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# Evaluating the Effectiveness of a Parent Training Protocol Based on an Acceptance and Commitment Therapy on Happiness and Mental Adjustment among Mothers with Slow Paced Children

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***Abstract***

***Background:*** The birth of a mentally retarded child can have a profound impact on the entire family; parents face many logistical and emotional difficulties that can impact their happiness and mental adjustment. We aimed to investigate the effectiveness of the parent training protocol based on an acceptance and commitment therapy on happiness and mental adjustment among mothers with slow paced children.

***Methods:*** The population of this quasi-experimental included all the mothers with slow-paced children in Tehran, Iran, from 2020. Samples of the study were selected using purposive sampling and randomly divided into an experimental group (Parent training protocol) (n=15), and a control group (n=15). Each of the experimental participants was trained for ten 90-minute sessions, while no therapy was provided to the control group. The subjects were assessed before and after treatment using the Persian Version of the Mini-MAC and Oxford happiness questionnaire (OHQ). The data was analyzed Using version 18.0.

***Results:*** The total sample was 30 mothers with slow-paced children, among whom the highest frequency was for the age group of 37-45 years with the mean age of 43.3. The results showed that the acceptance and commitment therapy had significant effects on happiness (F= 83.4; P=0.04) and mental adjustment (F = 80.9; P=0.06) of the mothers with slow-paced children.

***Conclusion:*** Parent training protocol based on an acceptance and commitment therapy increased the happiness of mothers with slow-paced children and improved their mental adjustment.

***Key Words:*** Acceptance and commitment therapy, Happiness, Mental Adjustment, Mothers, Parent training protocol, Slow- Paced children.

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## 1- INTRODUCTION

Slow-paced children have unique limitations in memory, word storage, abstract thought, along with visual and auditory deficiency, and immovability under a normal intelligence quotient (1). These characteristics are confirmed in the Fifth Revised Edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-V) and the World Health Organization (WHO) of the American Association of Psychiatrics (APA) of the International Classification of Diseases, 11th Revision (ICD-11) (2). Nonetheless, in line with Iranian human values and traditions, the term "slow pace" is considered as a better equivalent due to its better motivational load. The word "mental retardation" was replaced by this term, which approaches mental retardation from a more optimistic perspective (3). Children who are slow-paced may have impaired motor, speech, and social skills and have poorer cognitive functioning than their peers who normally develop. This can lead to fewer opportunities for relaxation, leisure, and athletic events to participate in. Sedentary activity, social isolation, anxiety, and shyness that are frequently identified in this group may be increased by lower levels of engagement in activities among these children (4, 5).

All parents are optimistic about raising a new child, but none of them expect the child to be disabled. For parents, the birth of a child with a disability is unexpected and has specific implications. Shock, denial, shame, resentment, depression, frustration, anxiety and acceptance are the phases of grief for parents of children with special needs (6).

The birth of a mentally retarded child can have a profound impact on the entire family (parents and children) and extended relatives (grandfather and grandmother). It is a widespread experience among all close relatives and all facets of the family will be impacted (7). Hayes et al. claimed that children's behavioral issues have associations with negative actions, contact, and mother's tension in primary life years. Therefore, the problematic actions of children resulting from this situation will lead to a decrease in the mental wellbeing levels of the parents (8). With the assumption that parents' behaviors mediate children’s behavior, numerous approaches for parent training programs have been created to increase mental health, happiness and/or adjustment to child behavior (9).

Considering that there are numbers of parent training programs that could be readily implemented in community settings, for example; parent-child interaction therapy (10); psychological intervention on marital satisfaction of mothers with slow pace children (11), spirituality-based cognitive-behavioral therapy on resiliency and life satisfaction in mothers with slow-paced children (12); solving training for mother-child interactions among mothers with slow-paced children (13) the triple P-Positive parenting program and parenting program of acceptance and commitment therapy (14); and the acceptance and commitment training on the overt behavior of parents (15).

Parent training programs are disseminated and implemented in usual care to prevent and intervene in parents' psychological problems. Beh-pajooh et al. (2018) indicated that parent-child relationship counseling has a big influence on reducing the burden of mothers with slow-paced children with behavioral issues, and, thus, reducing the behavioral problems of children (10).

