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Examining the relationship of mindfulness to resilience in university students

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Abstract

Introduction: Mindfulness, a concept influenced by the Buddhist thinking, has attracted the attention of psychologists, psychotherapists, and researchers in the recent years. Mindfulness-based interventions (MBIs) are regarded as one of the third generation or third wave cognitive-behavioral therapies. Many research studies have examined factors related to this variable. The present study aims to examine the relationship of mindfulness to resilience in university students.

Materials and Methods: The research method used in this study was of descriptive-correlational type. The sample consisting of 357 students (203 girls and 154 boys), who were selected from the Faculty of Humanities, the Faculty of Engineering, and Pardis Faculty of the University of Kashan, studying in the year 2016, was taken based on the stratified sampling method in proportion to the size of the strata. For data gathering purposes, the Connor-Davidson Resilience Scale (2003) and the Five Factor Mindfulness questionnaire (Baer, Smith, Hopkins, Krietemeyer, and Toney, 2006) were used. The obtained alpha coefficient values for variables mindfulness and resilience were 0.733 and 0.856, respectively, and those for the components of mindfulness-observing, describing, acting with awareness, accepting without judging of the inner experience, and non-reactivity to the inner experience were 0.726, 0.667, 0.802, 0.724, and 0.623, respectively. For data analysis, the Pearson's Correlation Coefficient was used with SPSS.

Results: There was a significant relationship between mindfulness and resilience among students, as agreed by other similar research ($P < 0.05$). The findings of the study showed that mindfulness could lead to a boost in resilience among students.

Conclusion: According to the results of the study, it is suggested that cultural, higher education, and other educational planning authorities throughout the country pay more attention to the improvement of mindfulness and resilience in university students and provide training in this area.

Keywords: Mindfulness, Resilience, Students

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Introduction

Mindfulness is a concept that has attracted the attention of psychologists, psychotherapists and researchers in recent years under the influence of Buddhist ideas. Interventions based on mindfulness are considered as one of the cognitive-behavioral treatments of the third generation or the third wave. Mindfulness is defined in different ways, but they all emphasize flexible attention, openness, and curiosity. The aforementioned definition of mindfulness expresses three important points: First, mindfulness is the process of awareness, not thinking. Second, mindfulness includes an attitude of openness and curiosity, and third, mindfulness includes the flexibility of the mind (1). Conscious people perceive internal and external realities freely and without distortion and have a great ability to face a wide range of thoughts, emotions, and experiences (both pleasant and unpleasant) (2,3). Mindfulness helps us to understand that negative emotions may occur, but they are nothing but fixed and permanent personality. It also allows a person to respond to events with thought and reflection instead of responding to events involuntarily and thoughtlessly (4). In relation to mindfulness, there have been many researches that show the beneficial effects of mindfulness in treating all kinds of problems. Measuring the structure of mindfulness and its correlates or comparing its dimensions in clinical and non-clinical groups does not have a long maximum. Only in the last decades has this been expanded. For this reason, researchers have tried to study mindfulness in relation to basic or pathological structures. For example, Thompson (5) divides the benefits of mindfulness into three areas of well-being, psychological and therapeutic. Well-being includes having more energy and pleasure, while psychological benefits include increased stability and understanding of the mind. Therapeutic benefits have been seen in areas such as depression, anxiety, schizophrenia and pain. In the multiple study of the effect of mindfulness on stress, coping style and emotional health, the results of Winston et al.'s research (6) showed that people with high mindfulness evaluated stress more, used less avoidance coping strategies and problem-oriented coping were reporting Also, stress

adaptive responses and coping strategies were adjusted to a large extent according to the relationship between mind-awareness and mental health. The results of studies show that continuous mindfulness practice can increase attention and emotional self-regulation and improve flexibility (7). Other researches have shown that the method of stress reduction training based on mindfulness is effective in improving mindfulness, increasing self-expression and exam anxiety (8).

One of the other factors that mindfulness has an effect on and that the current research has investigated is resilience. Resilience is one of the concepts that has recently been raised in the field of mental disorders and injuries and can be the key to prevention. A person's successful coping with stressful factors and difficult situations is called resilience (9). Resilience in the educational environment is considered as a very high probability of success in school and other life situations, despite environmental hardships and difficulties (10). As McAllister and McKeown (11) state, resilience is known as a factor in successful adaptation to changes and the ability to resist problems. Resilience gives a person the possibility to benefit from his adaptive skills and turn stressful situations into an opportunity for learning and growth, and by focusing on the problem, he can control the stress in the person (12).

