

Psychosocial factors at work and job commitment in medical science university in 2014

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Abstract

Background: Lack of job commitment can have adverse effects on the organization. Psychosocial factors are factors affecting employees' work and job commitment. **Objectives:** Aim of this study is relationship between psychosocial factors at work and job commitment in employees of Kerman medical science university in 2014. **Design:** This study used descriptive correlational and cross-sectional methods. The population of all central office staff Kerman University of Medical Sciences, 400, and sample size using Cochran formula, 147 were selected. Two questionnaires were used in this study: psychosocial factors of work questionnaire with validity 0/95 and reliability 0/72, and job commitment questionnaire with 0/ 93 Validity and Reliability 0/93 s was estimated. For data analysis, the Pearson and Spearman correlation and regression testing through software SPSS edition 22 was used. **Results:**The findings showed that there is not any relationship between psychosocial fact and all dimensions with job commitment in Kerman University of Medical Sciences. **Conclusions:** In this case that psychosocial factors have no relationship with commitment, it can be argued that moderated factors such as individual attitudes, organizational structure, culture, the university, the workload, so the results have been impressive is that these factors are not controlled.

Keywords : psychosocial factors at work, commitment, job commitment

Introduction

Persistent depressive disorder is a chronic mood disorder with the same, but less severe, symptoms as those of major depressive disorder, which is characterized by a depressive mood present in major parts of the day and in majority of days (Kriston, Wolff & Holzel, 2010). Persistent depressive disorder is also called dysthymia, Hypochondriasis depression, temperament depression, neurotic depression, and melancholia, which indicate an inherent tendency to experience a depressive mood (Kaplan & Sadok, 2003). This disorder, which occurs in 3-5% of general population, is more common in single young men, women under 64, and low income people (Kriston, Wolff & Holzel, 2010). In the studies performed by

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World Health Organization, it has been estimated that in 2020, this disorder will be the second heaviest health burden (Segal, Williams & Teasdale, 2002). Unlike major depressive disorder, persistent depressive disorder has not a periodical nature, and its symptoms are persistent, and its prominent characteristics are depressive mood, feelings of inadequacy and guilt, anger and irritability, lack of interest, rumination, inactivity, adaptiveness, and misanthropy (Sadok, 2009). Studies based on the cognitive model of depression consider the role of rumination and negative cognitive styles as risk factors for depression (Lo, Ho & Hollon, 2007; Roelofs, Huibers, Peeters, & Arntz, 2008). Rumination is known as permanent occupation with an issue and thinking about it (Sadok and Sadok, 2002). Rumination is a category of conscious thoughts which revolve around a certain ordinary axis, and these thoughts are repeated without urgent ambient requirements being dependant on them. Rumination is a collection of passive thoughts that have a repetitive nature, are concentrated on the causes and effects of symptoms and prevent maladaptive problem and lead to more negative thoughts (Nolen-hokesema, 2004). Hyde, Mezulis, & Abramson (2008) believed that rumination is one of the cognitive depression variables. Donaldson and Lam (2007) also asserted that the depression is associated with direction of attention towards negative information for self-assessment. The negative direction is stronger in those patients who have rumination. In the past three decades, cognitive therapy, and increasing use of it in dealing with the increasing emotional and behavioral problems, and insufficiency of the formulations of the classical theory (mainly linear models) to explain and provide appropriate treatment, has been faced with the shortcomings of the problem. Therefore, after theoretical criticism, aimed at explaining the relation of cognition and emotion, linear model were gradually replaced by more complex and multilayer models. For example, the theoretical framework of the "interactive cognitive subsystems" (Teasdale and Barnard, 1993) indicates processing in two reportorial and implicit levels of cognition. In fact, Teasdale believes that reportorial level functions as the linear relationship between thoughts and feelings as provided by Aaron Beck model, and he believes implicit processing is necessary for the process of change. Emotional processing which is the introduction to changes takes place in implicit level of knowledge (Teasdale, 2001). Teasdale theory's key concept of is the schematic mental models. Representation of experiences throughout the life in the mind prepares ground for formation of schematic mental model. In this theory, it is assumed that emotions arise when appropriate model of implicit codes are processed. In a schematic model, the individual may see himself as a negative, helpless and desperate human. A depressing situation can trigger a well-proportioned model that connects with broad and high meaning level of the individual. In schematic model there is interrelation between collection of structures and sensual elements; and this is what distinguishes this model from former ones such as associative networks model (Ghasemzadeh, 1999). In fact, the recurrence of negative mood, for whatever reason, can be followed by signs of depression. This means that a negative mood is triggered, negative thinking or negative rumination starts again and we may witness a full period of depression (Moulds, Kandris, Starr & Wong, 2007). So, discovery of the relationship between negative mood and negative thoughts can prevent depression. In 1992, Teasdale and Segal, from University of Wales, and University of Toronto, respectively, proposed a new approach to prevent the recurrence of depression. This model was called mindfulness-based cognitive therapy approach (MBCT) (Segal, Williams & Teasdale, 2002). It was an innovative combination of some aspects of Beck's cognitive therapy (Beck, Rush, Shaw, & Emery, 1979) and mindfulness-based stress reduction (MBSR) (Kabat-Zin, 1990). Mindfulness means paying instant attention in a specific and targeted and free from prejudice and judgment manner (Kabat - Saddle, quoting Segal, Williams and Teasdale, 2002). According to Crain (2009) Management of mindfulness-based cognitive therapy can reduce the negative mood, negative thoughts and dysfunctional processing

