- Ede, M. O., Anyanwu, J. I., Onuigbo, L. N., Ifelunni, C. O., Alabi-Oparaocha, F. C., Okenyi, E. C., ... & Victor-Aigbodion, V. (2020). Rational emotive family health therapy for reducing parenting stress in families of children with autism spectrum disorders: a group randomized control study. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 38, 243-271 [link]
- Enea, V., & Rusu, D. M. (2020). Raising a child with autism spectrum disorder: A systematic review of the literature investigating parenting stress. *Journal of Mental Health Research in Intellectual Disabilities*, 13(4), 283-321 [link]
- Hutchison, L., Feder, M., & Abar, B. et al. (2016). Relations between Parenting Stress, Parenting Style, and Child Executive Functioning for Children with ADHD or Autism. *Journal Child Family Studies*. 25, 3644–3656 [link]
- Ivey, J. K. (2004). What do parents expect? A study of likelihood and importance issues for children with autism

- spectrum disorders. *Focus on Autism and other Developmental Disabilities*, 19(1), 27-33 [link]
- Jahan, S., Araf, K., Griffiths, M. D., Gozal, D., & Mamun, M. A. (2020). Depression and suicidal behaviors among Bangladeshi mothers of children with Autism Spectrum Disorder: a comparative study. *Asian Journal of Psychiatry*, 51, 101994 [link] (In Persian)
- Kazemi, j. (2013). *The effectiveness of group counseling based on self-knowledge recourses on increasing assertiveness addicts in rehabilitation performed*. Master's thesis counseling family. University of social welfare & Rehabilitation [link]. (In Persian)
- Kütük, M. Ö., Tufan, A. E., Kılıçaslan, F., Güler, G., Çelik, F., Altıntaş, E., & Kütük, Ö. (2021). High depression symptoms and burnout levels among parents of children with autism spectrum disorders: a multi-center, cross-sectional, case–control study. *Journal of Autism and Developmental Disorders*, 51, 4086–4099 [link]
- Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour Research and Therapy*, 33(3), 335-343 [link]
- Maleksaiedi, J., Younesi, J., & Sohrabi, F. (2014). The Effectiveness of Skills Training to Adjust the Sources of Self-Development on Decreasing the Marriage Conflicts among Women. *Family Counseling and Psychotherapy*, 4(1), 29-47 [link] (In Persian)
- Matthews, E. J., Puplampu, V., & Gelech, J. M. (2021). Tactics and strategies of family adaptation among parents caring for

- children and youth with developmental disabilities. *Global Qualitative Nursing Research*, 8, 1-18 [link]
- Mohtashami, T., Ebrahimi, F., Aliakbari Dehkordi, M., & Chimeh, N. (2015). Comparison of Parental Stress, Satisfaction and Family Functioning in Mothers of Children with Autism and Normally-developing Children. *Journal of Exceptional Children's*, 16(4), 51-62 [link] (In Persian)
- Murphy, J., Prentice, F., Walsh, R., Catmur, C., & Bird, G. (2020). Autism and transgender identity: Implications for depression and anxiety. *Research in Autism Spectrum Disorders*, 69, 101466 [link]
- Nikoy kouhpas, E. (2016). *The effectiveness of group counseling based on self-knowledge recourses on increasing Self-esteem and decrease the social anxiety*. Master's thesis Counseling Rehabilitation University of social welfare & Rehabilitation [link]
- Öz, B., Yüksel, T., & Nasiroğlu, S. (2020). Depression-anxiety symptoms and stigma perception in mothers of children with autism spectrum disorder. *Archives of Neuropsychiatry*, 57(1), 50-55 [link]
- Sahebi, A., Asghari, M. J & Salari R.S (2005). Ferdosi University Validation of Depression Anxiety and Stress Scale (DASS-21) for an Iranian Population. *Journal of Iranian Psychologists*, 1(4), 1-18 [link] (In Persian)
- Samani, S., Jokar, B., & Sahragard, N. (2007). Effects of Resilience on Mental Health and Life Satisfaction. *Iranian Journal of psychiatry Clinical psychology*, 13(3), 290-295 [link] (In Persian)
- Schoneman, T. J. (1981). Report of the source of self-knowledge. *Journal of Personality*, 49, 284-294 [link]

- Schoneman, T. J., College, L., Taber, L. E., & Nash, D. L. (1984). Children reports of self-knowledge. *Journal of Personality*, 52(2)124-137 [link]
- Simi Kivi, H. (2009). *the effectiveness of group counseling based on sources of self- knowledge on increasing self-esteem of high school girl students*. Master's thesis Clinical psychology, therapy family, University of science and culture, Tehran [link]
- Wells, A. (2002). *Emotional disorders and metacognition: Innovative cognitive therapy*. John Wiley & Sons [link]