

Effectiveness of Pennsylvania Prevention Program and Program based in Islamic Criteria on Marital Satisfaction of Mothers with an autistic child

Masoume Ghodrati¹, Hakimeh Aghaei^{2*}, Mohammad Hatami³

1- PhD. Student, Islamic Azad University, Shahrud, Iran.

2- Assistant Professor, Department of Psychology, Islamic Azad University, Shahrud branch, Shahrud, Iran.

3- Associate Professor of Psychology, Department of Clinical Psychology, Kharazmi University, Tehran, Iran.

(*Corresponding author: Hakimeh Aghaei, Email: ha.aghaei@gmail.com)

(Received: 1 Dec 2020; Revised: 16 Dec 2020; Accepted: 27 Dec 2020)

Abstract

Introduction: The present study aimed to compare the effectiveness of the classical Pennsylvania prevention program and program based on Iranian-Islamic criteria on the marital satisfaction of mothers with an autistic child.

Method: 45 volunteers have been selected through convenience sampling among mothers of autistic children, having medical records at the Rehabilitation Center of Shahrud, and whose disorders were approved by an expert psychologist. The samples were randomly placed into two intervention groups and a control group (each group 15 subjects). The interventions were conducted in five, 2-hour sessions per week and the participants responded ENRICH Marital Satisfaction Scale (EMS) before and after the interventions. Data analysis was done through ANCOVA and MANCOVA.

Results: The results showed that three groups have a significant difference in a total score of marital satisfaction and components of satisfaction, conflict resolution, leisure time ($p < 0.05$). The effectiveness of the Pennsylvania prevention program based on Iranian-Islamic criteria was significantly higher than the Pennsylvania Prevention program ($p < 0.05$).

Conclusion: Accordingly, Pennsylvania Prevention Program has positive effects on psychological health and improves marital relationships by combining a variety of approaches and techniques including psychoeducation, cognitive-behavioral therapy, rational-emotional therapy, problem-solving and social skills training.

Declaration of Interest: None

Keywords: Autism, Pennsylvania prevention program, Iranian-Islamic, Marital satisfaction, Mother.

Introduction

Autism spectrum disorder (ASD) is a developmental disorder characterized mainly by dysfunction in social interaction, relationships, and typical behaviors (1). The studies have shown high levels of stress and anxiety in the parents of children with autism in comparison with the parents of typical children (2). Having a child with autism can lead to depression, anxiety, stress, shame, and embarrassment in parents (3). Studies have shown, it also negatively affects marital relations since it leads to more arguments between couples about an autistic child, her/his care and treatment, and therefore emotional distance (4).

Some studies have found that the risk of divorce in parents with autistic children is high; however, the results of empirical analyses are not clear enough (5). Some studies have reported low quality of life, marital adjustment, and satisfaction in parents of these children (6, 7, 8). On contrary, some studies have not found meaningful relation between marital adjustment and satisfaction and having autistic children (9). Hannon (9) claims that the marital adjustment of parents with an autistic child is at-risk. Besides, no research have reported a higher score in the marital satisfaction of such parents than the control group (10). Knapp (11) found that marital conflicts of parents of autistic children are higher than others. Weber (12) showed that parents of autistic children suffer higher stress in their parenting.

Although the negative consequences of raising children with autism have been extensively studied, few studies have evaluated the effectiveness of psychological interventions on the

reduction of psychological problems of their caregivers. A few studies are focusing on the effect of problem-solving skills, psychological training, counseling, peer-supportive intervention, and scheduling programs on the reduction of perceived stress, as well as an improvement of quality of life and well-being of parents of autistic children (13,14). In this regard, some studies focused on the effectiveness of cognitive-behavioral treatment on the reduction of the responsibility, physical and depressive symptoms, and reducing negative moods of the caregivers of autistic patients (15). Nevertheless, there is no special program based on cognitive-behavioral or cognitive therapy for the improvement of the families of autistic patients (16).

In this regard, the positive psychologists have emphasized on the use of some capabilities such as effective coping strategies, social problem-solving training, and enhancement of motivational and cognitive resources (17). One of the applications of positive psychology is the area of mental immunization based on the Pennsylvania prevention program with cognitive and social dimensions. In the social dimension of the Pennsylvania program, the emphasis is on the significance of providing proper support for increasing social skills in interpersonal interactions and cognitive dimensions. The main techniques are the treatment of depression in the face of negative events in life and for increasing their immunization. According to Seligman, the use of the Pennsylvania prevention program is managing multiple consequences of coping with negative events in life and immunization of individuals toward negative events (18).