techniques, and be effective in improving mood in different groups of patients. He believes that a basic assumption of this method is that the mind processes experiences in two different ways. A method called "performance method" tries to reduce gap between the current situation and desired situation by ongoing problem solving. And other method, "being" or "understanding" method faces with conditions as they are without trying to change them. The first method is applicable in many areas of life; however, it is usually inefficient in dealing with thoughts of depressive individual. Therefore, mindfulness is aimed at shift of thinking style to "being" method. In this method, the objective is to teach patients a method by which they could deal with their thoughts and experiences differently. Through automatic pilot, effects of reactivity acquires mentality of there-awareness, and through doing repetitive exercises aimed intentional direction of attention to a neutral object, e.g., breathing, the individual observes his thoughts, feelings or physical senses (Khanpur, 2010). As a person learns mindfulness skills, he learned that he should attach less power, will and value to his self-judgments and self-blaming, which fuel and feel his negative thoughts, rather, they respond to such conditions with kindness and acceptance (Kuyken, 2010). So far, many studies have shown the effectiveness of mindfulness training. For example, William and Russell (2010) showed in their controlled randomized study that training mindfulness-based cognitive therapy is more effective in prevention of recurrence in patients with suicidal thoughts recovered from depression, compared with other psychological doctrines as well as treatment by medication. Barnhofer, Crain, Hargus, Amarasingh, & Williams (2009) also studied effectiveness of this method in patients who had depressive symptoms and had previously experienced a depression episode, and had history of at least one suicide attempt. The results of his study suggested reduced reminiscent symptoms of depression in MBCT group. Kenny and Williams (2007) used in study of mindfulness-based cognitive therapy for patients who was experiencing an active period of depression, and had been resistant to other therapies in the past. Their results showed that the decrease in negative mood, negative thoughts and inefficient processing method, and improved mood occurred in participants who had experienced a maximum of four or more episodes of depression. Finucane, & Mercer (2006) in their study on The Effects of Mindfulness-based cognitive therapy in the field of identification of cognitive factors and processes predicting recurrence of depression, found that this approach was effective and useful in the treatment of depressive patients with chronic treatment-resistant depression and in treatment of symptoms reminiscent of depression, and in patients with medication-resistant chronic depression. Nierenberg, Peterson, & Alpert (2003) subjected 145 recovered depressed to mindfulness-based cognitive therapy, and after 60 weeks of follow-up, they showed that the risk of further depression in patients who have high risk of the recurrence of disease (For example, people who had three or more episodes of depression) has become 40%, while the risk in depressed patients who had not received the training was 66%. Segal, Williams and Teasdale (1996) also noted similar results, indicating that the recurrence rate has declined from 78 percent to 36 percent. In his study, Schulman (2004) divided students of university of Pennsylvania to two 10-some experimental and control groups, and subjected them to mindfulness training aimed at prevention of anxiety and depression. After a one-year follow up period participants of training course had significantly lower anxiety, depression and inefficient attitudes, compared with control group. Overall, given the above mentioned, and role of MBCT in negative mood, negative thought and inefficient processing techniques, and in improvement of patients with persistent depressive disorder, this research is study of effectiveness of MBCT in depression and rumination in depressive patients in city of Ahwaz. Therefore, given the importance of subject and the above said, this research tests the hypothesis that MBCT method has an effect on depression and rumination in patients with persistent depressive disorder.

