

**EFFECTIVENESS OF STRESS MANAGEMENT ON ANXIETY AND COPING STRATEGIES BY MEANS OF BEHAVIORAL-COGNITIVE**

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**ABSTRACT**

The purpose of this research is to investigate the effectiveness of stress management on anxiety and coping strategies by means of behavioral-cognitive. The statistic society is all guidance schools' pupils in school year 2014-2015 that the number of them dropped to 40 people after random sample selecting. They were divided into two groups of 20 randomly again (a control group and a test group). The test group attended a 10-session treatment class for stress management on anxiety and coping strategies by means of behavioral-cognitive. Both group received pre-test and post-test. Lazarus' questionnaires for stress coping strategies and stress – anxiety questionnaire were used for collecting data. Data was analyzed by covariance analysis with software SPSS Ver. 20. Findings showed that the score of anxiety and coping strategies for test group differed significantly from control group ( $p < 0.05$ ). This results means that stress management training by means of behavioral-cognitive is really more effective on reducing anxieties and choosing more proper coping strategies.

**KEY WORDS:** Stress Management, Behavioral – Cognitive, Anxiety and Coping Strategies.

**INTRODUCTION**

From viewpoint of Lazarus and Folkman (1984), coping means: People's thinking, emotional and behavioral struggles when they face mental pressure in order to overcome, reduce or endure stresses (Dafeei, 1999). Actually the coping sources consist of the one's personal specifications which are available before stress comes up like self-esteem, sense of taking-control of the situation, cognitive methods, and source of control, self-affectivity and ability to solve a problem (Vafaei Pour, 2000). According to Lazarus and Folkman there are two methods for confronting stress which are well known as problem-centered and excitement-centered. The problem-centered coping method is to take control of the situation in source of pressure and excitement-centered is to reducing anxieties (Borhani, 2005). In general, excitement-centered coping was found as the most effective medium for relationship between stresses – illness in the results of most researches (Pakenham, 2004). The stress-centered illnesses and deterioration of the public health is normally seen in those who mostly use excitement-centered. Stress management by means of behavioral-cognitive is called to a set of techniques and methods which are used for reducing the stresses experienced by people or increasing their ability in confronting with life stresses. Such techniques are very various and consist of behavioral methods (such as pacification, care-giving and regular continuous sensitivity reduction) or behavioral – cognitive methods (such as training skills of confronting stresses or training skill of having courage, time management and educational and reasoning matters training) (Davoodzadeh Mami, 2009). The purpose of this research is to investigate the effectiveness of stress management on anxiety and coping strategies by means of behavioral-cognitive.

**MATERIALS AND METHODS**

It is semi – experimental from pre-test/post-test type with control group. The statistic society is all guidance schools' pupils in school year 2014-2015 that the number of them dropped to 40 people after random sample selecting. They were divided into two groups of 20 randomly again (a control group and a test group). Data was analyzed by covariance analysis with software SPSS Ver. 20.

**Instruments:**

**Trend and content of the training sessions of stress management by means of behavioral-cognitive:**

Medication plan was in accordance with hand book of behavioral – cognitive methods which was carried out by researchers on test group in ten 90-minute sessions within two months.

The sessions were as following: session 1 included acquaintance and introduction, inviting to cooperation and assuring attendants, discussing about stress making factors and the role of stress and anxiety on commencement, intensity and continuity of cancer and training of gradual muscular relaxation for a set of 16 muscles. In sessions 2, 3 and 4, there was a discussion on the effects of physical stress, relationship between thinking and feelings, negative thought, cognitive distortion and gradual muscular relaxation for a set of 8 muscles. In sessions 5 and 6, there was discussion on logical thought substitution, difference between logical and non-logical self-explanation, efficient coping, every kind of problem-centered and excitement-centered, inefficient coping and gradual muscular relaxation for a set of 4 muscles. Sessions 7 and 8 the discussion was on how to perform effective confronting, collating coping strategies and with stress-makers, pain and passive gradual muscular relaxation. Session 9 included anger management training, diaphragm breathing and declaration. Session 10 the examinees progress and the skills learnt in session 9 was reviewed. The physician defined the topic of discussion in the beginning of each session, taught new skills to the patients and gave them homework to do in the intervals between two running sessions and they had to do the homework during the intervals and give the progress reports.

**Comparing Moses' and Blinger's coping strategies with stress:**

This questionnaire has got 32 question including excitement-centered and problem-centered coping strategies (Pajakhzadeh, 1981). Credit coefficient was reported 0.88 in accordance with Kronbach Alpha (Pajakhzadeh, 2001). Scoring and the performing were in the way that attendees had to tick the answers which graded as Never, Occasionally, Most often and Always with scores from 0 to 3 based on their choice. The total score of their answers to excitement-centered and problem-centered coping strategies questions would divide to the number of definitions of each and then the final score would be gained. Any method which gained higher score would be the confronting method for that person (Kafi and Mosavi, 2007).

**Najarian et al. anxiety questionnaire:**

It was used in order to measure the level of anxiety (Abolghasi, 2008). It has 27 items that examinee was to answer each item in accordance with Leekert 4 scales (0 = most often, 1 = sometimes, 2 = seldom and 3 = never). The highest score in these scales shows the anxiety of that person is too high. The re-test coefficient and Kronbach Alpha varied from 0.56 to 0.90. Validity coefficient for all examinees, girl examinees and boy examinees were orderly 0.79, 0.91 and 0.67. Credit coefficient for his examination for scale mentioned above by performing at the same time with anxiety-depression questionnaire and sub-scale psychathania MMPI questionnaire were 0.69 and 0.54 orderly.

