

## Original Research

# The Comparison of Mindfulness Components in Depressed, Anxious and Normal Individuals

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### Abstract:

**Background:** The present research has a functional purpose and a descriptive-analytical method. The aim of this study was to compare the components of mindfulness in depressed, anxious and normal individuals.

**Method:** The statistical population of this study is all of the depressed and anxious patients who went to the counseling center of Isfahan University of Medical Sciences from June to September 2017. The sample size included 30 patients with major depressive disorder, 30 patients with generalized anxiety disorder and 30 normal individuals. The sampling method in this research is the convenience method. Spss software has been used to analyze the data obtained from the questionnaire and Anova test has been used for investigating the research hypotheses. The results of Anova test showed that there was a significant difference between the anxious and normal people as well as the depressed and normal people in observation components (at the  $P < 0.0001$  level) and due to the difference between the averages, it seems that normal people have scored higher in the observation component than the depressed and anxious people.

**Result:** There is no significant difference between depressed and anxious people in terms of observation component. There is a significant difference between anxious and normal people as well as depressed people and normal people in terms of description component ( $P < 0.0001$ ); Due to the difference in averages, we can say that normal people have scored higher in the description component than depressed and anxious people.

**Conclusion:** There is no significant difference between depressed and anxious people in this component. In the component of action with awareness, there is a significant difference between normal and anxious people as well as normal and depressed people (at the level of  $P < 0.0001$ ) and due to the difference in averages, it seems that normal people have scored higher in the component of action with awareness than depressed and anxious people. In fact, there is no difference between anxious and depressed people in the said component.

**Keywords:** Mindfulness, Depressed, Anxious

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## Introduction

Mindfulness is a new concept that is being used by psychiatrists and psychologists for treating many psychological disorders in the recent years. The use of mindfulness techniques requires the use of other information on how the components of mindfulness function in

each of the psychological disorders (1). Mindfulness is the ability to focus attention on the inner and outer experiences that are taking place at the moment. It helps the person be more aware in the present and increase non-judgmental observation and subsequently reduce automatic responses (2).

Mindfulness focuses one's attention on the present and helps one to accept events without trying to change them and to deal with psychological actions that occur automatically (3). Mindfulness is a form of meditation that is rooted in Eastern religious teachings and rituals, especially the Buddha, and means paying special, purposeful attention in the present, free from prejudice and judgment (4). Mindfulness means paying attention in a specific way, goal-oriented, in the present and without judgment. In the mindfulness, one learns to be aware of one's state of mind at any given moment and to turn one's attention to different mental states. Mindfulness-based interventions are considered as one of the third generation or third wave cognitive-behavioral therapies (5).

In mindfulness, the person becomes aware of his state of mind at any moment, and after becoming aware of two states of mind, one doing and the other being, he learns to move the mind from one state to another, which requires teaching special behavioral-cognitive and metacognitive strategies for focusing the attention. Mindfulness-based interventions have shown their effectiveness in treating various psychological problems (6). Depression affects various aspects of life and its symptoms disrupt individual's functions in motivational, emotional, cognitive, behavioral and biological areas (7).

Generalized anxiety disorder is another common disorder with a one-year prevalence

estimated at 3% to 8% and a lifetime prevalence of 8%. Also, generalized anxiety disorder is probably the most common disorder found simultaneously with other disorders. People with depression and anxiety disorders have cognitive biases and dysfunctional attitudes which play an important role in the persistence of these disorders. For example, research has shown that depression is associated with a tendency to pay selective attention to negative information. Cognitive bias among depressed individuals is also associated with negative judgments and documents (8).

Depressed people are mostly preoccupied with what has happened in the past, and anxious people are faced with the occurrence of threatening events in the future. Therefore, it seems that depressed and anxious patients do not have the ability to enjoy the present and live in the past or the future. Mindfulness-based therapies can be used to help such patients. Mindfulness is one of the important concepts that has recently attracted a lot of attention and seems to play an important role in these disorders. Mindfulness means paying attention in certain ways: being in the present moment, purposeful and free from judgment.