It is noteworthy that the geographical area, religion, culture, age, and cognitive level of children are effective factors on the stress of parents of autistic children (4). As far as the focus of clinical-cultural psychological efforts is on investigating the cultural factors creating psychological disorders and therapies (19), it is required to localize the psychological interventions through adaptation of theories and researches with the problems that are based on the culture for higher efficiency and effectiveness (9).

Furthermore, positive psychotherapy has the potential to be adapted to the Islamic cultural dimensions of our country because of having mental-spiritual excellence (20).

Based on this, the present study seeks to promote marital satisfaction of parents of children with autism with the focus on Iranian and Islamic criteria and intends to answer this question, "Is the effectiveness of Pennsylvania prevention program adapted to Iranian and Islamic culture different from the effectiveness of its classical form on the marital satisfaction of mothers with an autistic child?"

Method

The present study is a quasi-experimental with a pretest and posttest design including two test groups and one control group. The statistical population includes mothers of autistic students who have medical record and file at the Rehabilitation Center of Shahroud, and whose disorders were approved by an expert psychologist. 45 volunteers have been selected through convenience sampling and randomly placed in two intervention groups and one control group, each group containing 15 subjects. Inclusion criteria included signing the

informed consent to participate in the study, no acute mental disorders, no acute physical illness, and not receiving other treatments. Exclusion criteria were an acute physical or mental condition that impeded the continuation of participation in treatment sessions, absence of participants for more than 2 sessions, unwillingness to participate in the study. After ensuring mothers of the research basis of this survey and confidentiality of the information and obtaining their consent for participation in the study, the required explanations were given to them for filling the questionnaire. Then all three groups filled ENRICH Marital Satisfaction Scale (EMS).

In the next stage, two groups were given the training interventions and the control group was on the waiting list. After completion of the intervention course, three groups filled the questionnaire once again. Five experts confirmed the content validity of the Program based on Islamic Criteria and Pennsylvania Prevention Program. Also, the effect of these two interventions in improving the marital satisfaction of mothers of autistic children shows their validity.

Measurements

ENRICH Marital Satisfaction Scale (EMS): Marital Satisfaction Scale contains 115 items developed by Olson, Fournier, and Druckman (21) and used for evaluation of the satisfaction level in a marital relationship. ENRICH scale consists of 14 subscales, the first subscale including 5 questions and others including 10 questions. The validity and reliability of EMS have been confirmed in various studies abroad (21). In Iran, the studies have shown that EMS and its Persian translation have required reliability and validity (21). In the version containing

115 questions which are executed in Iran, five choices have been considered for each question including strongly agree, moderately agree, neither agree nor disagree, moderately disagree and strongly disagree except for questions 96 and 105 for which the choices are always, often, don't know, rarely and never. The scoring of the questions is based on a Likert scale in the form of 0, 1, 2, 3, 4. A

higher score indicates more satisfaction (22).

Two groups were given the training intervention on a weekly 2-hour sessions within 5 weeks and the control group was on the waiting list. Tables 1 and 2 deal with the content of the Classic Pennsylvania Prevention Program (Table1) and Pennsylvania Prevention Program Based on Iranian Islamic Standards (Table2).

Table1: Classic Pennsylvania Prevention Program

Sessions	Content of session
First session	Learning the pattern of the relationship between the elements of thinking and feeling. Familiarity with the ABC model, through the design of several scenarios that include a disturbing event (A), the consequences of dealing with this event (B), and the underlying beliefs of these consequences (C). Provide the necessary training on how to record ABC events.
Second session	Assessing the attribution pattern of individuals in the face of adverse events, defining the concept of attribution using the ABC model, teaching optimism against pessimism according to the characteristics of the attribution pattern. Practice document pattern review in real-life events.
Third session	Dealing with catastrophic attitudes and beliefs. Learning to deal effectively with catastrophic beliefs by adding two factors to argue with false beliefs (D), and energizing changes in outcomes (E), following the previous ABC model, using evidence-based techniques, proposing alternative interpretations, avoiding catastrophe, and plotting an attack for the most likely event to prevent helplessness. Practice the ABCD pattern on real-life events. Practice dealing with disaster in the face of real-life events.
Fourth Session	Learn the five steps of problem-solving. Teaching procrastination and thinking, looking at things from the perspective of others, setting goals, and listing the tasks that lead to those goals, choosing a method of action, testing the effectiveness of the chosen solution, and choosing another solution if they are not effective.
Fifth meeting	Social skills training, assertiveness, and negotiation. Teach courage by following the steps of describing the situation, expressing your feelings, brief and useful change, expressing the impact of this change on your feelings. Negotiation training by following the steps of identifying a reasonable and achievable demand, expressed a reasonable demand, paying attention to the demands of the other party, trying to reach an agreement, continuing the negotiation until an agreement is reached.

