

## The effectiveness of stress management training by cognitive - behavioral on mental health Kermanshah's Central Prisoners

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### Abstract:

*The aim of the present study stress management training methods cognitive - behavioral by mental health of prisoners is Kermanshah. This study is experimental study with pretest-posttest design with experimental and control groups. The study sample consisted of all male prisoners in the Central Prison of Kermanshah. The sample size was 217. Research tool was mental health questionnaire (GHQ). The experimental group received 9 weekly sessions that each session lasting 90 minutes under stress management therapy cognitive - behavioral group. The results showed that the impact of the training was effective. Many interventions such as stress management training methods with cognitive - behavioral can improve the mental health of prisoners to tolerate environment to their advantage to have less stress.*

**Key words:** prisoners, stress management, cognitive – behavioral therapy

## **Introduction**

Mental Health is important issue in the field of human sciences to note that many of scientists are priority. With view to improving quality and attention to this important issue among human societies and the solution offered. The discussion in the society is an important aspect of development (Almasi and Moradi, 2012).

World Health Organization mental health as an essential factor for people you know its key message is that mental disorders, the prevalence of mental illness are a major issue. Therefore, understanding the mental health policy can have a positive effect on the health of populations (Funk, 2004) The organization of mental health state of health of the person who knows his own abilities, can cope with the pressures of life, for the fruitful and able to make decisions and participation is, accordingly, the mental health and well-being for individuals and society(World Health Organization, 2008).

Jail and prisoner although are unpleasant, but the reality of existing populations, existence of people in the name of the offender, convicted or imprisoned as a cognitive impairment that requires special services (Sadok and Sadok, 2000) suggests that society health practitioners more concerned with accuracy and absence and to investigate the causes and consequences of mass creation, modification and treatment of prisoners and to open the way they act. Otherwise, the relatively high population of around 136 to 140 thousand people is currently (Yasaghi, 2004), not only large economic costs to society create, but also the health and comfort of people have ventured. On the other hand, history has shown that the prison and fight crime, punishment-based methods not only can prevent the occurrence of the perpetration of this crime, but in some cases also contribute to the severity and number of these cases, hence, today it is believed that the use of an emphasis on rehabilitation and psychological rehabilitation assistance

seekers, especially those patient with cognitive defects and mental disorders are very helpful (Crighton & Towel, 2005).

Towel (2003) examined and compared the impact of intervention programs based on punishment and intervention programs on reinforcing positive behaviors in camp of patients and found that more patients will be more emphasis on punishment; this also increases the amount of crime and sentence. Accordingly, during the past few decades society and prison officials and practitioners focus on alternative activities, rehabilitation and rehabilitation rather than punishment in prison.

Rehabilitation activities, which are widely used in prisons, job training and vocational education and training programs, entrepreneurship and individual counseling and group projects. The results of several studies have shown that individual and group psychotherapy program a great role in the improvement of the patients are psychologically and reducing crime(Friendship, Blud, Erikson & Thorton,2003; McGuire,2000).

Although effectiveness of group cognitive-behavioral of stress management technique were not been conducted on prisoners in earlier research. In recent years, various studies on the effect of treatment of mental health problems (such as anxiety and depression) and physical confirmed (Jandoghi, et al,2012; Kush & Fleming,2000; Cosio, Siddique & Mohr,2011;Van & etal,2008).

Cognitive-behavioral stress management techniques and methods that can be set to reduce the stress experienced by individuals or increase their ability to cope with life stresses are applied. These techniques are highly variable and may include some of the behavioral methods (e.g., relaxation, meditation and systematic desensitization), or methods of cognitive - behavioral (e.g., coping skills, assertiveness training, record thoughts and cognitive restructuring, time management and

educational issues and arguments) (Antoni, Ironson & Schneiderman, 2007).

Now more than 8.75 million prisoners around the world held by the United States with more than 1.96 million, China with 1.46 million and Russia with 0.92 million have the highest number of prisoners in the world (Brimingham, 2004). In our country, according to the latest statistics, there are far more than 163,000 inmates (Walmsley, 2008). The mental health status and personality disorders are one of the groups most at risk of utmost importance.

Due to the lack of research on prisoners in this way, it seems that can stress management training cognitive - behavioral problems of the group targeted and did not allow the reduction of problems, helping them to gain higher level of mental health and quality of life. Thus, according to the explanations given in this study, we sought to answer the question that is stress management training methods cognitive – behavioral effective on mental health of Kermanshah's prisoners?