Mindfulness means that one turns one's consciousness from the past and the future to the present.

## Questions of the research

Is there a significant difference in the components of mindfulness in anxious, depressed and normal people?

## Background

(1), compared the components of mindfulness and emotional temperament in people with major depression, generalized anxiety disorder and normal people. The results showed that there is a significant difference between the three groups in the components of mindfulness. In other words, there was a significant difference in observation, description and action with awareness components between anxious and normal people as well as depressed and normal people. In the component of non-judgmental mindfulness, there were significant differences between depressed and anxious people and normal and anxious people. Also, in the unresponsive component, the difference between anxious-depressed, anxious-normal and depressed-normal groups was significant. Also depressed individuals scored higher than anxious and normal individuals in emotional temperaments and the difference between these scores in the cyclothymia and Irritability scale was significant compared to normal individuals. In explaining the results of this study, it can be concluded that anxious and depressed patients have weaker performances in mindfulness components than normal individuals and their emotional temperament scores are much higher than them. Therefore, treatments based on mindfulness, by

emphasizing these components, can facilitate the treatment process and also improve the symptoms of such patients (1).

(3) did a research entitled "Comparison of components of mindfulness in patients with major depression, generalized anxiety disorder and normal individuals".

Explaining the results of this study, it can be concluded that anxious and depressed patients have a weaker performance in the components of mindfulness than normal individuals and therefore mindfulness-based therapies can facilitate the healing process by emphasizing these components. And also improve the symptoms of such patients (9). (2) did a research entitled "The effectiveness of teaching mindfulness-based stress reduction therapy on anxiety and depression in female students." So, during a semi-experimental study with pretest-posttest design and control group, 40 high school girls in Hamadan were selected by convenience sampling method and randomly applied in two control and experimental groups. The experimental group was then put through 8, 120 minute sessions of mindfulness-based stress reduction therapy. The groups were tested for depression, anxiety and stress at the beginning and the end of the study. The results of covariance analysis showed that mindfulness-based intervention training reduces anxiety, depression and stress of the experimental group students. It seems that by teaching stress management based on mindfulness, students' depression, anxiety and

stress can be reduced (5). (9) did a research entitled "The effectiveness of mindfulness-based group cognitive therapy in reducing anxiety and depression in high school students."

The results of multivariate analysis of variance show a significant reduction in anxiety and depression in the experimental group compared to the control group ( $p < 0.01$ ). Mindfulness-based cognitive therapy can help the psychological health of students (10). did a research entitled "The effectiveness of mindfulness-based cognitive therapy on reducing perceived stress and eating disorders in students with eating disorders symptoms?" The results of analysis of covariance showed that the symptoms of eating disorders and stress in the experimental group in post-test were significantly reduced compared to the control group.

Findings confirm the effectiveness of mindfulness-based cognitive therapy in reducing perceived stress and eating disorders (11).

Hoffmann and Gomez (2017) did a research entitled "Mindfulness-based interventions for anxiety and depression." This article examines strategies for developing cognitive and behavioral therapies for depression and anxiety using mindfulness techniques. Research on mindfulness-based intervention (MBI) has increased exponentially over the past decade.

The most common of these include mindfulness-based stress reduction (MBSR) and mindfulness-based cognitive therapy (MBCT).

MBI has proven to be effective in reducing anxiety and the severity of depressive symptoms in a wide range of people being treated. MBI consistently transcends evidence-based therapies and active control conditions such as health education, relaxation education, and supportive psychotherapy.

MBI also works toward cognitive-behavioral therapy (CBT). MBI treatment basics for anxiety and depression are compatible with CBT standard basics (12).

## **Mindfulness**

Mindfulness means paying special, purposeful attention, in the present time and free from prejudice and judgment. In mindfulness the person becomes aware of his state of mind at any moment. For the mind, there are two main states, which are "to do" and "to be". In mindfulness people learn to move the mind from one state to another. Mindfulness requires specific behavioral, cognitive, and metacognitive strategies to focus the attention process, which in turn leads to prevention of the diminishing spiral of negative mood-negative thinking, tendency to anxious responses and the growth of new perspectives and the emergence of pleasant thoughts and emotions (11).