Table2: Pennsylvania Prevention Program Based on Iranian Islamic Standards

Sessions	Content of session
First session	Learning the pattern of the relationship between the elements of thinking and feeling, comparing religious and non-religious thinking and the emotions that follow. Familiarity with the ABC pattern, by recalling a disturbing event (A), the consequences of facing this event (B), and the religious and non-religious beliefs underlying these consequences (C). Provide training on how to record ABC events. Practice the ABC pattern for real-life

events.

Second session	Evaluating the documentary model of individuals in the face of unpleasant events, defining the concept of documents and its characteristics using the ABC model, teaching optimism against pessimism using Quranic verses, hadiths and anecdotes, and Iranian proverbs. Practice the attribution pattern in real-life events. Practice replacing optimism with pessimism by reviewing and presenting relevant verses, narrations, and anecdotes.
Third session	Dealing with catastrophic attitudes and beliefs with emphasis on Islamic confrontation. Training to deal effectively with catastrophic beliefs by adding the two factors of arguing with false beliefs (D) and energizing changes in consequences (E) to the ABC pattern, using evidence-based techniques, proposing alternative interpretations, and avoiding catastrophe. Conception, plotting an attack for the most likely event to prevent helplessness. Practice ABCD pattern on real-life events with the help of the concepts of acceptance, patience, trust, and recourse.
Fourth Session	Learn the five steps of problem-solving. Teaching to think and meditate by reciting Qur'anic verses about thinking and reasoning, looking at things from the perspective of others, setting goals, and listing the tasks that lead to the realization of those goals, testing the effectiveness of the chosen solution, and choosing another solution in Ineffective face. Practice problem-solving in real-life events.
Fifth meeting	Teaching social skills of assertiveness and negotiation. Teach courage by following steps to describe the situation, expressing your feelings using religious and cultural teachings. A brief and helpful change and assess the impact of this change on your feelings. Teaching negotiation by identifying a logical and achievable demand, articulating this demand, paying attention to the demands of the other party, trying to reach an agreement, continuing the negotiation until reaching an agreement with an emphasis on fairness and respecting the rights of others based on verses and hadiths Islamic and Iranian anecdotes.

Results

Table 3 shows that in all studied variables, the mean scores of the Pennsylvania group-based on Iranian-Islamic criteria have increased in the posttest compared to

pretest; while in the classic Pennsylvania group, almost no difference is observed in the mean scores of various stages.

Table3. The descriptive indices of research variables in groups and the studied procedures

Variable	Stage	Iranian-Islamic Pennsylvania		Classic Pennsylvania		Control	
		Mean	SD	Mean	SD	Mean	SD
Total score	Pretest	150.333	15.873	141.467	19.276	131.667	10.761
	Post-test	165.533	14.525	138.333	12.720	121.333	11.586
Satisfaction	Pretest	21.267	2.219	21.067	3.693	17.333	2.968
	Posttest	24.800	2.570	20.133	2.588	13.733	2.344
Contractual	Pretest	12.800	2.65	10.600	2.667	9.533	3.314
	Posttest	13.267	1.800	11.000	2.268	9.067	3.150
Personality issues	Pretest	9.200	2.933	9.067	3.058	8.467	2.615
	Posttest	10.667	0.845	8.600	3.203	7.333	2.610
Communicati on	Pretest	8.733	1.952	8.867	2.949	9.933	2192
	Posttest	11.133	1.642	8.200	2.541	8.400	2.261
Conflict resolution	Pretest	15.867	3.461	16.000	4.018	14.800	3.529
	Posttest	20.400	1.242	15.667	2.059	12.267	2.344