Previous studies have shown that such treatments are considerably effective in marital satisfaction as well as in several elements such as traditional responses, personality problems, marital relationships, dispute resolution, recreation, parenting, family and friends,

ideological orientation and sexual relationships of mothers with slow-pace children (11). In view of previous findings, cognitive-behavioral therapy is another therapy that appears to improve resilience and life satisfaction in mothers with a slow-paced child with an emphasis on spiritual domains, including cognitive restructuring, completing behavioral homework, and improving the spiritual component (15). In addition, Aghajani et al. (2015) showed that training in social problem-solving enhances mother-child interaction by influencing slow-paced children. The results indicate that training in social problem-solving will solve or decrease the social challenges of children with disabilities (16).

Rostami et al. also revealed that acceptance and engagement therapy group training can be used as a simple, low-cost, and efficient approach with comprehensive applicability to enhance the quality of life and self-compassion of mothers with educable children with disabilities (17). The results of another comparative study indicate that Triple P and Acceptance and Commitment Training (ACT) are successful strategies for strengthening parent-child relationships and parental self-efficacy in these children's mothers (14).

Farshadi et al. (2020) found that happiness mean scores were considerably different between the experimental and control groups in post-test scores, and the happiness score was higher in the experimental group, i.e. the intervention, based on acceptance and commitment, and was successful. So, the therapeutic intervention was effective in enhancing the happiness of clinical patients, based on the approach of acceptance and commitment, and was an effective boost to their mental health and quality of living (18). Acceptance and Commitment Therapy ACT (8) is a contemporary behavioral analytic approach addressing problematic private events, founded in radical behaviorism, functional contextualization, and Relational Frame Theory (19), and Applied Behavior Analysis (ABA). The goal of ACT is to create psychological flexibility in service of valued living. Psychological flexibility can be considered a behavioral repertoire that is sensitive to the presence and functioning of private events, but that is characterized by adaptive, flexible, and creative responding with respect to those private events (20). Recent research has suggested that parenting-specific psychological flexibility may be related to more adaptive parenting behaviors associated with lower levels of child problematic behaviors (21). It is also indicated that parents receiving SSTP with ACT reported statistically significant reductions in child behavioral problems, as well as reductions in dysfunctional parenting styles at a 6-month follow-up (19).

Though the literature review supported the therapeutic method of acceptance and commitment training, no study has previously investigated its effects on the dependent variables of this research. It is a contemporary behavioral approach to increase adaptive flexible repertoires of behavior by rule-deriving and rule-following. Then, based on the pivotal role of mothers in all aspects of life, our main objective was to assess the efficacy of a parent training protocol based on acceptance and commitment therapy on happiness and mental adjustment of mothers with slow-paced children.

## 2- MATERIALS AND METHODS

### 2-1. Study design and sampling

This study was a quasi-experimental research with a Pretest-Posttest design with an intervention (ACT) and a control group. The study population consisted of all mothers with slow paced children in Tehran, Iran, in 2020.

Since the number of samples could not be reliably determined, we selected several samples for pilot projects. This sampling eliminates precise monitoring of confounding variables; in addition, in experimental research studies, the size of each sample should be at least 15 participants (22). Therefore, 30 patients were deliberately selected from the survey population on the basis of the inclusion criterion, and 15 mothers with slow-paced children were assigned to each of the ACT and control groups.

### 2-2. Inclusion and exclusion criteria

Inclusion requirements were identification of mothers with slow-paced children on the basis of a medical interview, having a slow-paced child with 6 to 10 years of age, having at least a high school diploma, absence of clinical pain or taking neurological pills based on a psychological interview, and therapy approval. Exclusion requirements included missing 1 intervention session, receiving other psychotherapy and support services during the treatments, and being unable to resume the therapy sessions.

### 2-3. Measuring tools: validity and reliability

**a) Persian Version of the Mini-MAC:** The 29-item Mini-MAC (23) was used in its Persian version. The original factor structure was used to obtain scores on the five sub-scales identified in the Watson et al. (23) study, namely, fighting spirit (4 items), hopelessness (8 items), anxious preoccupation (8 items), fatalism (5 items), and cognitive avoidance (4 items). It should be noted that the items have been scored based on a 4-point scale from 1 (Definitely does not apply to me) to 4 (Definitely applies to me). A higher score represents a higher level of the respective adjustment style. The Persian version was developed by the standard translation method. Alpha coefficient is 0.84 for the total scale, and 0.94 for the subscale of helplessness/hopelessness, 0.76 for cognitive avoidance, and 0.90 for anxious preoccupation, 0.77 for fatalism, and 0.80 for the fighting spirit (24).