## **Depression**

Depression has been referred to as the common cold of mental health, but it does not always remain as a common cold and goes beyond and requires serious psychological treatment [14]. Depression is one of the most common mental disorders and one of the diseases that costs the health care system a lot in terms of disease burden. Mental illnesses range from anxiety, depression and mild stress to schizophrenia and complete insanity.

The most common of these is depression in Iran and around the world, with about 10 percent of people experiencing at least one period of depression during a year of their life [15].

## **Anxiety**

Anxiety can be seen as a diffused, unpleasant, and ambiguous emotional experience of fear and anxiety. This feeling has no definite origin and includes uncertainty, helplessness, and physiological excitation.

Also, the recurrence of situations that were previously stressful, or during which the person was injured, causes anxiety in individuals [16].

## **Normal person**

Normal individuals are those who are in harmony with themselves and their surroundings and are in harmony with their cultural requirements or social rules (Tabatabai, 2012).

## **The purpose of the research**

Determining the differences in the components of mindfulness in anxious, depressed and normal individuals.

## **Research Method**

The present research has a functional purpose and descriptive-analytical method.

The statistical population included anxious and depressed patients who went to the Counseling Center of Mashhad University of Medical Sciences and the offices of two psychiatrists. In this study, the convenience sampling method was used; thus, three groups of 30 people, including depressed, anxious and normal patients, were matched with each other in terms of age, gender, absence of physical illness and lack of other mental illnesses.

Clinical groups were selected from those who referred to the mentioned centers. The criteria for selecting the subjects were: 1. Diagnosis of the center's psychiatrist based on the origin of anxiety disorder or depression 2. Clinical interview by the researcher with patients based on DSMIV criteria. Using Beck's depression and Spielberger's anxiety Questionnaires, both of which are used as complementary tools, and both questionnaires are administered to all three groups: anxiety, depression, and control (Table 1).

## **Findings related to the first question of research**

Multivariate analysis of variance (MANOVA) test was used to examine the first question of the study (comparison of components of mindfulness in depressed, anxious and normal

individuals). In this analysis, Pillai's trace and Wilke's lambda tests were used. The results of this analysis are shown in Table (2).

According to the results in the table (2) and according to the value of F, we can say that the results are significant at the level of  $P < 0.0001$ ; In other words, there is a significant difference between the three groups in terms of components of mindfulness. From the results of Table (3) it is concluded that there is a significant difference between depressed, anxious and normal individuals in all five components of mindfulness.

Post-Hoc Tukey test was used to determine between which groups this difference exists and the results of each component are reported below. According to Table (4), we can say that there is a significant difference (at the level of  $P < 0.0001$ ) in the observation component between anxious and normal individuals as well as depressed and normal individuals, and considering the difference between the means, it seems that normal individuals scored higher in the observation component than depressed and anxious individuals. There is no significant difference between depressed and anxious individuals in terms of observation.

Table (5) shows that there is a significant difference ( $P < 0.0001$ ) between anxious and normal individuals as well as depressed and normal individuals in terms of description component; Given the differences in averages, it is safe to say that normal individuals scored higher than depressed and anxious ones.

Depressed and anxious individuals in this component are not significantly different from each other. In Table (6), the results of the Tukey test for the component of action with awareness are reported.

The results reported in Table (6) show that there is a significant difference (at the level of  $P < 0.0001$ ) in the component of action with awareness, between normal and anxious individuals as well as normal and depressed individuals. Considering the difference in averages, it seems that normal individuals have higher scores in the component of action with awareness than depressed and anxious individuals.

But as shown in Table (4-7), there is no difference in the above component between anxious and depressed individuals. As we can see in Table (7), there is a significant difference (at the level of  $P < 0.0001$ ) between anxious and depressed individuals, as well as anxious and normal individuals. Depressed individuals have higher scores in this component than anxious ones. Normal individuals also scored higher than anxious ones.