## **Method**

Study is experimental of pretest-posttest design with control groups.

### **The population**

Study sample included all male prisoners in Kermanshah's Central Prison.

### **Sample size and sampling**

In this research, simple random sampling was used. So that a sample size of 217 was determined according to formula Cochran, and mental health questionnaire was administered on them, and then those who received the highest score in the questionnaire. (Higher scores indicating mental health and

mental health questionnaire is low), 30 of them were selected randomly to two groups (n = 15) and control (n = 15) were replaced and the pre-test was performed. The group of 9 sessions of cognitive-behavioral group training stress management the way they dealt with the control group received no intervention and at the end of each post-test was used.

## **Measure**

***Mental health questionnaire (GHQ):*** GHQ, first by Goldberg (1972) was adjusted. This test has 28 questions and the four subscales (somatic symptoms, anxiety, depression and social dysfunction) in the covers. The questionnaire used in many domestic and foreign research and has shown great reliability and validity. Reliability and validity of the questionnaire by virtue of 2004 is examined, so that the validity of the SF three methods of re-survey, alpha and alpha was determined that the validity of 0.70, 0.93 and 0.90 was obtained.

## **Procedure**

After necessary coordination, training and meetings for the sample described and before the implementation of a training program for both control and experimental groups were tested and after the training program for the experimental group, both groups were tested again. Treatment program was set according to the model proposed participated in received 9 weekly sessions, each session lasting 90 minutes under stress management therapy cognitive - behavioral therapy. The sessions of stress management techniques including cognitive restructuring, coping effective education, expressiveness, and relaxation techniques to reduce anxiety include various types of imaging, etc. were used. Summary of content will be treated as follows:

**The first meeting** of the members' present and familiar expression of progressive muscle relaxation, stress and fatigue for 16 groups. **Second meeting:** progressive muscle relaxation for stress and muscle groups 8 and awareness. **Third session:** diaphragmatic breathing exercises, progressive muscle relaxation for 4groups of Muscles, imaging, relaxation and communication of thoughts and emotions. **Session Fourth:** progressive muscle relaxation with imagery particular location passive, negative thinking and cognitive distortions. Fifth Session: self-education, replacing rational thoughts and self-talk between rational and irrational steps. **Session Sixth:** the birth of their practice, effective and ineffective coping, definition and types. **Session Seventh:** training with imagination and self-induced birth, along with autogenic care sunlight, expressiveness training. **Session Eighth:** meditation, mantra and meditation exercises of social support. **Session Ninth:** Meditation counting breaths do a relaxation exercise sessions before and appreciated.

The Leveen, Mean and Mancova were used to analyze data.

## Results

**Table 1. The homogeneity of the slope of the linear combination of the components of the pre-test and post-test of mental health**

Source	Value	F	df	Sig.
Group * before physical symptoms	0.63	1.62	(8,28)	0.16
Before anxiety *Before social dysfunction	0.44	1.63	(8,28)	0.16
Before depression	1.08	1.63	(8,28)	0.16
Interactions	0.89	3.14	(8,28)	0.16

To investigate Mancova assumptions, at first the pre-test and post-test were calculated slope homogeneity, the results showed homogeneity of the regression slope is established.As shown in Table slope of regression analysis in mental health component is not significant. Thus the assumption of homogeneity of

regression slope can be confirmed in test and control groups. Table 1, are shown the homogeneity of the slope of the linear combination of the components of the pre-test and post-test in mental health.

**Table 2. Equality of variance in the experimental group and control group**

Health components	F	df	Sig.
Physical symptoms	3.41	(1,22)	<b>0.07</b>
Anxiety	2.50	(1,22)	<b>0.12</b>
Social dysfunction	1.01	(1,22)	<b>0.32</b>
Depression	2.41	(1,22)	<b>0.13</b>

According to Table 2, it can be said that one of the assumptions of covariance is equal of variance that Leven's test was used to examine it, as shown in Table 2. This assumption is satisfied.

**Table 3. Results of multivariate analysis of covariance (Mancova) Posttest scores on the mental health component in control and experimental groups with the control test**

Test	Value	df	F	Sig.	Eta
Wilks lambda	0.32	3	5	0.009	0.57
Hoteling effect	1.33	3	5	0.009	0.57
Largest root	1.33	3	5	0.009	0.57

To compare the experimental and control groups in terms of the mental health component of the multivariate analysis of covariance was used, test results showed that the level of  $P < 0.01$  significant, this means that at least one of the components between the control and experimental groups there, the results are summarized in Table 3.

