Reduction of irrational thoughts in mothers of children with mental retardation by resilience training

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Abstract: The researches of recent 20 years show that resilience is a multidimensional structure and affected by environmental texture, time, age, gender, cultural origin and life conditions. Due to this, studying the effective factors on resilience in recent years has been increased. The statistical population of this research included all mothers of children with mild and severe mental retardation in exceptional primary schools in academic years of 2015-2016 in Tehran city. The research is a quasi-experimental design with pre-test, post-test and control group. Sampling was accomplished by simple random method and finally, 60 persons were selected and they were placed in 2 groups of training and witness. The intervention of test group included resilience training during eight sessions. The main tools of this research included initial incompatible schema questionnaire with short form (SQ-SF) and irrational thoughts (IBT) and Conner-Davidson resilience. The collected data were analyzed by using of SPSS software. In this study, descriptive statistic was used and in order to study the relation between variables, inferential statistic including covariance analysis and Means comparison were utilized.

Generally, we can express that the amounts of irrational thoughts, also initial incompatible schema of mothers that have been trained in terms of resilience in some sub-variables are less than the mothers that haven't been trained.

Key words: resilience, irrational thoughts, retardation

1. Introduction

The parents of children with mental retardation tolerate more stress than other parents (Singer & et al, 2007, Macci & et al, 2008).

This stress may be resulted from the following cases:

Concerns about this issue that how children cope with future problems, behavioral problems and inability level of child, change in family relations, heavy economic expenses, windswept dreams, compassionate behaviors of others, negative attitude of society, lack of information, limited access to services, facilitations and contradictions related to have another child which finally lead to appear irrational thoughts in these parents (Vitter, 20143; Blue & et al, 2006).

Mental retardation of children always confronts the families and especially mothers with mental challenges. Resilience training to the mothers can help to increase the mental ability and better compatibility of them with special conditions of their child. The compatibility rate depends on two factors: 1-personal characteristics like attitudes, skills. 2-The nature of situations that the person faces with it like familial problems, sudden and natural accidents, resilience of peoples, ability in effective compatibility with environment despite exposure to risky factors (Gomez & Mclaren, 2006).

Louleh & Hastings (2009) in a research found out that creating resilience through creating psychological acceptance causes to reduce the stress, adjust the initial incompatible schema and increase the mental health of parents, employees and teachers who were interacting with the retarded persons.

In a research which has been accomplished by Wang & et al (2009) about the effect of planning for increasing the resilience to promote the schools, health in Hong Kong, the results have indicated that these considerations have been effective on increasing the resilience and promoting the health; and promotion of

schools، health is a strong basis for improvement of general health of students, also mental health has origin in resilience.

2-Resilience

Resilience term for the first time was applied in 17th century in physic and it was used to determine the flexibility amount of an object against stroke. «Resilience» in physic is told to an amount of energy which has been reserved in the object and this energy is the result of deformation effect in it (Tracy, 2012). Resilience in behavioral knowledges unlike the physic doesn't mean stability and it hasn't been assumed a fixed feature, rather it is a property which grows during the time and can be affected by interactive methods (Drapiva, 2007). A look on the researches accomplished in this domain indicates that basically, two approaches have been considered in this field; first, resilience has been studied in the form of different indexes like self-respect, training performance, physical health, comparison and conformity and lack of mental pathology or felonious behaviors (Marksrum; Marshal & Trovin, 2010) and second, the researches which have been applied according to a special definition of scales resilience or special questionnaires for measuring the resilience. In conjunction with an accurate definition of resilience, we should say despite passing two decades research about this issue, ambiguities are still seen, but the definitions which will be mentioned in the following are the definitions that there are more consensus and agreement on them.

2-1. Familial resilience

Having positive attitude, spirituality, agreement and compatibility among the family members, flexibility, having familial relation, economic management, familial time, common recreations and amusements and supportive network are the main factors of familial resilience (Plumb, 2011). When resilience feature is applied in the family, it is a method which enables the family members to respond the life problems. Family resilience is synonym with life drives and forms the foundation of interactive model of the family (Walsh, 2006). According to the experts، opinion in the domain of family problems, resilience according to this idea is that some persons or families have physical strength points and mental and inter-personal abilities which let them react to serious challenges and grow according to these experiences. These pundits believe that resilience is a process which implies growth namely the person becomes more powerful under the shadows of experience (Walsh, 2006, quoted by Plumb, 2011).