In a research, Keye and Pidgeon (13) found a positive and significant relationship between mindfulness and resilience. In fact, they concluded that people with a higher level of mindfulness also have a higher level of resilience. Also, the researchers found that resilience is significantly influenced by mindfulness, and an evidence of the relationship between mindfulness and resilience (14). Over the past few decades, many studies have shown that characteristics such as self-efficacy, creative problem solving skills, introversion, and the ability to interact with the present are significantly related to resilience (14). Recent studies show that many of these characteristics that are related to resilience are also related to mindfulness (14). In one of these studies, Smith (15) states that mindfulness may reduce the use of an avoidant coping style in response to stress and increase resilience. According to the stated

content, there is a relationship between mindfulness and resilience (15). Also, Bajaj and Pandey (15) concluded that resilience has a positive relationship with mindfulness. According to the mentioned materials, since there is no research in the country to examine the relationship between mindfulness and resilience, the main question of the research is what is the relationship between resilience and mindfulness?

Materials and Methods

The research method in this research is a descriptive correlation type. The statistical population of this research included all the students of the Faculty of Humanities, Engineering and Campus of Kashan University in the academic year of 2014 in the number of 2421 people, of which 357 people (203 girls and 154 boys) were selected by stratified sampling using the table Kerjesi and Morgan have been selected from the mentioned statistical population. Connor and Davidson resilience questionnaire (CD-RISC) and five-dimensional mindfulness questionnaire (FFMQ) were used to collect data.

Research instruments

A) *Connor and Davidson Resilience Questionnaire*: A resilience questionnaire was prepared by Connor and Davidson (16) to measure the ability to deal with pressure and threats, and Mohammadi (17) adapted it for use in Iran. This questionnaire has 25 items with five options, whose options are scored from 0 to 4 respectively. In this way, the completely incorrect option is given a score of 0, the rarely correct option is given a score of 1, the sometimes correct option is given a score of 2, the often correct option is given a score of 3, and the always correct option is given a score of 4. The sum of the scores of the 26 items forms the total score of the scale. In the research conducted by Samani et al. (18), the reliability of this scale was obtained with the help of Cronbach's alpha coefficient equal to 0.87. Using Cronbach's alpha coefficient, Mohammadi (17) found the reliability coefficient of the scale to be 0.89 and the validity of the scale by correlating each item with the total score of the coefficients category

between 0.41 and 0.64. The alpha coefficient obtained in this study for the resilience variable was 0.856.

B) *Five-Dimensional Mindfulness Questionnaire*: This tool is a 39-item self-measurement scale created by Baer et al. through Konchoki Mindfulness Scale (22), Revised Cognitive and Emotional Mindfulness Scale (23) and Southampton Mindfulness Questionnaire (24) have been developed using the factor analysis approach. In a research, Baer et al. (19) conducted an exploratory factor analysis on a sample of university students. The obtained factors were named as follows: observation, action combined with vigilance, being non-judgmental to inner experience, describing and being non-reactive. Based on the results, the internal consistency of the appropriate factors and the alpha coefficient ranged from 0.75 (in the non-responsiveness factor) to 0.91 (in the description factor). The correlation between the factors was moderate and significant in all cases and was in a range between 0.15 and 0.34 (25). Also, in a study conducted on the validity and reliability of this questionnaire in Iran, the test-retest correlation coefficients of the FFMQ questionnaire in the Iranian sample were between $r = 0.57$ (related to non-judgmental factor) and $r = 0.84$ (observation factor). It was observed. Also, the alpha coefficients were acceptable (between $\alpha = 0.55$ and related to the non-reactivity factor and $\alpha = 0.83$ related to the description factor) (26). The alpha coefficient obtained in this study for the variable of mindfulness was 0.733. Also, 0.726, 0.667, 0.802, 0.724 and 0.623 were obtained for the components of observation, description, action with awareness, non-judgment and non-reaction, respectively.

Results

This part includes research findings based on descriptive statistics and inferential analysis. Table 1 shows the descriptive indices, including the mean and standard deviation of the subjects in the research variables.