Financial management	Pretest	8.067	2.604	8.267	2.375	8.067	3.058
	Posttest	11.533	1.995	8.200	2.83	6.733	2.604
Leisure time	Pretest	11.867	2.560	11.733	2.685	11.400	1.765
	Posttest	15.067	2.314	12.667	1.988	10.667	2.320
Sexual relationship	Pretest	16.600	3.043	18.400	3.481	16.400	3.376
	Posttest	18.200	2.484	17.133	2.295	14.733	3.218
Parenting	Pretest	13.367	2.134	11.467	2.560	9.600	2.444
	Posttest	14.333	1.397	10.533	1.767	7.533	1.846
Families and friends	Pretest	10.867	3.044	9.000	1.890	10.667	2.289
	Posttest	12.267	3.035	10.267	2.251	9.000	2.391
Equalitarian roles	Pretest	7.333	1.345	5.933	1.624	5.533	1.302
	Posttest	6.800	1.373	6.800	1.656	6.067	1.580
Religious orientation	Pretest	12.200	3.802	10.400	3.680	8.600	3.521
	Posttest	13.067	2.017	9.000	2.726	9.333	4.254

To investigate the difference between the effectiveness of training these two methods, at the first stage, ANCOVA is used for a total score of marital satisfaction and at the second stage, MANCOVA has been used. The preliminary studies have been carried out to ensure not violating assumptions of normality, linearity, homogeneity of variances, homogeneity of regression slope, and reliability of covariate measurement, and the conditions for using

the above tests were established. Therefore, the results of the above tests are presented below. As seen in table 4, three groups have a significant difference at $P < 0.05$ in a total score of marital satisfaction and components of satisfaction, conflict resolution, leisure time, and parenting. The effect size of difference for the above variables is respectively 0.635, 0.453, 0.390, 0.4705 and 0.590.

Table4. ANCOVA and MANCOVA analysis for a total score of marital satisfaction and its components

Test	Source	Dependent variable	Sum of squares	Mean of squares	F (2, 41)	Significance level	Effect size
Univariate	Group	Total score	12308.663	6154.331	35.604	0.0005	0.635
Multivariate					F (2, 30)		
	Group	Satisfaction	129.798	64.899	12.403	0.0005	0.453
		Contractual	19.983	9.991	1.948	0.160	0.115
		Personality issues	30.838	15.419	1.919	0.164	0.113
		Communication	15.905	9.952	2.178	0.131	0.127
		Conflict resolution	76.313	38.157	9.607	0.001	0.390
		Financial management	23.809	11.905	1.686	0.202	0.101
		Leisure time	117.446	58.723	13.306	0.0005	0.470
		Sexual relationships	19.450	9.725	1.406	0.261	0.086
		Parenting	130.205	65.102	21.551	0.0005	0.590
		Friends and families	171.152	8.576	1.357	0.273	0.083
		Equalitarian roles	4.968	2.484	1.010	0.376	0.063
		Religious orientation	21.093	10.546	1.198	0.316	0.074

To compare the groups, the Bonferroni post hoc test was used. According to the results of the test both programs have led to meaningful improvement in the total score of marital satisfaction and components of satisfaction, conflict resolution, leisure time, and parenting at $P < 0.05$. However, the effectiveness of the Pennsylvania prevention program based on Iranian-Islamic criteria on the above variables is significantly more than the effectiveness of the classic Pennsylvania prevention program at $P < 0.05$.

Conclusion and Discussion

The results of the present study showed that both programs have significantly improved marital satisfaction; however, the effectiveness of the Pennsylvania prevention program based on Iranian-Islamic criteria on the above variables is significantly more than the effectiveness of the classic Pennsylvania prevention program. The results of the present study are in some ways in line with the results of the previous studies (23, 24, 25). On the other hand, Perry et al. (26) in their study on the effectiveness of group consultation on family functioning and marital satisfaction in mothers of autistic mothers did not find a significant difference between marital satisfaction and family functioning before and after the study. Factor et al. (27) found that although the integrated program of autism parenting skills improved the family functioning in the reduction of parents' conflict in parenting style and increase in the feeling of efficiency and satisfaction of the parenting role, it did not have a meaningful effect on the marital satisfaction of parents. Therefore, it can be said that the mentioned studies are not in line with the present study.