Methods

This was a quasi-experimental research, with pretest - posttest design and control group. In this design, consisting of the two groups (experimental and control), pre-test form was administered to two groups and then forms of post-test were administered after intervention. The statistical population included all female dysthymic patients who referred to counseling centers in Ahwaz in the fall of 2011. For selection of sample, 40 patients who volunteer to participate in meetings were selected randomly and then were assigned to two groups of 20 (experimental and control). Criteria for inclusion in the sample included: 1 - Not having an episode of psychosis, mania, hypomania or any personality disorder. 2 - The age range of 18-26 years. 3 - High school completion or higher. 3 - Not having a history of suicide. 4 – Not having received a full course of psychological treatment in the past 5- not taking any drugs or alcohol. 6 – Not receiving any medical or psychological treatment while participating in the study.

Tools used in this study were:

1) Beck Depression questionnaire: this is one of the most successful tools for measuring depression, the original version of the questionnaire consisted of 21 items. Each question accounts for a specific symptom of depression which include a graded set of 4 self-examination sentence, sentences are ordered from neutral (0) to maximum depression severity (3) to reflect a range severity of depression. In the research by the artist M. Hosseini and Mehrabi (2011) Chronbach's alpha reliability coefficients was 0.89 and the half-cut correlation coefficient was 0.87. In the present study, depression questionnaire's reliability coefficients were calculated using Cronbach's alpha and half-cut, which, for the overall scale were respectively 0.84 and 0.76. To determine validity of depression questionnaire, its score was correlated with anxiety questionnaire scale, and it was found out that $r=0.73$ and $p=0.0001$, which indicate depression questionnaire had necessary validity.

2)Rumination Response Scale: This scale is a 22-item scale based on the Likert Scale 4 score score measuring individuals' tendency to rumination in response to depressed mood. In this test, the scores range from 22 to 88. Answers that have been included in the questionnaire focused on four areas: self-centered, symptoms-focused, focused on causes and potential consequences of these mood states. For behavioral responses, validity in foreign counterparts was obtained by retest to be 0.8. This questionnaire translated by Fata (2003) in Iran and Lotfinia (2007) calculated its reliability coefficients by administering it to the 54 students in a three-week period to be 0.82. The reliability coefficient of this test was obtained to be 0.74 in the present study.

Procedure

After selection of sample from the intended population, subjects were randomly assigned to two groups (experimental and control), then pre-test was performed on two groups. Next, the independent variable in this study, the technique of mindfulness-based cognitive therapy (Table 1) was taught during 8 70-minute sessions per week for 8 weeks, and in the meantime, subjects in control group received no intervention. Then, both groups were subjected to post-test, so that the results for both groups could be obtained and compared.

Procedure of treatment sessions

In training of mindfulness-based cognitive therapy, the depressive patients learn how to deal with their negative thoughts and habits differently, and how to focus on changing the content of their beliefs and



thoughts. They also learn to redirect their automatic thoughts, habits, mental ruminations, negative thoughts and feelings, how to become aware of their thoughts and feelings in a broader perspective (teasdale et al, 1994).

Goals of therapy sessions

- 1 - Help participants to learn the skills to prevent depression recurrence.
- 2 - Awareness and attention to the feelings, thoughts and physical sense instantly and expand it.
- 3 - To learn skills of responding to unpleasant thought or feeling and how to avoid negative thoughts and how to prevent intensification of them.
- 4- To Change old habits of thinking, such as recognition of automatic routines, motivelessness in the works, considering things as being futile, evasion or avoidance of depression or hard life situations, having high dreams and always comparing the current situation to the desired situation.
- 5- Awareness of the warning signs of depression and minor mood changes

Subjects of first-fourth sessions include: introduction, to conceptualize and describe depression, to outline the role of mindfulness training in better control of mood, learning how to deal with attention and learning to deal with the everyday issues while being mindful, learning about wandering mind, how to deal with wandering with body review exercise, use of meditation, mindfulness of breathing, eating, seeing, hearing, etc.

Subjects of fifth-eighth sessions include: continuation of previous exercises, full awareness of thought and feelings and accepting them, changing mood, and thoughts, being beware of depressive symptoms and planning for future, and use of techniques of being in the present for continuation of life.

Findings

Descriptive findings of this study are presented in Table 1.

Table 1: Summary of statistical indicators relating to the subjects' scores on tests of depression and Obsessive-rumination

post-test		pre-test		Group	
respectively	mean	respectively	mean		
3.02	15.60	4.23	26.15	MBCT	depression
2.75	26.15	2.82	27.25	control	
3.07	17.80	3.01	27.5	MBCT	Obsessive-rumination
2.01	27.40	2.01	28.40	control	

As shown in Table 1, it can be seen in the form of pre-test that scores of participants in terms of depression in the MBCT and control group are respectively 26.15 and 27.25, their standard deviations are respectively 4.23 and 2.82, and in terms of the rumination in MBCT and control groups, scores are respectively 27.5 and 28.40 and their standard deviations are respectively 3.01 and 2.01. Also in the form of the post-test, the mean score of the subjects in terms of depression in the MBCT and control group are respectively 15.60 and 26.15, their standard deviations are respectively 3.02 and 2.75, and in terms of the rumination in MBCT and control groups, scores are respectively 17.80 and 27.40 and their standard deviations are respectively 3.07 and 2.01.

