

The efficacy of teaching stress coping methods on subjective well-being of mothers of children with physical disabilities

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Abstract

The current study has been conducted with the aim of determining the efficacy of teaching stress coping methods on subjective well-being of mothers of children with physical disabilities. The research has been quasi-experimental designs, pretest-post test method with unbalanced control group. The statistical population includes mothers of children with physical-motor disabilities who have been referred to welfare organization (Marivan) in the first quarter of 1394. first 30 of them were selected by simple random sampling then placed in two experimental and control groups.

The experimental group has learned "Immunization against stress" technique during 8 sessions, and both of the groups have been evaluated by Dinner and other's "satisfaction with life questionnaire "(1985) and positive and negative affect schedule (PANAS)" in both pre and post- test phases. The results of covariance analysis showed teaching stress coping methods significantly have increased life satisfaction and positive affect and decreased negative effect on experimental group. In another way, teaching stress coping methods can lead to the better subjective well-being of mothers of children with physical disabilities.

Keywords: teaching stress coping methods, subjective well-being, mothers of children with physical disabilities.

Introduction

The process of raising a normal and healthy child is enjoyable but in the same time it has a lot of problems and concerns. These concerns are much more severe and stressful in the case of families of children with special needs whose parents make dreams about their unborn children and imagine their ideal child's features in a very good and favorable level but all of this collapses and vanishes one after another with the birth of a disabled child (Seyf Naraghi and Naderi 2005). Often, emotional responses such as stress, depression and mental disorders happen to these parents (Beyli, Golden, Roberts and Ford 2007, Olson and Huang 2001, Amiri, Behpazhooh and Ghorban Jahromi 2009, Serami, Amiri, Neshatdoost Taher and Mowlavi 2009). These stressful issues are directly linked to the disabled child because disability brings new demands for the parents such as spending extra time nursing and taking care of the disabled child (Hedov, Anneren, Wikblad 2000 and 2007, Smith, Oliver and Innocenti 2001) and it needs financing their sometime heavy costs (Seltzer and Krauss 1998, Smith and others 2001).

Studies also show that these parents experience restrictions such as hygiene concerns and deprived feelings along with high levels of stress and depression compared with parents of normal children (Queen and Paul 1985, Roach, Ormond & Barratt 1999, Valentine, McDermott & Anderson 1998). Being aware of any kind of problems, developmental delay or difference has a hard impact on the parents. So when they face their child's disability, they experience hard and severe emotions. Shaply Bistika (1997) and others suggest that because of the special role of the mothers in birth and nursing of a disabled child they usually experience more mental pressure compared to fathers. Fathers usually do not reveal their emotions while mothers show a wide range of them such as aggression, sadness, crying and mourning (Rafeyi 2007). Thus, using suitable coping strategies in stressful situations can not only increase mental health in individuals but also improve feeling of happiness and well-being (Carr 2004-translation of Sharifi 2006).

In recent years, a group of researchers in the field of mental health who are inspired by positive psychology have selected a different theoretical and research approach to explain this concept. Nowadays, researches about well-being and positive psychology are increasing daily. Subjective well-being is an important structure interpretation of character researches and is defined as the positive assessment of life and the balance between positive and negative affections (Dinner, Sue and Oushi 1997).

Parent education programs put their attention on improving the quality of parent-child relationship and teach a variety of parental skills and effective skills on children's behavior, (Kaminski and others 2008). Parents of children with developmental disorders significantly report high levels of stressful issues in comparison with parents of normal children (Hassall and others 2005, Hastings & Johnson 2001, Tomanik & Harris & Hawkins 2004). Parent

education programs can decrease parental stress and improve parenting efficacy (Saners and Wouli 2005).