Kolmogorov-Smirnov test was used to check the normality of the distribution of the main research variables. The results of Table 2 show that the significant value related to the Kolmogorov Smirnov test in the scores of all

variables except the components of observation, description and the total mind-awareness score is more than 0.05. Therefore, it is concluded that the distribution of all variables except for the components of observation and description and the total score of mind-awareness is normal. The results of Table 3 show that there is a significant

relationship between mindfulness and resilience ($P < 0.05$). In other words, according to the positive value of the correlation coefficient ($r = 0.335$), it can be concluded that with the increase in the mindfulness score among the students of Kashan University, their resilience also increases significantly.

Table 1. Descriptive results of the studied variables

Variable	Group	Mean	Standard Deviation
Mindfulness	The whole sample	64.123	89.11
Resilience	The whole sample	59.65	82.11

Table 2. Test to determine the normality of the main variables

Variable	Kolmogorov-Smirnov Statistic	P
Mindfulness		
Observing	1.362	0.049
Describing	1.803	0.003
Acting with awareness	1.275	0.078
Non-judgment	1.241	0.092
Non-reactivity	1.271	0.079
Total score	1.434	0.033
Resilience		
Total Score	1.032	0.237

Table 3. Correlation matrix of variables studied in the research

Variables	Mindfulness	Observing	Describing	Acting with awareness	Non-judgment	Non-reactivity	Resilience
Mindfulness	1						
Observing	0.533**	1					
Describing	0.730**		1				
Acting with awareness	0.652**	1	0.367**	1			
Non-judgment	0.366**		0.021	-0.435**	1		
Non-reactivity	0.225**		0.185*	-0.336**	-0.417**	1	
Resilience	0.335**		0.317**	0.122**	-0.165*	0.367**	1

*significant at the 0.05 level **significant at the 0.01 level

Discussion

The purpose of the present study was to determine the relationship between mindfulness and resilience in Kashan University students. For this purpose, after collecting distributed questionnaires and analyzing them, it was found that there is a relationship between mindfulness and resilience in students of Kashan University. This finding is consistent with the research findings of Kay and Pidgeon (13). In a research, they found a positive and significant relationship between mindfulness and resilience. In fact, they

concluded that people with a higher level of mindfulness also have a higher level of resilience. Thompson et al. found that resilience was significantly influenced by mindfulness. There is also evidence of the relationship between mindfulness and resilience, which states that mindfulness is a predictor of resilience. Over the past few decades, many studies have shown that characteristics such as self-efficacy, creative problem-solving skills, introversion, and the ability to interact with the

present are significantly related to resilience. Recent research shows that many of these characteristics that are related to resilience are also related to mindfulness (quoted from 14). In one of these studies, it has been stated that mindfulness may reduce the use of avoidant coping style in response to stress and increase resilience. According to the stated content, there is a relationship between mindfulness and resilience (cited in 15). Also, resilience has a positive relationship with mindfulness. In fact, in explaining this finding, they stated that people with higher awareness have higher resilience. In other words, a higher level of mindfulness may help people overcome difficult situations and achieve a higher level of resilience. Conscious people can better respond to difficult situations without performing involuntary and non-adaptive behaviors. They are open to new perceptions, tend to be more creative and can better deal with difficult situations, thoughts and feelings without weakness and discomfort (15). When a person faces a difficult emotional or physical situation, by not judging the experiences, he becomes more aware of what he sees and is and what should be, and as a result of this awareness, he can show more resilience.

According to the results of the research, it is recommended that cultural planners, higher education and educational institutions of the

country pay attention and plan to improve the level of mind-awareness and resilience of students, and since mind-awareness is one of the variables that It is effective in improving resilience and it is a skill that has the ability to be taught. It is suggested that future research be directed to experimental designs related to the training of this skill. One of the limitations of this research is the size and characteristics of the sample. Therefore, it is suggested to compare the implementation and results with the current research with a sample with a variety of age range, education level, universities, and schools, so that these demographic characteristics can be determined in the obtained result.

Conclusion

The results showed that mindfulness can increase people's resilience, and this feature helps people to overcome difficult and stressful situations and benefit from their adaptive skills and turn situations into opportunities for learning and growth.

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