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EVALUATING THE RELATIONSHIP BETWEEN MINDFULNESS AND OBSESSIVE THOUGHTS IN PSYCHOLOGY STUDENTS OF ISLAMIC AZAD UNIVERSITY OF KARAJ

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ABSTRACT

The objective of the current research was to evaluate the relationship between mindfulness and obsessive thoughts in psychology students of Islamic Azad University of Karaj. This research is considered as correlational type of study. The sample of research included 100 psychology students of Islamic Azad University, selected by random cluster sampling method. The research tool was Obsessive Belief Questionnaire (OBQ) and Five-Facet Mindfulness Questionnaire (FFMQ). The internal consistency of the obsessive beliefs questionnaire was obtained 0.86 and the internal consistency of the five-facet mindfulness questionnaire was obtained 0.84 in the current research. In the analysis of data, Pearson correlation (regression analysis) was used to evaluate the relationship among the scores of the subjects (Mindfulness and Obsessive Thoughts Test). Research findings suggest a significant and positive relationship between the mindfulness and obsessive belief ($P <0.01$).

Introduction

Thought obsessions are unwanted thoughts, mental images, or repetitive impulses, which are unacceptable or hateful for a person. These obsessions are one of the most painful psychological problems and they are emotionally very annoying. The fight against obsessive thoughts is an alone and private battle. In some cases of obsessive disorder, people suffer from a sense of mental contamination, in addition to their other concerns (Rockman, 1994). Research evidence indicates that various types of obsessive beliefs contribute in development and continuation of obsessive thoughts (Steckti and Frost, 1994, Rochman et al., 1995, Steckti et al., 1998, Wilson and Champless, 1999, Whiton et al., 2010).

The cognitive model states that people with obsessive disorder interpret their thoughts, images, and impulses very important, and ineffective beliefs pave the way for formation of these thoughts, images, and impulses (Shams and Sadeghi, 2006). A new guideline has been developed in behavioral treatment in the last few decades. One of the characteristics of this new wave is an emphasis on the mindfulness and acceptance. Mindfulness emerges in the form of awareness as a result of paying attention to goal at the present moment and without judgment in revealing momentary experience (Kobat Zain, 2003). Mindfulness enables an individual to develop a relationship different from the experience of inner feelings and external events through momentary awareness and behavioral orientations based on wise responsibility rather than automatic responsiveness.

By purposeful using of the higher mental functions such as attention, awareness, kindly attitude, curiosity, and compassion, mindfulness could effectively control the emotional responses through the inhibition of limbic system cortex (Kobat and Zain,

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2003). Thus, people who have higher levels of mindfulness show less negative thoughts and they believe that they are able to avoid such thoughts (Frion, Evans, Maraj, Douzis and Patrich, 2006). Mindfulness interventions were first developed by Kobat Zain, who initiated Mindfulness Center at the University of Massachusetts in 1979. He developed a mindfulness-based stress-reducing program to treat the patients with symptoms, which were not reduced by traditional medical interventions (chronic pains).

The findings of correlation between components of mindfulness and obsessive beliefs also suggest a significant relationship between some components of mindfulness (describing inner and outer states, lack of response to inner states and lack of judgment on inner experience) and obsessive beliefs. In this regard, Esmeeilian, Tahmasian et al. (2013) examined the effectiveness of mindfulness-based cognitive therapy in the depression symptoms in children with divorced parents. Multivariate analysis of covariance findings revealed that mindfulness-based cognitive therapy significantly reduced the depression symptoms in children with divorced parents.

In addition, Holzel et al. (2013) compared the neuronal mechanism in people with generalized anxiety under mindfulness training and also patients under stress management training. They showed that in people with anxiety, mindfulness training leads to change in anterior limbic cortex, which determines the emotions. This change is correlated with recovery symptoms. Jane et al. (2007) also compared the effectiveness of the mindfulness meditation model and relaxation with regard to rumination. Findings indicated that the impact size of the mindfulness meditation model was larger than that of relaxation training with regard to reduced rumination. Hafziger and Kohner (2009) found a significant relationship between mindfulness and rumination in their studies. Psychometric evaluations revealed positive correlation among the mindfulness, extroversion, emotional regulation, and acceptance of emotions. Thus, given the importance of our subject in the current research, we evaluate the relationship between mindfulness and obsessive thoughts in psychology students of Islamic Azad University of Karaj.

Methodology

As nature of the subject in the present research is investigating the relationship between mindfulness and obsessive beliefs, it is considered correlational type of descriptive studies. This method is used for examining the level of variations in one or more factors as a result of variations in one or more other factors.