The results of Toge, Brereton, Kiomal, Mackinnon, King and Reinhart's study in 2006 showed that parent education programs and behavior management interventions have improved the indicators of mental health and families dysfunction compared with those who just used counseling services. Nowadays a wide range of psycho-therapies including relaxation, family therapy, music therapy, massage and cognitive-behavioral stress management, have been effective in control and reducing stress (Roufer and others 2010, linden 2005, Davis and others 2005). These therapies are trying to inhibit stress after its occurrence but recently it has been found in medical fields that it's better that interventions be performed with a proactive approach (Couacmi and others 2003). Immunization against stress is a practical cognitive-behavioral program with proactive approach that was proposed in 1985 by Mayknba (Sheyhiand Houran 2004). This education is like the vaccine of the measles that makes the body safe against main pressures by applying a small pressure on the biological system so there will an opportunity for individuals' success. (Myknbam2007). The aim of immunization is helping people to earn and develop coping skills not only for quick solving of current problems but also for encountering future problems (Kiani and others 2010). Immunization against stress consists of the 3 phases of conceptualization, earning and practice skills that enable people to change their self-talks and beliefs about stressful behavior and methods of coping with stress (Myknbam 2007). Results of the studies of Kawaharada and others (2009), Amiri and others (2009), Ansari and others (2009) have showed that immunization program improves the health of patients and governmental employees. Lesley & Jacqueline & Mollie's research about subjective well-being of 27 parents of children with language disorders showed that increasing stress and depression decreased their well-being and increased life satisfaction, self-esteem that produced positive affects on their well-being.

The results of this study also showed that parent's increased well-being improved children's lingual development. Shang & others (2004) have showed that children's disabilities have a direct link to mother's emotional and behavioral problems. In a research that studied 1392 child in Taiwan, it was found that children's problem have negative effect on parents subjective well-being. Duvdevany& Abboud have showed that the amount of mental health and happiness of mother's of physical disabled children is significantly lower than the normal ones. Widhaya and Rajue studied the difference between families with disabled and healthy children, the results showed that parents with disabled children reported lower marital satisfaction, lower social support and lower happy feelings. Boyer and others in a study identified the relation between coping strategies and subjective well-being in 230 of patients with breast cancer showed that there is a positive and significant link between task-oriented stress coping strategies (positive re-evaluation and religious support), which are effective coping strategies, and subjective well-being. Queen and Paul showed that children's behavioral problems influenced parent's stress and reduced subjective well-being. So the

question of the research is: do the teaching stress coping methods affect the resiliency and subjective well-being of mothers with physical disabled children?

Methodology

The current research method is a clinical and functional trial of pre-test, post-test with control and experimental groups. Statistical population of the research consists of all the mothers of children with physical disabilities who have been referred to welfare organization of Marivan that has diagnostic-maintenance case. 30 of them were selected by simple random sampling then randomly placed in two experimental and control groups.

Research tools

The educational immunization against stress package and subjective well-being questionnaire has been used for data collection as follows:

1-SIT educational package, and teaching immunization against stress are the most comprehensive cognitive-behavioral therapy methods. This kind of education represents a considerable and explainable design. Teaching immunization against stress includes a lot of therapeutic strategies and it's possible to pick the best and the most affective ones among them. Myknbam has proposed this method in 1972 but the expansion and details have been performed some years later. In this type of therapy, the special educational process is different in term of the number of patients (Pouzesh and Babri 2002).

2- subjective well-being questionnaire: subjective well-being has three components, positive effect, negative affect and life satisfaction which Watson, Clark and Telgen (1988) used for assessing positive and negative affection and Diner and others used for assessing life satisfaction.

Positive and negative affect scale (PANAS) is a 20 item assessment scale that has been designed for assessing two affective aspects, negative effect (PANAS-N) and positive affect (PANAS-P) Watson, Clark, Tegen1998). Any subscale has 10 items and items are graded on a 5 point scale (1=very low-5=very much).PANAS is self-evaluation scale with changing direction. Both mood and adjectival category can be found if the time framework is one week. The mood category is considered when it refers a longer framework. The adjectival category is considered as well. The overall range of scores for each subscale is between 10 to 50 (Watson and others1988). Mowlavi and others (2009) have reported Cronbach's alpha coefficients 90% for the scale. Also Jalvani in a research (2012) has reported it as 78%. In 1985, satisfaction with life scale, has been used by Diner and others for measuring life satisfaction in the cognitive aspect of subjective well-being. The scale has five items and each one has 7 options via which the responder expresses his/her satisfaction level from 1(totally disagree) to 7 (totally agree). The mean level of 1 shows dissatisfaction and mean level of 7

shows total satisfaction (Ishi 2000). The validity of the Persian form of the scale has been measured in comparison with negative and positive affect scale and a positive. The significant relation with positive affect and a negative and significant relation with the negative affect have been determined (Mozaffari 2004).