**b) Oxford happiness questionnaire (OHQ):** This questionnaire was developed by Argyle in 1989 based on the Beck Depression Inventory (25). OHQ comprises 29 items each involving the selection of one of four options. 20 of the items were taken from the Beck Depression Inventory and 9 items were added to cover other aspects of mental health. The original version of the OHQ was scored on a 4-point scale, and the revised type was set to be scored on a 6-point scale. This version has been used in Iran. The following seven factors were obtained by factor analysis: positive cognition, social commitment, and positive mood, sense of control, physical health, self-satisfaction, and psychological consciousness. Each item is scored from 0 to 3, so the minimum score is 0 and the maximum is 87. Argyle et al. using Cronbach's alpha coefficient have reported the reliability of OHQ as 0.90 and also 0.77 as a result of administering after four weeks (26). Internal reliability using Cronbach's alpha in a sample of 101 in Tehran Universities was 0.98, and the 3-week test-retest reliability was .79 (27).

### 2-4. Interventions

The training package is based on the texts of parent training protocol in the acceptance and commitment therapy provided by Hayes et al. textbook (28) in ten 90-minute weekly sessions by a clinical psychologist. In these sessions, the participants were trained so that they would be able to use the skills and techniques for establishing proper parenting. The main items that were discussed in the sessions are as follows: definition of parent training protocol and its importance, effective and ineffective ACT-based parenting, training the mind's productions, learning the concept of

controlling the problem, acceptance training and psychological flexibility, teaching self-observing and self-conceptualizing, training mindfulness exercises, teaching behavior change methods, learning values using the metaphor, reviewing previous discussions. Two weeks after the training, both groups filled the Persian Version of the 29-item Mini-MAC (23) and Oxford happiness questionnaire (25) again. The results were analyzed and compared together.

**Table-1:** Description of ACT-based parenting sessions (28)

| Content | Time | Place |
|---|---|---|
| First session: familiarizing with group members, group rules, the features and indications of headstrong and disobedient children, the significance of parenting, and the differences between ACT parenting and other techniques. | 90 | Counseling center |
| Second session: learning creative helplessness using the metaphor of well, the metaphor of being caught in the sands, the metaphor of being caught in the swamp; giving the assignment. | 90 | Counseling center |
| Third session: Training the mind's productions, awareness of the mind's commands, and different types of families from the perspective of acceptance and commitment; giving the assignment. | 90 | Counseling center |
| Fourth session: learning the concept of controlling the problem rather than resolving it, using the metaphor of remembering the numbers 2, 1, and 3, the metaphor of the ship with the monsters, the hungry tiger metaphor; and finally the assignment. | 90 | Counseling center |
| Fifth session: acceptance training and psychological flexibility and acceptance of negative thoughts and feelings instead of control, avoidance, and elimination; using guest metaphor and assignment. | 90 | Counseling center |
| Sixth session: teaching self-observing and self-conceptualizing using chess metaphor and mindfulness exercises, practicing awareness of the finest sounds, practicing with the child, practicing the whole body examination, practicing eating raisins, and giving the assignment. | 90 | Counseling center |
| Seventh session: training mindfulness exercises, including practicing the awareness of the finest sounds, practicing with the child, practicing the whole body examination, practicing eating raisins, and giving the assignment. | 90 | Counseling center |
| Eighth session: teaching behavior change methods, teaching effective commanding, teaching prognoses, behaviors, contexts, and behavioral consequences; teaching functional analysis of behavior; and giving the assignment**.** | 90 | Counseling center |
| Ninth session: learning values using the metaphor of the funeral, the metaphor of the gravestone, and the metaphor of the island, teaching the difference between values and goals and expectations; giving assignments. | 90 | Counseling center |
| Tenth session: reviewing previous discussions, summarizing, and summing up. | 90 | Counseling center |

ACT: Acceptance and Commitment Training

### 2-5. Data Analyses

The data was analyzed Using SPSS software version 18.0. Quantitative data were expressed as mean and standard deviation (SD). A measure of the intensity of the association between two or more sets of random varieties is given by the study variables. The normality of the data was evaluated with the Kolmogorov-Smirnov & Levene's analyses before analyzing the results of the variance analysis.