**RESULTS**

Table No. 1 shows the average and standard deviation of anxiety varieties' scores for excitement-centered and problem-centered coping strategies for both test group and control group. Before analyzing the results, all necessary hypotheses about covariance analysis was made sure that in all variables of Loon's research were not in the significant level of 0.05, therefore it was made sure that the variance is the same and it was valid to use covariance analysis.

Table No. 1:

Group		Test	M	S/D
<b>Test group</b>	Anxiety	Pre-test	13.45	3.73
		Pre-test	7.20	3.14
	Problem centered	Pre-test	18.95	2.70
		Pre-test	23.60	3.30
	Excitement centered	Pre-test	10.90	2.17
		Pre-test	6.95	1.00
<b>Control group</b>	Anxiety	Post-test	12.40	3.35
		Post-test	12.15	2.72
	Problem centered	Post-test	18.95	2.54
		Post-test	19.10	2.65
	Excitement centered	Post-test	11.20	1.70
		Post-test	11.00	1.92

Table No. 2 shows a one way results of covariance analysis which involvement of the behavioral – cognitive stress management has a significant effect on the stress and anxiety, excitement-centered and problem-centered coping strategies; it means that stress management by means of behavioral – cognitive in significant level decreases the anxiety ( $p = 0.001$  &  $F = 154.21$ ) and excitement-centered coping strategies ( $p = 0.001$  &  $F = 41.08$ ). And problem-centered coping strategies will increase in a significant level ( $p = 0.001$  &  $F = 120.72$ ).

Table No. 2:

	Variety source	SS	D/F	M/S	F	Sig.
<b>Anxiety</b>	Pre-test for error group	155.51	1	155.51	79.65	0.001
		301.8	1	301.8	154.21	0.001
		72.24	37	1.95		
<b>Problem centered</b>	Pre-test for error group	146.23	1	146.23	29.67	0.001
		202.50	1	202.50	41.8	0.001
		182.37	37	4.93		
<b>Excitement centered</b>	Pre-test for error group	42.93	1	42.93	34.52	0.001
		150.13	1	150.13	120.72	0.001
		46.2	37	1.24		

## CONCLUSION AND DISCUSSION

The purpose of this research is to determine the effectiveness of stress management on anxiety and coping strategies by means of behavioral-cognitive. The results showed that there is a significant difference between pre-test scores and post-test scores of both test group and control group in anxiety after involvement of stress management by means of behavioral-cognitive. Investigating and comparing the results showed that use of stress management based behavioral-cognitive theory is an important factor in forming people's mental and physical health against the stress making factors and negative excitement (Jane Lopez and Anderson 2006). The findings of this research were in accordance with previous researches. Halamandaris and Power (1999) compared scores which gained from high school students training for gradual muscular relaxation and behavioral relaxation with the scores of control group and the result showed that the group that was trained for relaxation had less anxiety in comparison to the group that had no relaxation training. Lemos (2002) showed that though training programs the excitement controlling could be taught to the students. Gresham (1981) reached to a conclusion that students' emotional – sentimental and social changes were effective in improving their cognitive health and reducing their behavioral problems. Therefore it can be said that stress management by means of behavioral-cognitive is suitable for reducing stress, anxiety coping strategies.

## REFERENCES

- Abolghasemi A. (2008).** Construction and primary credit finding of exam-stress questionnaire and investigating the relationship between anxiety, self-esteem, social – economic base and teachers' expectations among third grade students of guidance schools in Ahwaz. M/S Thesis. Chamran University.
- Barahani M. (2005).** Fundamental of psychological of Hilgard Etkinson .Tehran: Roshd. [Persian]
- Dafei M. (1999).** Relation coping methods with personal characters and mental health in infertility families in Yazd. [M.Sc. Thesis] Midwifery. TarbiatModares University 1999.
- Davazdahemami M.H., Roshan R., Mehrabi A. AND Attari A. (2009).** Effectiveness of stress management training of cognitive-behavioral impact of blood glucose in patients with type 2 diabetes and depression. Iranian J Endocrinology and Metabolism. 11(4): 385-392. [Persian].
- Gresham F.M. (1981).** Social skills training with handicapped children: a review. *Rev Edu. Res.* 51(1):139-76
- Halamandaris K.F. and Power K.G. (1999).** Individual differences, social support and coping with the examination stress: a study of the psychosocial and academic adjustment of first year home students. *Pers. Individ. Dif.* 26(4):665-85.
- Jane-Llopis E. (2006).** Anderson P. Mental health promotion and mental disorder prevention across European member states: a collection of country stories. 2nd ed. Luxembourg: European Communities.

- Kafi M. (2007).** investigating the relationship between stress coping method with mental pressure and mental health in a group of Guilan university student. *News Consultancy Researches*. 23. 67 – 81
- Lemos M.S. (2002).** Social and emotional processes in the classroom setting: a goal strategies Anxiety Stress Coping. 2002;15(4):383-400
- Michael A., Gil Ironstone abd Niel Sniderman (2009).** Hand book of stress by means of behavioral-cognitive.
- Pajakf Sh. (2001).** comparing that stress making factors and the way of confronting them in low stress and high stress students M/S thesis for clinical psychology, Ferdowsi educational science university. Mashad.
- Pakenham K (2004).** Coping with multiple sclerosis: Development of a measure. *Psychology, Health, and Medicine*. 6: 411-428.
- Piko B. (2002).** Gender differences and similarities in adolescents' ways of coping. *Psychological Record*. 51: 223-236.
- Vafaipoor S. (2000).** Role of religious prejudice in occupational stress of women teachers in Hamadan. [MSc Thesis] Health Education. Tarbiat Modares University.