Procedure method

The aim of this study is teaching stress coping methods consisting of 8 educational sessions with axes of definition of stress and its effects on physical-psychological health and normal development as well as defining coping and coping methods which have been arranged according to Myknbam theory.

Table1-intervention sessions according to Myknbam theory

session	Aim of the session	class exercise	Home exercise
1	Familiarity, connecting, data collection	The manner of physical feeling ,emotion, .thoughts a behavior interaction	Record their physical, mental, behavioral and emotional responds in critical situations
2	Determining stressful factors and problem conceptualization	Role turning and differentiation between reality and thoughts, regular grading of behaviors, awareness of thoughts and beliefs	Registering stress responding methods daily, regular grading of behaviors, feelings and special thoughts, tracing activator events, Feelings or behaviors
3	Teaching problem-solving	Problem solving, Mental and Behavioral imagery and role play	Use problem-solving problem in real life and thinking about the problem they are facing
4	Teaching relaxation	Diaphragm breathing and progressive muscle relaxation	Diaphragm breathing and progressive muscle relaxation

5	Level 2 relaxation	4 muscle group relaxation, brief muscle relaxation, break your back, use your rage in constructively	Review class exercises
6	Achieving former peace	Crating a sedative picture Making the mental list and creating the sedative vacuum	Making a list of disturbing thoughts
7	changing cognitive beliefs and improve optimism	Changing negative thoughts through changing behavior, effective self-talk, focusing on assignment, practice saying No and saying No without feeling guilt	Recording concern's content and thinking about a not so stressful situation
8	Readiness to be challenged in stressful situations	Guided mental images , coping imagery, mental workout and peace imagery	Mental workout and mental imagery

In table 2 well-being grades in control and experimental group have been compared together and as it can be seen the groups are homogenous.

Table2: the statistical average and standard deviation of control and experimental groups

variable	Component	group	number	Pre-test	Post-test
Subjective well-being				Mean	Mean
				STD	STD
	Negative affection	control	15	26.60-4.733	24.87-4.487
		experimental	15	26.73-5.092	26.73-5.203
	Positive affection	Control	15	24.80-4.229	25.87-4.051
		experimental	15	24.73-5.035	24.80-4.960
	Satisfaction with	Control	15	16.60-2.586	17.93-2.520
		experimental	15	16.93-2.219	17.00-2.854

The results in table 2 indicate that both groups grades in negative affection have been prevailing before teaching stress coping methods intervention in pre-test phase, but after teaching stress-coping methods in post-test phase the results show that positive affection and satisfaction with life have prevailed in experimental group. However, in the control group negative affection is still prevailing. These results show that teaching stress coping methods has been affective in increasing grades.

Hypothesis: teaching stress coping methods is affective on mothers of children with physical disabilities subjective well-being.

As it can be seen in table 3, by pre-test controlling of all scales significance level, results show that there is significant difference between control and experimental group's target variable (subjective well-being) ($P > 0/01$ and $F = 15.639$). The ANOVA has been conducted in the content of Mankova to find out in which manner they are different with result presented in table 4. The level of impact or difference is 0.671 which means that 67 percent of individual differences in post-test grades of subjective well-being is related to teaching stress coping methods. Statistical power is 1 which means there wasn't the possibility of type II error.