## 3-RESULTS

As can be seen in **Table 2**, the total sample was 30 mothers with slow-paced children, among whom 23.3 were in the age group of 20 to 25 years, 33.3 were in the age group of 26 to 36 years and 43.3 were in the age group of 37 to 45 years. 43.3 of the participants were in the lowest states of economy and 13.3 percent had the highest states of economy.

**Table-2:** Demographic information of the participants

| Variables | Sub-group | Frequency | Percentage |
|---|---|---|---|
| Education State | Diploma | 10 | 33.3 |
| | Bachelor of Art | 8 | 26.6 |
| | MA & PhD | 12 | 40 |
| Age, year | 20 to 25 | 7 | 23.3 |
| | 26 to 36 | 10 | 33.3 |
| | 37to45 | 13 | 43.3 |
| Economical State | Low | 13 | 43.3 |
| | Middle | 11 | 36.6 |
| | High | 4 | 13.3 |

As can be seen in **Table 3**, the Mean and SD of happiness in the experimental and control groups were 89.80±18.54 and 12.50 ±5.19, respectively. These results show that the pretest mean of happiness in the experimental group was higher than that in the control group. Also, the Mean and SD of mental adjustment in the experimental and control groups were 59.50±6.98 and 9.20± 0.78, respectively. These results show that the mean of adaptation of the experiment was slightly higher in the experimental group than in the control group.

**Table-3:** Frequency, mean, standard deviation, minimum and maximum scores obtained in the pretest and posttest

| Variables | Sub-groups | Groups | Mean ±SD | Min | Max |
|---|---|---|---|---|---|
| Happiness, Ranged: 4 to 16 | Experimental | Pretest | 77±10.31 | 60 | 90 |
| | | Posttest | 89.80±18.54 | 64 | 115 |
| | Control | Pretest | 71 ±15.28 | 54 | 99 |
| | | Posttest | 12.50 ±5.19 | 115 | 99 |
| Mental Adjustment Ranged: 0 to 60 | Experimental | Pretest | 10±1.33 | 7 | 12 |
| | | Posttest | 59.50±6.98 | 8 | 22 |
| | Control | Pretest | 9.90±1.19 | 8 | 12 |
| | | Posttest | 9.20± 0.78 | 8 | 10 |

As can be deduced from the findings of **Table 4**, since the level of significance obtained in the Kolmogorov-Smirnov test in most research variables by a group is more than the criterion value of 0.50 (P> 0.05), it can be said that the statistical population variances in different samples are equal and homogeneous and parametric tests of analysis of covariance can be used.

**Table-4:** The results of the Kolmogorov-Smirnov test for normal distribution of scores

| Variables | The z value of Kolmogorov-Smirnov | Significant level |
|---|---|---|
| Happiness | 0.89 | 0.40 |
| Mental Adjustment | 0.44 | 0.98 |

According to **Table 5**, since the level of significance obtained in the Levene's test in most research variables is more than the criterion value of 0.05 (P> 0.05), it can be said that the statistical population variances in different samples are equal and homogeneous and parametric tests can be used for the analysis of the data.

**Table-5:** Levene's test results for homogeneity of variances

| Variables | The value of Levene's statistics | DF1 | DF2 | *Significant level |
|---|---|---|---|---|
| Happiness | 1.32 | 1 | 18 | 0.26 |
| Mental Adjustment | 0.09 | 1 | 18 | 0.76 |

df1: degree of freedom, df2: degree of freedom

As can be seen in **Table 6**, the results showed that the effect of the ACT treatment on the happiness of mothers with slow-paced is significant (f = 83.4) at the level of 0.05. These results indicate that the implementation of ACT therapy has been effective in improving the happiness of mothers with slow-paced children.

As shown in **Table 6**, the results revealed that the effect of the ACT treatment on the mental adjustment of mothers with slow-paced is significant (f = 80.9), at the level of 0.05. 0. These results indicate that the implementation of ACT therapy has been effective in the improvement of the mothers' mental adjustment.