The present study showed that the Pennsylvania prevention program increases marital satisfaction in mothers of an autistic child. The family stress will increase with the presence of a difficult child and influences the whole family. The parents of such children feel themselves fully engaged in the problems and difficulties of their kids and experience many marital stresses (3). In this regard, Perry et al. (26) in their study concluded that some strategies such as common and shared objectives, increased respect and attention to a spouse, providing social support, stress reduction, and encouraging or giving hope support the growth and retaining of the marital and positive parenting. Furthermore, according to Bayat et al. study (28) who reported a low level of positive psychological components in mothers of children with autism, it can be concluded that the interventions which deal with such components could be effective in increasing marital satisfaction of these mothers. Predescu and Sipos (29) in their study reported a meaningful relation between emotional stress in parents of children with autism with negative self-talk, irrational cognition, and ways to cope with ineffective stress.

Besides, the present study showed that the Pennsylvania intervention based on Iranian-Islamic criteria is more effective than the classic Pennsylvania program. In this regard, Gosztyla & Gelleta (30) showed the relation between having religious opinions and high quality of life in mothers with autistic children. Overall, it is claimed that religious couples experience more support in the quality of their marriage since religion could be used as the main source by the parents (30). It is proved that the positive religious

strategies are along with lower depression and stress indices in mothers of children with autism (4) and considered as the main source of hope in these mothers (29). Besides, it creates a sense of stability based on the perception of marriage as an undeniable relation and a strong motivation for the cooperation of spouses in finding a solution in difficult situations (30).

The limitations of the present study can be summarized as follow: the statistical population is limited to mothers of autistic students in Shahroud city as well as to school-age children, a limited number of sample groups, non-random sampling method, ignoring several other influential variables such as demographic variables including age, marital status, level of education, and many children which are suggested to be considered in future research.

References

- 1- Christensen J, Grønberg TK, Sørensen MJ, Schendel D, Parner ET, Pedersen LH, Vestergaard M. Prenatal valproate exposure and risk of autism spectrum disorders and childhood autism. *Jama*. 2013 Apr 24;309(16):1696-703.
- 2- Balestrieri E, Cipriani C, Matteucci C, Benvenuto A, Coniglio A, Argaw-Denboba A, Toschi N, Bucci I, Miele MT, Grelli S, Curatolo P. Children with Autism Spectrum Disorder and their mothers share abnormal expression of selected endogenous retroviruses families and cytokines. *Frontiers in Immunology*. 2019;10:2244.
- 3- Dehghan F, Mirzakhany N, AlizadeZarei M, Sartipizade M. Sensory processing in children with attention deficit hyperactivity disorder and high-functioning autism. *International Journal of Applied Behavioral Sciences*. 2014 Oct 8;1(1):28-37.
- 4- Reed P, Osborne LA. Reaction to diagnosis and subsequent health in mothers of children with autism spectrum disorder. *Autism*. 2019 Aug;23(6):1442-8.
- 5- Bentenuto A, Perzoli S, de Falco S, Venuti P. The emotional availability in mother-child and father-child interactions in families with children with Autism Spectrum Disorder. *Research in Autism Spectrum Disorders*. 2020 Jul 1;75:101569.
- 6- Naheed A, Islam MS, Hossain SW, Ahmed HU, Uddin MJ, Tofail F, Hamadani JD, Hussain AE, Munir K. Burden of major depressive disorder and quality of life among mothers of children with autism spectrum disorder in urban bangladesh. *Autism Research*. 2020 Feb;13(2):284-97.
- 7- Mello C, Rivard M, Terroux A, Mercier C. Quality of Life in Families of Young Children With Autism Spectrum Disorder. *American journal on intellectual and developmental disabilities*. 2019 Nov 1;124(6):535-48.
- 8- Pisula E, Porębowicz-Dörsmann A. Family functioning, parenting stress and quality of life in mothers and fathers of Polish children with high functioning autism or Asperger syndrome. *PloS one*. 2017 Oct 16;12(10):e0186536.
- 9- Hannon MD, Hannon LV. Fathers' orientation to their children's autism diagnosis: A grounded theory study. *Journal of Autism and Developmental Disorders*. 2017 Jul 1;47(7):2265-74.
- 10- Saini M, Stoddart KP, Gibson M, Morris R, Barrett D, Muskat B, Nicholas D, Rampton G, Zwaigenbaum L. Couple relationships among parents of children and adolescents with autism spectrum disorder: Findings from a scoping review of the literature. *Research in Autism Spectrum Disorders*. 2015 Sep 1;17:142-57.