Research population: research population included all psychology students of Islamic Azad University of Karaj, who were studying in the academic year of 2014-2015.

Sample size and sampling method: out of all psychology students of Islamic Azad University, 100 students were selected by random cluster sampling method.

Research tools

The measurement tool in this research is a questionnaire.

Five-facet Mindfulness Questionnaire (FFMQ):

This questionnaire is a tool, developed based on a factor analysis study on five mindfulness questionnaires, including Mindful Attention Awareness Scale (MAAS), Freiburg *Mindfulness Inventory* (*FMI*), Cognitive-Affective Mindfulness Scale (CAMS), and Mindfulness Questionnaire (MQ). The analyses identified 5 factors, assessing various aspects of mindfulness. These factors include observation, description, awareness-based action, lack of judgment on inner experience, and the lack of response to inner experience. These factors are assessed through a 39-items self-reporting questionnaire. The internal consistency of the questionnaire in this research was found 0.84.

Obsessive beliefs questionnaire: OCDWG group developed obsessive beliefs questionnaire (OBQ) as a tool for assessing the role of cognitive factors in the pathology and maintaining the obsession. OBQ-44 includes the ineffective beliefs of sense of responsibility, risk and threat assessment, perfectionism, the need for persuasion and certainty (PC), and importance and control of thoughts (ICT). Sum of scores of the three subsets gives the total score of obsessive beliefs. OBQ-44 has an appropriate internal consistency (0.92) and reliability coefficient (0.82) (Shams et al., 2006). The internal consistency of the questionnaire in this research was 0.86.

Statistical analysis: After collecting the questionnaires and encoding and recording the data, descriptive statistics (frequency, mean percentage, and standard deviation) were used, and in the inferential statistics section, Pearson correlation (regression analysis) was used to evaluate the relationship between the scores of subjects (mindfulness and obsessive thoughts tests).

Data analysis

Descriptive statistics: 44% of the subjects are male and 56% are female (Table 1).

Table 1-Frequency and frequency percentage of subjects in the research based on gender

Gender	Frequency	frequency percentage
male	44	44%
female	56	56%
total	100	100%

Table 2- Descriptive results of the mindfulness variable and its components

group	scale	n	mean	SD	minimum	maximum

male	Observation	44	27.38	5	15	38
	Description	44	28.18	4.49	19	38
	Awareness-based action	44	26.34	5.4	16	40
	Lack of judgment	44	22.18	4.11	14	30
	Lack of response	44	20.77	4.11	10	31
	Total mindfulness	44	124.95	14.35	82	149
female	Observation	56	29.83	5.78	17	40
	Description	56	27.3	4.98	15	37
	Awareness-based action	56	27.3	5.59	12	37
	Lack of judgment	56	22.42	5.01	10	39
	Lack of response	56	21.66	4.73	10	32
	Total mindfulness	56	128.58	15.88	88	172
total	Observation	100	28.76	5.59	15	40
	Description	100	27.69	4.77	15	38
	Awareness-based action	100	26.73	5.49	12	40
	Lack of judgment	100	22.32	4.61	10	39
	Lack of response	100	21.27	4.46	10	32
	Total mindfulness	100	126.99	15.26	82	172

Based on the findings of Table 2, the mean mindfulness of the sample group is 126.99, and the mean mindfulness variable is 128.58 and 124.95 in females and males, respectively, indicating that the mean mindfulness is more in females than that of males. In addition, the mean sub-scale of the observation in the sample group was 28.76, indicating that mean observation is higher in the sample group. In addition, the mean sub-scale of lack of response is 21.27 in the sample group, indicating that sample group obtained lower score in this sub-scale. In addition, comparing the mean in two sub-groups of males and females shows that the highest mean in both groups of males and females was related to sub-scale of observation and the lowest mean was related to sub-scale of lack of response.

Table 3- descriptive results of obsessive beliefs variable

maximum	minimum	SD	mean	n	scale	group
81	50-	31.58	14.5	44	obsessive beliefs	male
97	-105	39.74	10.16	56	obsessive beliefs	female
97	-105	36.27	12.07	100	obsessive beliefs	Total

Based on the results of Table 3, the mean obsessive beliefs in the sample group is 12.07, and it is 10.16 and 14.5 in females and males, respectively. In addition, the standard deviation of obsessive beliefs in the sample group is 36.27, and it is 39 and 31.58 in the females and males, respectively, indicating that distribution of obsessive beliefs is greater in the females.