**Table 6:** Results of the happiness and mental adjustment covariance analysis test in experimental and control groups while controlling the pretest effect

| Variables | Source of change | Sum of square | Degree of freedom | Mean Square | F | P-value | Test power | eta-value |
|---|---|---|---|---|---|---|---|---|
| Happiness | Pre-test | 1947.60 | 1 | 1947.60 | 10.19 | 0.005 | 0.85 | 0.37 |
| | Group | 923.29 | 1 | 923.29 | 4.83 | 0.04 | 0.54 | 0.22 |
| | Error | 3248.40 | 17 | 191.08 | | | | |
| | Total | 136816 | 20 | | | | | |
| Mental Adjustment | Pre-test | 75.78 | 1 | 75.78 | 7.47 | 0.014 | 0.73 | 0.30 |
| | Group | 99.37 | 1 | 99.37 | 9.80 | 0.06 | 0.83 | 0.37 |
| | Error | 172.31 | 17 | 10.13 | | | | |
| | Total | 2917 | 20 | | | | | |

Eta -value: Eta squared is the proportion of variance associated with one or more main effects, errors or interactions in ANOVA

## 4- DISCUSSION

The aim of this study was to evaluate the effect of a parent training protocol based on an acceptance and commitment therapy on happiness and mental adjustment among mothers with slow paced children. The present study indicated that the therapy was effective in increasing the mother's happiness and mental adjustment. It is important to note that we could not find any article investigating the effects of this therapy on happiness and mental adjustment in the literature review; but, we can support our finding with those of the related studies by Charmforoush Jalali et al. (1), Beh-pajooh et al. (10), Amini Naghani et al. (14), Gould et al (19), Aghajani et al. (16), and Farshadi et al. (18).

In line with our findings, previous research indicates that higher levels of parent stress and mental health problems are correlated with excessive experiential avoidance in parents of children with slow-paced (8, 19). According to ACT literature, an attempt to avoid interaction with aversive thoughts and feelings may prevent a parent from doing things that are important to them and their child. For instance, a parent may increasingly avoid meeting with the clinical team of their child to avoid feeling anxious. Therefore, parent participation or enforcement problems may be attributed to parental avoidance of uncomfortable feelings or self-generated laws that follow treatment involvement.

ACT-based parenting increases parents' resilience and willingness to use parenting skills under difficult environments by focusing on the mental assessment of the problems of their children and their subjective importance of parenting (29-31). ACT education has a considerable effect on enhancing the behavior of parents regarding children with the development of cognitive disabilities by identifying experiential avoidances and appropriate reactions to these children's needs (14). Gould et al. observed that ACT could improve advantageous parenting actions on the effectiveness of ACT on parents of children with autism disorder (19).

Mental adjustment is the cognitive and behavioral reaction of a person (24). It is an adaptive response to the different changes that arise during the management and therapy of the issue (32, 33). From a theoretical standpoint, it is expected that ACT interventions can decrease attempts to prevent or manage to suffer, not suffering itself. The aim of ACT treatments, described differently, is to improve psychological flexibility rather than to alleviate symptoms. The classic evidence for this claim is the research by Hayes (2008) in which more ACT participants (versus TAU participants) reported positive psychotic symptoms following an ACT intervention for psychosis, but substantially fewer ACT participants were later re-hospitalized. The widely accepted reason for these results is that greater levels of symptom reporting represent higher levels of symptom acceptance throughout the ACT situation (8).

### 4-1. Study limitations

The lack of using follow up, lack of using accidental methods may reduce the generalizability of this study. It is proposed that this analysis be replicated in different groups and with larger sizes. It is suggested that researchers use other approaches such as observation and interview for data collection in future studies. Making use of the other questionnaires such as the Fordyce Satisfaction Questionnaire would be also beneficial. In addition, widespread administrations of courses to teach strategies for improving happiness and mental adjustment would be vital for these mother's and families.

## 5- CONCLUSION

In general, satisfaction and mental adjustment of the mothers with slow-paced children changed under group training. It can be concluded that the Parent Training Protocol Focused on Acceptance and Engagement Counseling was substantially successful for these mothers in terms of satisfaction and mental adaptation. It combines the criteria for mothers to undergo routine and ongoing activities. Overall, besides other rehabilitations, the empowerment of families with slow-paced children should be considered.

## 6- ETHICAL CONSIDERATION

To observe the ethical principles, the researchers informed the subjects that the study has been designed to help and provide them with useful parental teachings. Their data would be kept confidential, and they could withdraw from the research whenever they wanted. Then, the women gave their verbal consent to take part in the study. There was no intervention for the control group. For ethical reasons. It should be noted that this article is the result of the first author's proposal research approved by the Vice-Chancellor of Research, Science and Research Branch, AUT No. 139.