- 11- Knapp JA. Raising a child with autism: The impact on the quality of marital relationships. Walden University; 2004.
- 12- Weber P. *A comparison of parental stress and marital/couple satisfaction as reported by parents raising children diagnosed with Pervasive Developmental Disorder: An online mixed methods study* (Doctoral dissertation).
- 13- Catalano D, Holloway L, Mpofu E. Mental health interventions for parent carers of children with autistic spectrum disorder: Practice guidelines from a critical interpretive synthesis (CIS) systematic review. *International journal of environmental research and public health*. 2018 Feb;15(2):341.
- 14- Kazdin AE. Parent management training and problem-solving skills training for child and adolescent conduct problems. Evidence-based psychotherapies for children and adolescents. 2017 Jun 14:142-58.
- 15- McCrae CS, Chan WS, Curtis AF, Nair N, Deroche CB, Munoz M, Takamatsu S, McLean D, Davenport M, Muckerman JE, Takahashi N. Telehealth cognitive behavioral therapy for insomnia in children with autism spectrum disorder: A pilot examining feasibility, satisfaction, and preliminary findings. *Autism*. 2020 Aug 25:1362361320949078.
- 16- Kuschner ES, Morton HE, Maddox BB, de Marchena A, Anthony LG, Reaven J. The BUFFET program: development of a cognitive behavioral treatment for selective eating in youth with autism spectrum disorder. *Clinical Child and Family Psychology Review*. 2017 Dec 1;20(4):403-21.
- 17- Baker GA, Hargis E, Hsieh MM, Mounfield H, Arzimanoglou A, Glauser T, Pellock J, Lund S. Perceived impact of epilepsy in teenagers and young adults: an international survey. *Epilepsy & Behavior*. 2008 Apr 1;12(3):395-401.
- 18- Tabatabaee SM, Albooyeh G, Safari H, Rajabpour M. The effect of positive psychology intervention on psychological well-being of drugs inmates. *International Journal of Applied Behavioral Sciences*. 2016 Jan 20;2(3):8-14.
- 19- Hefti R. Integrating religion and spirituality into mental health care, psychiatry and psychotherapy. *Religions*. 2011 Dec;2(4):611-27.
- 20- Simmons JP, Nelson LD, Simonsohn U. False-positive psychology: Undisclosed flexibility in data collection and analysis allows presenting anything as significant. *Psychological science*. 2011 Nov;22(11):1359-66.
- 21- Olson DH, Fournier DG, Druckman JM. PREPARE-ENRICH counselors manual (Rev. ed.). Minneapolis, MN: PREPARE-ENRICH Inc. 1987.
- 22- Azarian A, Fatlali FF, Nouri E. Interactive role of psychological and demographic factors, marital satisfaction and level of education, a Communication Plan. *International Journal of Humanities and Cultural Studies (IJHCS)* ISSN 2356-5926. 2016 Jun 2;1(1):808-16.
- 23- Beasley M, Thompson T, Davidson J. Resilience in response to life stress: the effects of coping style and cognitive hardness. *Personality and Individual Differences*. 2003 Jan 1;34(1):77-95.
- 24- Misra R, McKean M, West S, Russo T. Academic stress of college students: Comparison of student and faculty perceptions. *College Student Journal*. 2000 Jun 1;34(2).
- 25- PorrahiMny M, Ahadi H, Askary P, Bkhtyarpoo S. Effectiveness of Penn Resiliency Program on Students' Coping Strategies, Quality of Life & Optimism. *Journal of Clinical Psychology Achievements*. 2015;1(1):25-40.
- 26- Perry A, Sarlo-McGarvey N, Factor DC. Stress and family functioning in parents of girls with Rett syndrome. *Journal of Autism and Developmental Disorders*. 1992 Jun 1;22(2):235-48.
- 27- Factor RS, Ollendick TH, Cooper LD, Dunsmore JC, Rea HM, Scarpa A. All in

- the family: a systematic review of the effect of caregiver-administered autism spectrum disorder interventions on family functioning and relationships. *Clinical child and family psychology review*. 2019 Dec 1;22(4):433-57.
- 28- Bayat M, Salehi M, Bozorgnezhad A, Asghari A. The comparison of psychological problems between parents of intellectual disabilities children and parents of normal children. *World Applied Sciences Journal*. 2011;12(4):471-5.
- 29- Predescu E, Şipoş R. Family quality of life in autism spectrum disorders (ASD). *Autism: Paradigms, Recent Research and Clinical Applications*. 2017 Apr 12:87.
- 30- Gosztyła T, Gellesta K. Marital quality and religiousness of couples parenting children with autism. *Polish Journal of Applied Psychology*. 2015 Sep 1;13(3):41-52.