3-The features of initial incompatible schemas

Schemas in early childhood or adolescence create accurate representations of the environs. The persons، schemas largely are the accurate reflection of their life environment. Initial incompatible schemas fight for their survival and this is the result of human، s tendency to the coordination cognition. Although the person knows that schema leads to his sadness but feels comfort with schema and the same comfort feeling convinces the person that his schema is correct. The persons are attracted toward the incidents which conform to their schema. Due to it, changing the schema is difficult. Patients see the schemas as realities that without testing their correctness and wrongness, believe that these realities are correct. The result of such view is that schema affects on processing of next experiences (Johnson & Valery, 2005). All schemas haven't been formed according to the deleterious incidents or childhood misbehavior.

4-Irrational thought

Social psychologists tend to know that how humans think about each other and how affect and are affected from each other, however they are not the only persons who are interested in these problems, rather anthropologists, sociologists and even novelists and philosophers tend to study these kinds of issues. Erikson after many searches about unconscious aspect of human and the contradictions which justify the causes of his natural and unnatural behaviors of him, studies the identity and the kind of thinking to it and this issue that identity which indicates transformation in sexual affairs and discovering ourselves and understanding ourselves by the side of adults and their unconscious contradictions, is formed and he adds that all unconscious feelings are originated from them and adults, and one of the human characteristics is to have the thought force which causes the human identity; human with the aid of thought has been able to reach the self-discovery which can cause identity in youth that the rational thought and discovering it in the mind can

be a new solution and Erikson has wanted to reconstruct daily life of adolescents with all disturbance to his stress and disturbances and this innovation and change in the attitude method have caused results that the deepest and firmest beliefs are in fact the identity growth which leads to the emotional, sexual and social maturity. In the persons with immature personalities, «I» is weak and fragile; and a part of social compatibility which is formed in childhood is named social compatibility and this is the same method that children through it learn the values and orientations that will face with them in future and all of us know that there have been situations in which resocialization has been accomplished again and due to it, this process has been exploited disastrously (Sotoudeh, 2002).

5-Statistical population

The statistical population of this research included all mothers of children with mild and severe retardation which have been studying in exceptional schools of Tehran Township in the academic years of 2015-2016. The sampling method is purposeful and random. In this form that one school was selected from all exceptional schools and the research samples with voluntary proclamation of mothers were included in two test (-n 30) and control (-n 30) groups. After coordination with managers of exceptional school of Tehran township and determining the manner of the mothers' presence for taking part in the research, the resilience questionnaire of Conner-Davidson was distributed. 60 persons were divided into two witness (without testing) and training (with test) groups.

5-1- Resilience index of Conner-Davidson

Conner & Davidson (2003) prepared this questionnaire by reviewing the investigative resources related to the years of 1979-1991 about resilience domain. Studying the psychometrics features of this scale has been accomplished in six groups pf public population, admitted to the primary care sector, psychiatric outpatients, patients with the problem of generalized anxiety disorder and two groups of stress patients after accident. This questionnaire has 25 questions and the mean score of this scale will be 52 so that whatever the triable score is higher than 52, resilience will be higher and whatever his/her score is closer to zero, he/she will have less resilience (Mohammadi, 2006). In next stage, the questionnaire questions were analyzed by using of the main components of factorial analysis. Before extracting the results, according to the correlation matrix, the correlation of questions, KMO index were calculated in Kervit-Bartlett test. KMO value was equal to 87% and the Chi-square value in Bartlett test was equal to 5556028 that both indexes indicated the witnesses' competence.

5-2- Short form schema index of Young (SQ-SF)

This questionnaire is a self-report tool which includes 75 questions and evaluates 15 initial incompatible schemas. There is a grading scale for each question which consists of these options:
Quite false, almost false, more true to false, slightly true, almost true and quite true that the options take the score of 1 to 6 respectively, and in order to obtain the score of each person in each schema, the sum of his/her scores is calculated in each schema. The following cases in the related schema are evaluated in the specified questions:
questions: 1 to 5 of emotional deprivation schema, 6 to 10 of triggered schema, 11 to 15 of mistrust and misbehavior schema, 16 to 20 of social isolation schema, 21 to 25 of shame defect schema, 26 to 30 of failure schema, 31 to 35 of incompetence dependence schema, 36 to 40 of vulnerability to loss and disease, 41 to 45 of involvement schema, 46 to 50 of obedience schema, 51 to 55 of dedication schema, 56 to 60 of emotional inhabitation schema, 61 to 65 of strict criteria schema, 66 to 70 of merit schema, 70 to 75 of continence schema related to inadequate self-discipline.