## 7- REFERENCES

1. Charmforoush Jalali L, Hasanzadeh S, Davaee M, Afrooz G. The Effect of De-Stress Training Program on the Stress of Mothers with Slow Paced Children, Jundishapur J Health Sci. 2016; 8(3):e34593. doi: 10.17795/jjhs.34593.

2. Kalantari M, Tahan M, Ahangari E, Barati F, Afrooz G. The effectiveness of teaching communication skills on willingness to communicate with others and preventing shyness of slow paced. Empowering Exceptional Children. 2017 Dec 22; 8(4):95-103.

3. Tahan M, Kalantari M, Rad TS, Aghel MJ, Afshari M, Sabri A. The Impact of Communication Skills Training on Social Empowerment and Social Adjustment of Slow-paced Adolescents. Journal of Educational, Cultural and Psychological Studies (ECPS Journal). 2020 Jun 8(21):131-47.

4. Phung JN. Mixed martial arts as a means to improve social communication and executive functioning in children with Autism Spectrum Disorder (Doctoral dissertation, UC Irvine).

5. King M, Shields N, Imms C, Black M, Ardern C. Participation of children with intellectual disability compared with typically developing children. Research in developmental disabilities. 2013 May 1; 34(5):1854-62.

6. Jalali LC, Hasanzadeh S, Davaee M, Afrooz G. The effect of the de-stress training program on the stress of mothers with slow paced children. Jundishapur Journal of Health Sciences. 2016 Jul 1; 8(3).

7. Findler L. Being a Grandparent of a Child with a Disability. In Grandparents of Children with Disabilities 2016 (pp. 39-67). Springer, Cham.

8. Hayes L, Matthews J, Copley A, Welsh D. A randomized controlled trial of a mother–infant or toddler parenting program: Demonstrating effectiveness in practice. Journal of pediatric psychology. 2008 Jun 1; 33(5):473-86.

9. Baumann AA, Powell BJ, Kohl PL, Tabak RG, Penalba V, Proctor EK, Domenech-Rodriguez MM, Cabassa LJ. Cultural adaptation and implementation of evidence-based parent-training: A systematic review and critique of guiding evidence. Children and Youth Services Review. 2015 Jun 1; 53:113-20.

10. Beh-pajooh A, Maghsoodloo N, Ghasemzadeh S. Effectiveness of parent-child interaction therapy on stress of mothers with slow paced children who have behavioral problems and reducing

children's behavioral problems. Empowering Exceptional Children. 2018 Dec 22; 9(4):103-14.

11. Soleymani M, Afrooz G A, Sharifi Daramadi P, Ghobari Bonab B. Effect of Psychological Intervention on Marital Satisfaction of Mothers with Slow Pace Under 5 Years Children. Iranian Rehabilitation Journal. 2012; 10 (2):18-23URL: http://irj.uswr.ac.ir/article-1-257-en.html.

12. Najaf Najafi M, Kargozar E, Mottaghi M, Dehghani N, Razmjou P, Hoseini ZS, Ghazanfarpour M. The Effect of Religious Beliefs and Spirituality Training on Family Health: A Systematic Review and Meta-Analysis. International Journal of Pediatrics. 2019 Dec 1; 7(12):10621-33.

13. Ashori M, Afrooz GA, Arjmand Nia AA, Pourmohamad Rez-Tajrishi M, Ghobari-Bonab B, Jalil-Abkenar SS. Adaptation of positive parenting program training based on cultural values and evaluation of its effectiveness in psychological health and interaction of mother with slow paced children. Journal of Research and Health. 2019 Jun 10; 9(4):284-93.

14. Amini Naghani S, Nazar Pourian S, Samavi S A. Comparing the Effectiveness of the Triple P-Positive Parenting Program and Parenting Program of Acceptance and Commitment Therapy on Parent-Child Relationship and Self-efficacy of Mothers With Oppositional Defiant Disorder Children. J Research Health. 2020; 10 (2):111-122.URL: http://jrh.gmu.ac.ir/article-1-1743-en.html.