To test the research hypothesis based on that:

- 1 - Teaching Mindfulness-based cognitive therapy has an effect on depression of patients with depressed mood.
- 2 - Mindfulness-Based Cognitive Therapy Training on has an effect on rumination in depressed patients.

Multivariate analysis of covariance (MANCOVA) was used in compliance with the following assumptions.

- 1 - There is a linear relationship between the auxiliary random variable and the dependent variable
- 2 - The assumption of equal variances
- 3 - Assuming there are homogeneity gradients (regression)

To examine the linear relationship between the auxiliary random variables and the dependent variable we examine diagram 1:

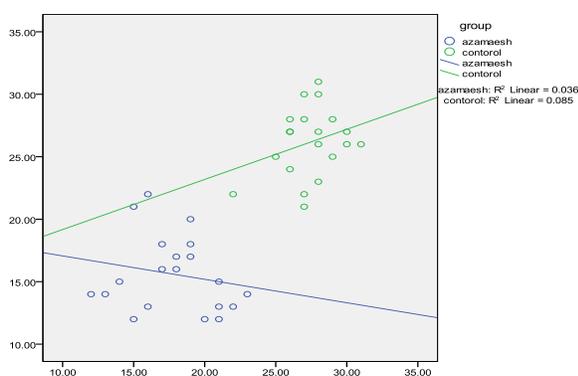


Diagram 2: rumination in two groups

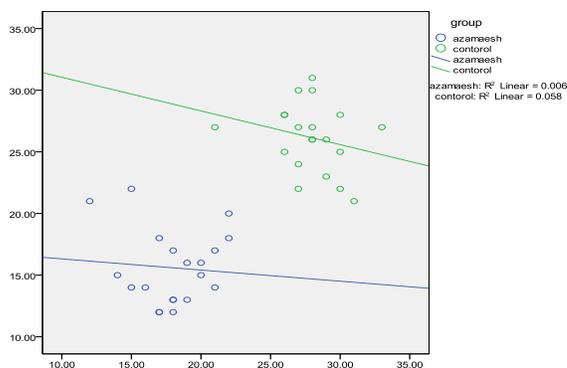


Diagram 1: depression level in two groups

As seen in diagrams 1 and 2, there is a linear relation between auxiliary random variables of pretest of depression and rumination and dependent variable (post-test) of depression and rumination. It is because gradient of regression lines are parallel, that is, the relationship between the variables is the same in both groups. Also, data in Table 2 relates to test of the hypothesis of homogeneity of gradient. This table is prepared before performing the covariance in order to examine the interactions between the auxiliary random variable (pretest of depression and rumination) and group variable (the cause) in predicting the dependent variable (posttest of depression and rumination).

Table 2 :Assumption of homogeneity of variance

P	Df2	Df1	F		
0/098	38	1	1/784	depression	post-test
0/079	38	1	2/578	Obsessive-rumination	

As presented in Table 2, given the significance level is greater than 0.05, therefore, data has not questioned the assumption of equality of variance errors.



Table 3: Summary Analysis of covariance analysis data for depression and rumination in the experimental and control groups to test the interaction

ita	p	F	Mean square	Df	Square	Source of
0.098	0.134	1.14	2.13	1	2.13	Independent variable and the pretest depression
0.098	0.78	2.98	2.16	1	2.16	Independent variable and the pretest rumination

It seen from the data in Table 3 that interaction between the pre-test of depression and group is not significant. The interaction between pre-test of rumination and group is not significant. Non-significant interaction indicates that data support the assumption of homogeneity of gradients. So, implementation of covariance is just aimed at the test interactions between of rumination and depression post-test main variables and the group. That is, the question is if means of population in control and experimental groups are the same. The results of this analysis are presented in Tables 4 and 5.