Table 3: the results of multivariate covariance analysis (Mankova) on post-test grades mean of control and experimental group

Name of the scale	amount	F	HDF (Hypothesis)	EDF (Error)	Significance level	ATA Square	Statistical power
Pili effect scale	0.671	15.639	3.000	23.000	0.000	0.671	1.000
Wilks lambda scale	0.329	15.639	3.000	23.000	0.000	0.671	1.000
Hetling effect scale	2.040	15.639	3.000	23.000	0.000	0.671	1.000
The biggest scale	2.040	15.639	3.000	23.000	0.000	0.671	1.000

As it can be seen in table 4 there is a significant difference between control and experimental group after adjusting pre-test grades. So, hypothesis 0 is that claiming that there isn't any difference between the two groups is rejected, In the other way, teaching stress coping methods has influenced experimental groups one's subjective well-being.

Table 4: results of the ANOVA of pre-test, post-test grades means of control and experimental group

Pre-test of	Sum of squares	DF	Mean Square	F	Significance level (sig)
Negative affect pre-	603.287	1	603.287	763.157	0.000
	1.913	1	1.913	3.897	0.060
	0.086	1	0.086	0.065	0.801

test					
Positive affect pre-test	0.030	1	0.030	0.038	0.848
	500.771	1	500.771	1020.319	0.000
	4.524	1	4.524	3.418	0.076
Satisfaction with life pre- test	0.585	1	0.585	0.741	0.398
	1.013	1	1.013	2.063	0.163
	153.542	1	153.542	116.008	0.000
	21.997	1	21.997	27.826	0.000

group	7.809	1	7.809	15.911	0.001
	11.734	1	11.734	8.865	0.006
Error	19.763	25	0.971		
	12.270	25	0.491		
	33.089	25	1.324		
Total	20656.000	30			
	19797.000	30			
	9362.000	30			

The follow up test results that represent difference of the groups in well-being components are given below to compare and evaluate the different orientations between them.

Table 5: results of SHEFE follow-up test

Subjective well-being post-test	The I group	The J group	The mean difference	STD error	Significance level (sig)
Negative affection post-test	Experimental	Control	-1.717	0.326	0.000
	Control	Experimental	1.717	0.326	0.000
Positive	Experimental	Control	1.023	0.257	0.257

affection post-test	Control	Experimental	-1.023	0.257	0.257
Satisfaction with life post-test	Experimental	Control	1.254	0.421	0.006
	Control	Experimental	-1.254	0.421	0.006

As it can be seen from the follow-up test results, there is a statistical significant difference among the control and experimental groups in all three components of subjective well-being. With reference to table 1, after teaching stress coping methods, the post-test intervention results show that there is a significant increase in post-test of positive affection and satisfaction with life and a significant decrease in negative post-test affection.

Discussion and conclusion

To test the hypothesis that "teaching stress coping methods influences subjective well-being of mothers with physical disable children", multivariate covariance analysis (Mancova) was used. This hypothesis's result indicated that the post-test mean of experimental group significantly increased in positive affection and satisfaction with life and decreased in negative affection. Post-test results show that after teaching stress coping methods intervention, positive affection and satisfaction with life prevailed in experimental group, but in control group negative affection still prevails and it shows that teaching stress coping methods effected subjective well-being grade.

Boyer and others (2004) identified the relation between coping methods and subjective well-being in 230 of patients with breast cancer showing that there is positive and significant relation between task-oriented strategies (positive re-evaluation and religious support) which are efficient coping strategies and subjective well-being. Shokri and others (2010) showed that upper levels of subjective well-being are predictable through task-oriented coping styles and lower levels are predictable through emotion-oriented coping styles. Also, Marsha and others (2004) showed that parents who use task-oriented coping strategies in dealing with their children's problem have higher mental health. Queen and Paul (1985) showed that children's problems have effect on parents stress and decrease of their mental health. Vidhya Ravindranadan and Raju (2007) studied differences of families with normal children and families with disabled ones and results showed that families with disabled children reported less marital satisfaction, less social supports and less happy feelings.