15. Madani Y, Hoseini Nezhad SN, Fathi D, Mosavi SM. Effectiveness of Spirituality-Based Cognitive-Behavioral Therapy on Resiliency and Life Satisfaction in Mothers with Slow-Paced Children. Empowering Exceptional Children. 2016 Mar 20; 7(1):1-2.

16. Aghajani, S., Afrooz, G., Narimani, M., GhobariBonab, M., Mohsenpur, Z. The Effectiveness of Social Problem Solving Training on Mother-Child Interaction among Mothers with Slow Paced Children. Family Counseling and Psychotherapy, 2015; 4(4): 691-717.

17. Rostami M, Fatollahzadeh N, Saadati N. The effectiveness of acceptance and commitment training on improving the quality of life and self-compassion of the mothers of educable disabled children. Journal of Psychological Studies. 2016 Oct 22; 12(3):103-22.

18. Farshadi S, Hatami M, Kalhor Nia Golkar M. Evaluation of the Effectiveness of Acceptance and Commitment Therapy on Happiness in Iranian Veterans with Mental Disorders in Psychiatric Hospitals. International Journal of Hospital Research. 2020 Aug 1; 9(2).

19. Gould ER, Tarbox J, Coyne L. evaluating the effects of acceptance and commitment training on the overt behavior of parents of children with autism. Journal of Contextual Behavioral Science. 2018 Jan 1; 7:81-8.

20. Blackledge JT, Drake CE. Acceptance and commitment therapy: Empirical and theoretical considerations, 2013.

21. Brassell AA, Rosenberg E, Parent J, Rough JN, Fondacaro K, Seehuus M. Parent's psychological flexibility: Associations with parenting and child psychosocial well-being. Journal of Contextual Behavioral Science. 2016 Apr 1; 5(2):111-20.

22. Delavar A. (Theoretical and practical foundations of research in the humanities and social sciences (Persian)). Tehran: Roshd Publication; 2015.

23. Watson M, Law MG, Santos MD, Greer S, Baruch J, Bliss J. The Mini-MAC: further development of the mental adjustment to cancer scale. Journal of

Psychosocial Oncology. 1994; 12(3):33-46.

24. Patoo M, Allahyari AA, Moradi AR, Payandeh M. Iranian Version of the Mini-Mental Adjustment to Cancer Scale: Factor Structure and Psychometric Properties. J Psychosoc Oncol. 2015; 33(6):675-85. doi: 10.1080/07347332.2015.1082169.

25. Argyle M. The psychology of happiness. Routledge; 2013 Oct 23.

26. Argyle M, Crossland J. The dimensions of positive emotions. British Journal of Social Psychology. 1987 Jun; 26(2):127-37.

27. Liaghat Dr MJ, Jafari E, Abedi MR, Samiee F. Reliability and validity of the Oxford Happiness Inventory among university students in Iran. Spanish journal of Psychology. 2008 May 1; 11(1):310.

28. Hayes SC, Strosahl KD, Wilson KG. Acceptance and commitment therapy. Washington, D.C: American Psychological Association; 2009.

29. O'Brien KM. Evaluating the effectiveness of a parent training protocol based on an acceptance and commitment therapy philosophy of parenting. University of North Texas; 2011.

30. Burke K, Muscara F, McCarthy M, Dimovski A, Hearps S, Anderson V, Walser R. Adapting acceptance and commitment therapy for parents of children with life-threatening illness: Pilot study. Fam Syst Health. 2014; 32(1):122. (DOI: 10.1037/ fsh0000012) (PMID).

31. Whittingham K, Sanders MR, McKinlay L, Boyd RN. Parenting intervention combined with Acceptance and Commitment Therapy: A trial with families of children with cerebral palsy. J Pediatr Psychol. 2015; 41.

32. Kang JI, Chung HC, Kim SJ, Choi HJ, Ahn JB, Jeung HC, Namkoong K. Standardization of the Korean version of Mini-Mental Adjustment to Cancer (K-Mini-MAC) scale: factor structure, reliability and validity. Psycho-Oncology. 2008; 17(6):592-7. doi: 10.1002/pon.1277.

33. Wang WT, Tu PC, Liu TJ, Yeh DC, Hsu WY. Mental adjustment at different phases in breast cancer trajectory: re-examination of factor structure of the Mini-MAC and its correlation with distress. Psycho-Oncology. 2013; 22(4):768-74. doi: 10.1002/pon.3065.