There is no significant difference between depressed and normal individuals in non-judgment component.

The results of the Tukey test for the non-reactive component are reported in Table (8). According to the results reported in Table (8), we can see that in the non-reactive component, between anxious and depressed individuals (at

the level of  $P < 0.001$ ) and between anxious and normal individuals (at the level of  $P < 0.0001$ ) there is a significant difference. The scores of depressed individuals in this component are higher than the scores of anxious ones, and the scores of normal individuals are higher than the scores of depressed and anxious ones. The difference between normal and depressed individuals was significant at the level of ( $P < 0.05$ ).

## Conclusion

Is there a significant difference in the components of mindfulness in depressed, anxious and normal individuals? Research findings show that the components of mindfulness are different in depressed, anxious and normal individuals; however, this difference is mostly between normal individuals and the depressed and anxious ones, and differences between depressed and anxious individuals are not significant in most of the components.

This conclusion is consistent with the results of researches from Walsh, Balint, Smolira and Madsen (2008), Van Heeringen and coworkers(2009), Way, Creswell, Eisenberger, and Lieberman (2010), Blatcher, Crawford, Carmody, Rosenthal, and Oaken (2011) and Bernhofer, Dugan, and Griffith (2011). For more specification, we will examine each component separately.

Normal individuals get higher scores in the observation component (paying close attention

to internal and external phenomena and stimulants) compared to depressed individuals. Depressed individuals are sad and introspective people who are constantly engaging in distressing thoughts and ruminating their thoughts and do not have much contact with their surroundings.

These people probably do not pay attention to water falling on their body in the bath, wind blowing, sun shining, birds singing and such things, and it seems reasonable for normal individuals to do better than depressed individuals in this component; Because most normal individuals, at some point, finally pay attention to their own environment and interact with it.

Also, the scores of normal individuals in the observation component are higher than anxious people. Anxious individuals are very concerned about the future and its possible threats. Based on the cognitive perspective, they pay attention to threatening stimulants (Turner and Biddle, 2004; quoted by Tuzandehjani, 2008). Perhaps for this reason, their attention to other stimulants, which are not necessarily threatening and are considered in this study, is less than normal individuals who do not pay attention to this bias and therefore their capacity to pay attention to the surrounding stimulants is higher.

Normal individuals score higher than depressed ones in the description component (putting phenomena and events around them in words). Given the reasons we mentioned for

the observation component, it seems that depressed individuals do not pay much attention to the phenomena around them; So it is natural that they are not interested in describing or expressing them using words and phrases.

On the other hand, normal individuals get higher scores in the description component compared to anxious individuals. Anxious individuals have vague feelings and thoughts about what's happening around them which makes it difficult for them to find words that can describe these thoughts and feelings.

Of course, we must also keep in mind that the real ability of depressed and anxious individuals in this component may not be much different from normal individuals, and underestimating their abilities has led to these results. In action with awareness component (full attention to ongoing activity instead of automatic action) Normal individuals also scored higher than depressed individuals.

As we said before, depressed individuals have negative and ruminating thoughts about their mistakes, deprivations and failures in the past and are full of negative emotions. Psychomotor slowness and loss of interest in affairs is one of the characteristics of these people.

These individuals are not interested in doing things and if they have to do something due to the situation, they are probably so preoccupied with their thoughts and fantasies that they will not pay attention to how they do things and that

is why they have a lower score compared to normal individuals in the component of action with awareness. Normal individuals also scored higher in the component of action with awareness compared to anxious individuals. Again, as we said in the explanation of the previous components, anxious people are anxious and restless people who have low concentration and are constantly thinking about potential threats and dangers, and therefore most of the time, as the results of research show while doing the work, they do not pay attention to how it is done.