Table 1- the combinative existing plan of encouraging methods of Schwannker, the skill training method

The sessions arrangement	Session content
First session	Introduction of the group members and acquaintance with the plan, expressing the purpose, laws and the group frame, agreement on the time for holding the sessions and implementing the pre-tests.
Second session	Acquaintance with stress and the stresses arising from having child with mental retardation and defining the resilience concept and resilient behaviors and the characteristics of resilient persons
Third session	Introduction of different strategies for dealing and fighting with stress, emphasis on the role of beliefs in resilience and resistance against them, cognitive reconstruction and creating the model of constructive and resilient thought (1) expressing the role of beliefs, thoughts in behaviors, emotions, resilience and acquaintance with errors and cognitive distortions
Fourth session	Cognitive reconstruction and creating the model of constructive and resilient thought (2) acquaintance with the role of personal perceptions and individual differences in perception, emphasis on importance of thoughts role and negative self-talks about the child and others in creating the stressful experiences
Fifth session	Cognitive reconstruction and creating the model of constructive and resilient thought (3) acquaintance with optimistic and pessimistic thought of Seligman, reconstruction of several assumed situations and presenting different explanations and interpretations and emphasis on the role of optimistic thought in enduring the problems and difficulties
Sixth session	Training the encouragement-emphasis on purposeful behaviors and the role of encouraging in increasing of resilience, the practices for encouraging the others and emphasis on this concept that no one is complete.
Seventh session	Searching the meaning, seeking the meaning, introduction of logotherapy approach in life and trying to give the meaning to the unchangeable problems, also help to find the meaning in the experience of nourishing the child with mental retardation
Eighth session	Conclusion, review, taking the feedback and implementing the post-test

6- Inferential analysis of data

First hypothesis: the amount of irrational thoughts of mothers that have been trained in terms of resilience is less than the mothers that haven't been trained.

Table 2- studying the normal distribution of data in the irrational thoughts variable with Kolmogorov-Smirnov test

Variables	P	KM
Necessity of confirmation	0.52	**0.34**
Excessive expectation	0.77	**0.69**
Tendency to reproach	0.43	**0.60**
Reaction to failure	0.72	**0.83**
Irresponsibility	0.39	**0.57**

Anxiety	0.73	**0.62**
Avoidance from problems	0.56	**0.75**
Dependency to others	0.47	**0.41**
Helpless to change	0.71	**0.84**
Perfectionism	0.63	**0.79**

According to the table 2 and Kolmogorov-Smirnov test in the variable related to the irrational thoughts levels, the normality of the scores distribution in the persons of test and witness groups (P>0.05) was confirmed, therefore using of parametric tests is permissible for the variable related to the irrational thoughts levels.

Table 3- results of Levene test for the variable related to the irrational thoughts levels

Variable	F	df1	df2	Meaningfulness level
Necessity of confirmation	0.49	1	58	0.46
Excessive expectation	0.57	1	58	0.34
Tendency to reproach	1.63	1	58	0.08
Reaction to failure	0.25	1	58	0.65
Irresponsibility	0.014	1	58	0.54
Anxiety	0.017	1	58	0.76
Avoidance from problems	0.023	1	58	0.83
Dependency to others	0.26	1	58	0.69
Helpless to change	0.41	1	58	0.42
Perfectionism	0.59	1	58	0.35

Before using of covariance analysis for the variable related to the irrational thoughts levels, Levene test was used for studying the homogeneity between the variances.

With regard to the results of Levene test, we can be sure that the data related to these variables estimate the fundamental assumption of covariance analysis.

Table 4- the summary of covariance analysis results for the variables of irrational thoughts levels

Changes source	Total squares	Freedom degree	Squares mean	F	Meaningfulness level
Necessity of confirmation	65.68	1	65.68	12.48	**0.001**
Excessive expectation	10.35	1	10.35	13.15	**0.075**
Tendency to reproach	34.15	1	34.15	5.15	**0.003**
Reaction to failure	70.07	1	70.07	3.01	**0.012**
Irresponsibility	90.46	1	90.46	66.83	**0.084**
Anxiety	48.22	1	48.22	22.48	**0.004**
Avoidance from problems	22.08	1	22.08	10.06	**0.072**
Dependency to others	18.53	1	18.53	13.15	**0.075**
Helpless to change	30.24	1	30.24	5.15	**0.003**
Perfectionism	49.52	1	49.52	3.01	**0.012**

The results of covariance analysis in the table 4 for 10 sub-variables of irrational thoughts levels indicate that there is meaningful difference between the scores mean of 6 sub-variables of necessity of confirmation, tendency to reproach, reaction to failure, anxiety, helpless to change and perfectionism of post-test in the persons of test and witness groups (P<0.05); so that the scores mean of necessity of confirmation, tendency to reproach, reaction to failure, anxiety, helpless to change and perfectionism in the persons of test group in post-test stage was less than the witness group meaningfully. These results indicate that the didactic-therapeutic plan based on resilience causes to adjust the irrational thoughts levels.