Table 4 - Results of multivariate covariance analysis of (MANCOVA) with control of the pre-test and analysis of post-test of depression and rumination in experimental and control groups

p	F	DF Error	DF Hypothesis	value	Name of test
0.001	148.4	33	3	0.69	Wilks Lambda test

As seen from table 4, significance level of Wilks' Lambda indicates that there is a significant difference between subjects in experimental and control groups at least in terms of one of dependant variables (depression and rumination). Therefore, to further study the relation between mean scores of posttest of depression and rumination in two experimental and control groups and pretest control group, the one-way MANCOVA analysis was used in the context of MANCOVE, the results of which are reported in table5.

Table 5: Summary of one-way analysis of covariance (ANCOVA) in the context of MANCOVA on posttest scores of depression and rumination in experimental and control groups and pretest control (interactions excluded)

Df	ita	p	F	Mean square	Df	Square	Source of
1	0.78	0.001	124.85	912.7	1	0.75	depression
1	0.82	0.001	168.53	623.9	1	0.92 623	rumination

As can be seen in Table 5, with control of pretest of depression among patients with depressed disorder there was a significant difference between experimental and control groups. Therefore, the hypothesis one is confirmed. In addition, with control of rumination pretest, there was significant difference between experimental and control groups. The effect or difference of treatments on depression was equal to 78%

and 82% for rumination. In other words, 78% of individual differences in pretest scores for depressive symptoms and about 82% for rumination were related to effect of training MBCT (group membership in non-medication-based treatment).

Discussion and Conclusion

As stated above, the objective of this research and its hypothesis was study of effect of mindfulness-based cognitive therapy on depression and rumination in patients with depressive disorder. Findings shown in tables 1-5 showed that there is significant difference between patients with depressive disorder who have received MBCT training (experimental group) and those who have not (control group) in terms of depression and rumination ($p < 0.001$). This means that training mindfulness-based cognitive therapy is effective in reduction of depression and rumination in depressive patients in Ahwaz. Thus, the research hypotheses were confirmed.

The findings of this research were consistent with findings by Kuyken (2010), Williams and Russell (2010), Crain (2009), Kenny and Williams (2007), Finucane, & Mercer (2006), Schulman (2004), Nierenberg, Peterson, & Alpert (2003), Teasdale, Segal, and Williams (1995). To explain the reason for the finding that training MBCT has an effect on depression and rumination in patients with depressive disorder, it can be said that given MBCT is made based on the Kabat-Zin mindfulness-based stress reduction model, and psychotherapy principles are added to it, this kind of cognitive therapy includes different meditations, strain yoga, preliminary trainings about depression, body review exercise and a number of cognitive therapy which show the relation between mood, thoughts, feelings and physical senses. All these exercises somehow provide for attention to physical and environmental positions and reduce depressing automated processes (present moment). In this way, in mindfulness awareness states, distribution of information from two-way vicious cycles shifts to immediate and current experience. In essence, mindfulness training teach people how to release habitual skills (located in the central motor) from rigidity, and by shifting information processing sources to neutral targets of attention, such as breathing or sense of present moment, prepare conditions for change. So, reuse of attention by this method prevents intensification or perpetuation of depression, making the vicious processing cycles to be less available. From this perspective, the development or persistence of depression decreases. In this way, sensory sources, such as semantic patterns, and physical exercising results in transformed schema model (Teasdale, 2001, as quoted by Kaviani et al, 2005). Besides, vulnerability to recurrence of depression is caused by frequent links between depressive mood and negative self-blaming and hopeless patterns of thinking, which in turn lead to changes in cognitive and nervous levels (Segal, Williams, Teasdale & Gemar, 1996). Based on this assumption, those who have been depressed in the past are different from those have never been depressed in terms of the pattern of thinking. Thus, despite the defective thinking patterns, there always remains the possibility that individual enter a new episode of depression due to mild mood disorder and reactivation of thinking patterns. Mindfulness-based cognitive therapy can increase the preventive aspect of treatment by changing the defective patterns of thinking, and teaching skills of attention control. So, as the final conclusion, we can say that the use of mindfulness-based cognitive therapy changes individuals' perception and defective thinking pattern by reducing depression and rumination. Therefore, this treatment method can be used independently or alongside other methods such as drug therapy to solve psychological and behavioral problems caused by depression in individuals. In terms of application, it is suggested that counseling centers provide facilities for MBCT method. In terms of research, it is suggested that similar researches are performed using therapeutic methods on other psychological problems such as anxiety on different research populations, and study the



role of sex in effectiveness of this method, so that further knowledge is obtained about this therapeutic method. Finally, this study had two limitations: one is that sample size was very small, and available sampling method was used. Therefore, it is necessary that future researches use a larger number of patients with depressive disorder, and use randomized sampling method, so that it becomes possible to generalize the results. The other limitation is that it was not possible in this study to have follow-up period due to time constraints.

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