In the non-judgment component (not judging current experiences, thoughts, feelings, and beliefs), depressed individuals scored higher than anxious individuals; In other words, depressed people judge their thoughts, feelings, and beliefs less than anxious people. This result is contrary to the expected result. Because one of the salient features of depressed individuals is that they are constantly judging their thoughts, ideas, and feelings, and this judgment is of course negative and is one of the things that is targeted in cognitive therapy. Of course, anxious individuals also judge themselves to avoid making mistakes; But this feature is more common in depressed people. Probably the reason for this result is the lack of insight of depressed individuals towards this cognitive problem; they are unaware of the fact that they are constantly judging themselves.

Another conclusion reached in this component is that normal individuals scored higher than

anxious individuals in this component; meaning that normal people are more non-judgmental than anxious people, and this result can be justified according to the issue we mentioned in the previous paragraph. In the non-reactivity component (not reacting to thoughts, feelings and beliefs), depressed individuals scored higher than anxious ones; In other words, depressed people are less likely to react when thoughts and feelings come to them than anxious people.

Not reacting means that they leave that thought or feeling alone and do nothing to increase or decrease it. Depressed individuals have completely given in to their negative thoughts and feelings, fully accepted them and do not react to them; But anxious individuals are not like that, they are constantly trying to change the feelings and thoughts that cause them suffering. Therefore, it is natural for depressed people to get higher scores in this component.

Of course, we must keep in mind that this lack of reaction in depressed people is not positive. Another result of this component is that normal individuals have higher scores than depressed and anxious individuals. This lack of reaction is positive for normal people. Because most of their feelings and thoughts are normal and therefore they have no problem accepting them. So they accept them without reacting to them.

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None

## Conflict of interest

There is no conflict of interest for the authors of this article.

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## Tables and Charts:

**Table (1).** Component reliability coefficients

Factors	Questions	Chronbach's alpha
Mindfulness	8	0.84
Depression	7	0.67

Anxiety	4	0.60
Normal person	3	0.61

**Table (2).** the results of the MANOVA test

Tests	Value	F	df	Error df	Sig
Pillai's trace	0.78	10.46	10	164	0.0001
Wilke's lambda	0.35	10.98	10	162	0.0001

**Table (3).** Test results of variance analysis of differences in mindfulness components between depressed, anxious and normal groups

-	Dependent variable	Sum of squares	df	Mean squares	F	Sig
Groups	Observation	209.98	2	104.99	15.95	0.0001
	Description	866.34	2	433.17	22.23	0.0001
	Action with awareness	1168.09	2	584.04	23.8	0.0001
	Non-judgment	292.45	2	292.45	18.9	0.0001
	Non-reactivity	135.2	2	135.2	19.2	0.0001

**Table (4).** Tukey post hoc test results for the observation component

Groups		Mean difference	Standard error	Sig
Anxious	Depressed	0.87	0.67	0.4
Normal	Anxious	2.76	0.67	0.0001
Anxious	Depressed	3.62	0.67	0.0001

**Table (5).** Tukey post hoc test results for the description component

Groups		Mean difference	Standard error	Sig
Depressed	Anxious	1.5	1.15	0.35
Normal	Anxious	7.31	1.16	0.0001

Normal	Depressed	5.81	1.15	0.0001
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**Table (6).** Results of Tukey post hoc test for the component of action with awareness

Groups		Mean difference	Standard error	Sig
Depressed	Anxious	1.73	1.29	0.38
Normal	Anxious	8.48	1.3	0.0001
Normal	Depressed	6.75	1.29	0.0001

**Table (7).** Results of Tukey post hoc test for non-judgment component

Groups		Mean difference	Standard error	Sig
Depressed	Anxious	4.37	1.02	0.0001
Normal	Anxious	6.17	1.03	0.0001
Normal	Depressed	1.8	1.02	0.189

**Table (8).** Tukey test results for non-reactive component

Groups		Mean difference	Standard error	Sig
Depressed	Anxious	2.66	0.69	0.001
Normal	Anxious	4.28	0.7	0.0001
Normal	Depressed	1.62	0.69	0.055