Table 5- studying the normal distribution of data in the variable of the initial incompatible schemas with Kolmogorov-Smirnov test

Variables	KM	P
Triggered	0.55	0.69
Emotional deprivation	0.48	0.86
Distrust/misbehavior	0.51	0.92
Social self-alienation	0.68	0.54
Defect/shame	1.98	0.35
Failure	1.03	0.64
Dependency	0.63	0.86
Vulnerability to the loss	0.75	0.43
Involvement	0.68	0.38
Obedience of needs	0.80	0.56
Dedication	0.65	0.72
Emotional inhibition	0.89	0.25
Strict criteria	0.65	0.86
Merit	0.43	0.51
Inadequate continence	0.38	0.92

According to Kolmogorov-Smirnov test in the variable of initial incompatible schemas, the normality of the scores distribution in the persons of test and witness groups (P>0.05) was confirmed, therefore using of parametrics tests is permissible for the variable of initial incompatible schemas.

7-Conclusion

The covariance analysis results for 15 sub-variables of initial incompatible schemas indicate that there is meaningful difference between the mean scores of 9 sub-variables of triggered, emotional deprivation, defect/shame, failure, dependency, vulnerability to the loss, obedience of needs, dedication and merit in the persons of test and witness groups after training (P<0.05); so that the scores mean of these variables in the post-test stage was less than the witness group meaningfully. These results indicate that the didactic-therapeutic plan based on resilience causes to adjust the triggered, emotional deprivation, defect/shame, failure, dependency, and vulnerability to the loss, obedience of needs, dedication and merit schemas. Moreover, the obtained results indicate this issue that there is not meaningful difference between 6 other sub-variables of initial incompatible schemas namely: distrust/misbehavior, social self-alienation, involvement and emotional inhabitation, strict criteria and inadequate continence in test and witness groups in the post-test stage. The initial incompatible schemas have both a direct effect and indirect effect on mental health. The direct effect of schemas on mental health is in line with Young theory. The indirect effect of incompatible schemas on mental health is through the strategies for fighting with stress which acts as mediator factor in the relation between initial incompatible schemas and mental health.

References

1-Atkinson, Rita. L. Richard. D.S. Atkinson & Ernest. R. Hijard. (2005). Psychology field (volume 1 & 2). Tehran, Roshd publication.

2-Ahadi, Hassan; Banijamali, Shokouhalsadat (1996). Growth psychology, eighth print, Tehran: Nashr & Bonyad publication.

3-Ahmadpanah, M. (2002). The effect of child's mental retardation on mental health of family, journal of research in the exceptional children domain, first year, No.1, pages 24-36.

4-Azad, H. (1997). An analysis on therapeutic method of Albert Ellis. The first counselling and guiding seminar in Iran.

5-Afrouz, Gh. (2001). Psychology and rehabilitation of slow-paced children, first print, Tehran University Publication, Tehran.

6-Ellis, A. (1995). Nothing can make me sad, translation: Firouzbakht, M. Erfani, V. (2008). Sixth print, Rasa publication, Tehran.

7-Albo kerdi, S. Nikou seir Jahromi, M. Hosseini, S. Nikrou, M. (2013). The relation of resilience and mental disorders in guilty youth of central prison of Shiraz. Scientific journal of medical sciences University of Kordestan, seventh volume, pages 43-50.

8-Ahi, Ghasem. (2006). Short form normalization of Young schema questionnaire, YSQ-SF, structure-factorial study between Tehran Universities students in academic years of 2005-2006, MSc dissertation , faculty of psychology and educative sciences. Allameh Tabataee University.

9-Procheska, J. Nourkeras, J. (2007). Psychotherapy theories, translation: Seyed Mohammadi, Y. (2009). Six edition, first print, Agah publication: Tehran.

10-Pousardar, F. Abbaspour, Z. Abdi.

11-Zarrin, S. Sangari, A. (2013). Resilience effect on mental health and satisfaction of life, a psychiatric model of welfare, scientific-investigative journal of medical sciences university of Lorestan, fourth volume, No.1, pages 81-89.

12-Habibi Asgarabad, M. (2011). Effectiveness of training the skills for fighting with stress on parenting stress of mothers who have children with attention deficit disorder and hyperactivity, PhD epistle, Tehran University.

13-Hosseini Qomi, T. (2011). Effectiveness of resilience training on life quality level of mothers who have 10-13 years old children with cancer in Imam Khomeini Hospital of Tehran, MSc dissertation, Allame Tabatabaee University.

14-Hallajbashi, F. (2010). Comparing the effectiveness of training the skills for fighting with stress on parenting stress of mothers who have children with hyperactivity disorder in Kashan city, MSc dissertation, Allameh Tabatabaee University. 5- (Faraj Tabrizi, 2008).