Inferential statistics

Pearson correlation test was used in order to evaluate the relationship between mindfulness and obsessive beliefs. Pearson correlation analysis assumptions including deletion of outliers, linearity of the relationship, checking the normal distribution of variables using Kolmogorov-Smirnov test, and homogeneity of variances were examined. The Kolmogorov-Smirnov test results for the research variables suggest the normality of data. The result of this test has been reported in the following table. In addition, the nature of the data suggests that data scale is interval. To evaluate the linearity of relationship and homogeneity of variance, the distribution diagram was used. Findings suggest the linear relationship between the variables and observed homogeneity of variance assumption.

Table 4 - Kolmogorov-Smirnov Test to check the normal distribution of scores

Kolmogorov-Smirnov Test	Z	Significance level
observation	0.95	0.31
Description	0.93	0.35
Awareness-based action	0.73	0.65
Lack of judgment	0.70	0.69
Lack of response	1.04	0.22
Total mindfulness	0.51	0.95
obsessive beliefs	0.71	0.68

Table 4 results show that p-value obtained for 5 sub-scales of the mindfulness is greater than 5. Thus, the null hypothesis on normal distribution of scores in these 5 sub-scales is confirmed. Moreover, the p-value obtained for the mindfulness variable is greater than 0.05. Thus, the null hypothesis on normal distribution of scores for this variable is also confirmed.

Table 5- Correlation matrix between the variables of mindfulness and obsessive beliefs
*relationships are significant at the level of 0.05
*relationships are significant at the level of 0.01

	observation	description	Awareness-based action	Lack of judgment	Lack of response	Total mindfulness	Obsessive beliefs
observation correlation coefficient significance level number	1 91						
description correlation coefficient significance level number	0.183 40.08 91	1 91					
Awareness-based action correlation coefficient significance level number	0.152 70.14 91	0.390** 0.000 91	1 91				
Lack of judgment correlation coefficient significance level number	70.21-* 90.03 91	0.05 0.590 91	0.305** 0.003 91	1 91			
Lack of response correlation coefficient significance level number	0.276** 0.008 91	0.110 0.300 91	0.060- 0.573 91	0.387-** 0.000 91	1 91		
Total mindfulness correlation coefficient significance level number	0.586** 0.000 91	0.671** 0.000 91	0.698** 0.000 91	0.251* 0.016 91	0.349** 0.001 91	1 91	
obsessive beliefs correlation coefficient significance level number	0.023 0.829 91	0.171- 0.106 91	0.281-** 0.007 91	0.400** _ 0.000 91	0.096 0.364 91	0.267-* 0.010 91	1 91

Based on correlation coefficients reported in Table 5, the variable of obsessive belief has a significant relationship with the two subs-scales of awareness-based action and lack of judgment, and the mindfulness variable has a significant relationship

with the obsessive belief variable. The correlation coefficient between obsessive belief and the subscale of awareness-based action is 0.28 with a significant level of 0.007, which is less than 0.01 (P<0.01). In addition, the correlation coefficient between obsessive belief and lack of judgment subscale is 0.4, which its significance level is less than 0.01 (P<0.01). As a result, the relationship between these two subscales and obsessive beliefs is significant at the level of 0.01, and the correlation coefficient between mindfulness variable and obsessive belief variable is 0.26 with significant level of 0.01, which is less than 0.05 (P <0.05). As a result, the relationship between mindfulness and obsessive beliefs is significant at the level of 0.01.

Conclusion

Obsessions have been described as hateful and disturbing thoughts, which the person resists against them. They are resulting from phenomena such as injecting thoughts, reference thoughts, and the feeling that thoughts are controlled by external forces. The midfulness-based stress-reducing program, develope by Kobat Zain, helps the people develope mindfulness through intensive training in meditation.

Mindfulness is negatively correlated with depression and anxiety and positivly correlated with sense of satisfaction of life, positive emotions, and flourishing of more talents. The objective of the current research was to evaluate the relationship between mindfulness and obsessive beliefs of psychology students of Islamic Azad University of Karaj.

To analyze the data of current research, explanatory statistics related to the research variables (mindfulness and obsessive beliefs have been presented in the sample group) and the correlation coefficient between mindfulness variable and obsessive belief was obtained 0.26, with a significant level of 0.01, which is less than 0.05 (P <0.05). Thus, the relationship between mindfulness variable and obsessive beliefs is significant at the level of 0.01. Findings of the research suggest that mindfulness training is an effective method to reduce obsessive beliefs. Thus, it is recommended for psychologists and counselors to use this method for reducing the obsessive beliefs of clients.

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