Shang and others in a research, studying 1392 children in Taiwan showed that there is a link between children's disabilities and mothers emotional and behavioral problems thus children's problems have negative effects on parents subjective well-being. In line with this research,

Jody Choue (2009) showed that children's behavioral problems initiate mothers' disorder, depression, anxiety and increase their stress. Lesli and other's research about parents of 27 children with language disorder indicated that increasing their anxiety and depression decreases their subjective well-being while increasing life satisfaction and self-esteem boosts positive affection. Results of this research also showed that increasing parent's well-being improved their children's lingual development. Accordingly, Queen and Paul showed in a similar study that children's behavioral problems influence parents subjective well-being. Equally, Tesis and others (2009) showed that there is a link between various aspects of people's life such as occupation, marriage, parenting, friendship and satisfaction with life and this influences their subjective well-being. These results were reported by Davidson and others (2006), Youskel and others (2005). As results showed after teaching stress coping methods intervention subjective well-being in experimental group have increased.

To explain these findings it can be said that task-oriented coping skill is a cognitive skill that the person uses in response to the needs of the situation with more accurate assessment, regardless of his/her more realistic feelings. So, more use of these task-oriented methods shows less physical and psychological symptoms, and anxiety. Instead the relevant individual will have more satisfaction with life, well-being and positive affect. Also, using inefficient coping methods (emotional and avoidant) makes people more vulnerable to stressful situations and prepares the ground for emotional disorders, psychological incompatibility and lack of subjective well-being. Using emotion-oriented methods prohibits the person from direct and effective conflict with the problem and so it reduces their ability for problem solving and it causes intellectual impairment and emotional distress decreasing subjective well-being.

Various research evidence in this field report that there is a high percent of stress among mothers with disabled children because they are facing more requests which bring them more responsibilities. These include children's caring needs, and mothers activities for regulating child's work that show itself in situations like school and family environment (Mackcarti and others 2005).

The results of this study indicates that psychological interventions can improve subjective well-being of mothers of children with physical disabilities through controlling stressful situations and using efficient coping methods.

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References

- Amiri M, Saghaei A, Abedi A.(2011). “Effectiveness of stress inoculation training (sit) on general health of diabetic patients”. *Journal of Applied Psychology* 4:85-100.
- Amiri, M., Behpajoo, A. &Ghorbanjahromi, R.,(2009). “Stress and mental health among mothers of children with and without mental retardation” .23Annual European Health Psychology, Italy Pisa.
- Ansari F, Molavi H, Neshatdoost H.(2009). “Effectiveness of stress inoculation training on general health of hypertensive patients”. . *Journal of Applied Psychology* 13:81-96.
- Boyers, E. Kenya, R.U. Charles, S. C., &Hendrick, C.(2004). “Big five personality and relationship construct martial adjustment”. Available at: www.scinedirect.com
- Davidson, A. C., Berah, E., & Moss, S. (2006). “The relationship between the adjustment of Australian police officers and their partners”. *Psychiatry, Psychology and Law*,13,41–48.
- Davis C, Cooke M, Holzhauser K, Jones M, Finucane J.(2005). “The effect of aromatherapy massage with music on the stress and anxiety levels of emergency nurses”. *Australasian Emergency Nursing Journal* 8: 43-50.
- Diener, E., Suh,E.; &Oishi, S. (1997). “Recent findings on subjective well-being”. *Indian Journal of Clinical Psychology*.
- Diener E, Emmon RA, Larsen RJ, Griffin S.(1985). “The Satisfaction with Life Scale”. *Journal of Personality Assessment* 1;49(1):71-75.
- Duvdevany I, Abboud S.(2005). “Stress, social support and well-being of Arab mothers of children with intellectual disability who are served by welfare services in northern Israel”. , University of Haifa.
- Hassall, R, Rose, J, & McDonald, J. (2005). Parenting stress in mothers of children with an intellectual disability: The effects of parental cognitions in relation to child characteristics and family support. *Journal of Intellectual Disability Research*, 49, 405–418.
- Hastings, R. P., & Johnson, E. (2001). “Stress in UK families conducting intensive home-based behavioral intervention” in Hedov, G . , Anneren, G ., &Wikblad, K . (2000) .”Self

perceived health in Swedish parents of children with Down syndrome”. *Journal of Quality of Life Research*, 9, 415-422.