**Table 4. Results of one-way analysis of covariance in post-test scores Mancova on mental health components in ontrol group pre-test and control**

Mental health component	Sum of square	df	Mean of square	F	Sig.	Eta
Physical symptoms	14.47	1	14.47	6.47	0.01	0.27
Anxiety	6	1	6	7.20	0.01	0.28

Social dysfunction	0.85	1	0.85	0.76	0.39	0.04
Depression	0.22	1	0.22	0.05	0.82	0.003

Table 4 merely states that there is significant difference between one of the areas between the experimental and control groups but to determine in which areas the difference is significant, univariate analysis of variance was used in the text Mancova that indicated components of social dysfunction and depression between the experimental and control groups there was no significant difference. Cognitive-behavioral stress management training method has no significant effect on the component of social dysfunction and depression. The results showed that the two components of physical symptoms ( $F=74.6$ ) and anxiety ( $F=9.82$ ) between the experimental and control groups there is significant difference.

Cognitive-behavioral stress management training that method had a significant effect on the components of somatic symptoms and anxiety. The results are shown in Table 4.

## **Discussion and Conclusion**

The results showed that cognitive-behavioral stress management training on the mental health of prisoners is effective. Results Pourkazemi Soltani, Nouri, Bagherian, Adibi (2007), Shirbim, Sudan and Shafiabadi (2008) also showed that cognitive behavioral stress management training has an impact on the overall score of mental health. Results of Kog, Band, Flaxman (2005) also demonstrated the effectiveness of cognitive-behavioral stress management training on mental health.

Mental health is an aspect of the concept of health. Experts from the World Health Organization, mental health is the ability of harmonious relationships with others, improvement of individual and social environment and to resolve conflicts and personal wishes are reasonable, fair and



appropriate (Milanifar, 2010). The reaction term mental health, which is a term used to describe and express the specific target population is used. Every culture has its own criteria for mental health. The purpose of the society is to promote conditions that will ensure the health of community members prepare and mental health is part of general health (Gholami, 2007).

In the stress management training cognitive-behavioral, mental health is affected. Cognitive-behavioral stress management training method according to behavioral and cognitive methods used in their training, have been successful in this issue.

To explain the results of the theory of cognitive-behavioral interventions can be invoked. Cognitive-behavioral interventions to help people live longer, feel better and are designed to avoid negative thoughts. These interventions will help people to understand themselves and their lives are more and more satisfied with their happiness (Bronro, Cowan, Grochlsky and Garvy, 2006). Cognitive-behavioral stress management training is no exception. Behaviorist perspective suggests that mental health is dependent on the drivers and the environment. Overall, the behaviorist perspective believed that someone with mental health and behavioral norms that behavior is consistent with a given environment (Ganji, 2006).

The cognitive perspective, mental health or emotional well-being is to have a good compatibility. Cognitive-behavioral model is active approach to the organized sector. According to this approach, emotion and behavior is usually by the person appointed to make the world (Beck, 2002). Psychological factors include somatic symptoms, anxiety, social functioning and depression. Cognitive behavioral stress management training on two components of physical symptoms and anxiety symptoms was effective. In the category of anxiety, cognition, and behavior prior to treatment helps to perpetuate. Physical symptoms of anxiety as a result of the protests appear to be a continuation of anxiety. The physical symptoms of anxiety, are

associated with each other, so that anxiety, somatic symptoms and is incriminated. The physical symptoms of anxiety are involved in continuing and continuing. In this study, stress management training on cognitive - behavioral, and physical symptoms and anxiety symptoms was effective. In contrast, stress management training on cognitive - behavioral component of the social dysfunction and depression was not effective. That the existence of social dysfunction caused by low levels of social support, lack of leisure and poor quality of the relationships, these factors contribute to emergence of depression coming. The depression is significantly associated with impaired social functioning. The community is facing jail for disturbing the social function, not unexpected that we see depression. In total score of mental health, stress management training on cognitive - behavioral and mental health has been effective. Existence of necessary for the promotion of mental health, cognitive and behavioral changes, so the training group cognitive-behavioral stress management techniques with behavioral techniques (e.g., relaxation, meditation, etc.) and cognitive (e.g., negative thinking cognitive distortions, substitutions logical thinking, rational self-talk, imagery, etc.) and combine these two methods, promoting mental health.

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