Jelvani, Razieh, (2012) “CBT efficacy on optimism and well-being on women visitors to the counseling center”. Master's thesis in the University of Tehran.

Judy, Chu , Amanda L. Richdale. (2009). “Sleep quality and psychological wellbeing in mothers of children with developmental disabilities”. *Research in Developmental Disabilities* 30 ,1512–1522.

Kaminski, J. W., Valle, L. A., Filene, J. H., & Boyle, C. L. (2008). “A meta-analytic review of components associated with parent training program effectiveness”. *Journal of Abnormal Child Psychology*, 36, 567–589.

Kawaharada M, Yoshioka E, Saijo Y, Fukui T, Ueno T, Kishi R.(2009). “The effects of a stress inoculation training program for civil servants in Japan: a pilot study of a non-randomized controlled trial”. *Industrial Health* 47: 173–82.

Kawakami Y,Suzuki S.(2003). “How to use cognitive behavioral therapy in the workplace”. *Document Health*; 11: 11-18.

Kiani R, Sodani M, Seidian M, Shafi Abady A.(2010). “The effectiveness of stress inoculation group training on Somatization and Anxiety of the coronary heart disease patients”. *Sci Med J*; 9:495-506.

Lesley, P. Jacqueline ,S. Mollie, G.(2008). “Psychological well-being of parents of children with ataxia who attended the training and support programme: A12-month follow-up”. *Complementary Therapies in Clinical Practice*14, 152-157.

Linden W. (2005). *Stress management: from basic science to better practice*. Philadelphia: SAGE Publications; p.83-85.

Marsha, M, Seltzer, Jan G, Frank J. (2004). “Accommodative coping and well being of midlife parents of children with mental health problems or developmental disabilities”. *American Journal of Orthopsychiatry*. 74, 2, 187-195.

McCarthy, A., Cuskelly, M., Vankrayenoord, C, E., & Cohen, J. (2005). “Predictors of stress in mothers and fathers of children with fragile X syndrome”. *Journal of Research in Developmental Disabilities*, 27, 688-704.

Meichenbam D. (2007). *Stress inoculating training: a preventative and treatment approach*. 3rd ed. Philadelphia: Guilford Press, p.41-132

Meichenbaum D. (2007). "Stress inoculation training: a preventative and treatment approach". Trans. Mobini S. Tehran: Roshd Publ; 10-230. (Persian)

Mowlavi, Hosein, Torkan, Hajar, Soltani, Iraj, Palahang, Hasan (2009). "Normalization and Validity and Reliability assessment of the well-being questionnaire". *Iranian Journal of Psychiatry and Clinical Psychology* 3.238-231.

Mozaffari, S. (2004). "Personality correlates of subjective happiness according to Five-factor model among of student's of university of Shiraz" (Master thesis).University of Shiraz.

Pouzesh, Shhindokht & Babri, Reza. (2002). *Reducing test stress coping methods*, Tabriz: Tabriz University of Medical Science.

Oishi S. (2000). "Goals as Cornerstones of Subjective Well-being: Linking individuals and cultures". In E. Diener& Suh(GDS). *Culture and subjective well being*. Cambridge & London: The MIT Press

Ollson, M .B .,& Hwang, C . P. (2001). "Depression in mothers and fathers of children with intellectual disability". *Journal of Intellectual Disability Research*, 45,(6),535-543 .

Quine, L., & Paul, J. (1985). "Examining the causes of stress in families with severely mentally handicapped children. *British Journal of Social Work*, 15, 501-517.

Rfeyi & Talat. (2008). "Autism: assessment and therapy". Tehran: Danzheh. Carr, Alan (2004). *Positive psychology*. Pasha SHarifi translation, Hasan, Najafizand. Mohammad (2007).Tehran: Okhan.

Roach, M.A., Ormond, G.I., & Barratt, M.S. (1999). "Mothers and fathers of children with Down syndrome: Parental Stress and involvement in children". *American Journal on Mental Retardation*, 104, 422-436.

Rufer M, Albrecht R, Schmidt O, Zaum J, Schnyder U, Hand I.(2010). “Changes in quality of life following cognitive-behavioral group therapy for panic disorder”. *European Psychiatry*; 25:8–14.

Sanders, M. R., & Woolley, M. L. (2005). “The relationship between maternal self-efficacy and parenting practices: Implications for parent training”. *Child: Care, Health & Development*, 31, 65–73.

Seltzer, M& Krauss, W. (1989). “Aging parents with adult mentally retarded children: Family risk factor and sources of support” . *American Journal of Mental Retardation*, 94, (3), 301-321.

Serami, Zahra, Amiri, Shole, Neshatdoost, Hamid Taher and Mowlavi. Hasan .(2010). “The efficacy of CBT on mothers with OCD on their children's behavioral disorders”. *The Psychology Magazine* 13 (3) 324-306.

Seyf, N, Maryam &Naderi. Ezzatollah. (2006). “ Psychology and special children training” , Tehran. Aarasbaran Bailey Jr . , D .B. , Golden, R . N. , Roberts, J.,&Ford, A . (2007). “Maternal depression and developmental disability: Research critique”. *Journal of the Mental Retardation and Developmental Disabilities Research Reviews*,13,(4), 321-329 .

Shang, C. Y., Gau, S. S. F., & Soong, W. T. (2006). “Association between childhood sleep problems and prenatal factors, parental mental distress and behavioural problems”. *Journal of Sleep Research*, 15, 63–73.

Sheehy R, Horan J. (2004). “Effects of stress inoculation training for first year law students”. *International Journal of Stress Management* 11:41-55.

Shokri. Omid. Kdivar. Parvin. Zinabadi. Hasanreza.Garavand. Fariboz. GHanayi, Ziba, Nghsh, Zahra, Tarkhan. Alireza.(2010). “links between Neuroticism and coping methods, school Stressor factors, reactions to school stressors and student's subjective well-being”, *Psychology Magazine* (49), 53-36.

Smith, T. B., Oliver, M. N.I . , & Innocenti, M .L . (2001). “Parenting stress in families of children with disabilities”. *American Journal of Orthopsychiatry*, 71, (2), 257-261.

Tomanik, S., Harris, G. E., & Hawkins, J. (2004). "The relationship between behaviors exhibited by children with autism and maternal stress". *Journal of Intellectual and Developmental Disability*, 29, 16–26.

Tonge, B., Brereton, A., Kiomal, M., Mackinnon, A., King, N., & Rinehart, N. (2006). "Effects on parental mental health of an education and skills training program for parents of young children with autism: A randomised control trial". *Journal of the American Academy of Child and Adolescent Psychiatry*, 45, 561–569.

Tsaousis, I., Nikolaou, I., Nikolaos, S., & Judge, T. (2007). "Do the core self-evaluations moderate the relationship between subjective well being and physical and psychological health?" *Personality and individual differences*, 42, 1444-1452.

Uskul, A. K., & Greenglass, E. (2005). "Psychological wellbeing in a Turkish–Canadian sample". *Anxiety, Stress and Coping*, 18, 269–278.

Valentine, D.P., Mc Dermott, S., & Anderson, D. (1998). "Mothers of adults with mental retardation: Is race a factor in perceptions of burdens and gratification?" *Families in Society*, 79, 577–584.

Vidhya .R & Raju, S. (2007). "Adjustment and Attitude of Parents of Children with Mental Retardation". *Journal of the Indian Academy of Applied Psychology*, , vol. 33,.1, 137-141.

Watson, C. L. A., Clark, L. A. & Tellegen, A. (1988). "Development and validation of brief measures of positive and negative affect: The PANAS scales". *Journal of Personality and Social Psychology*, 54, 1063-1070.