

The Causal Relationship between Mindfulness and Perceived Stress with Mediating Role of Self-efficacy, Emotional Intelligence and Personality Traits among University Students

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Case Report

Abstract

The purpose of present study was to examine the casual relationship between mindfulness and perceived stress with mediating role of self-efficacy, emotional intelligence and personality traits among university students. The population in this study was all of the university students in Islamic Azad University of Zanjan, Iran. Who are studying in 2015-2016 academic year. From this population 250 students were selected using random stratified sampling method. The research instruments were Mindful Attention Awareness Scale (MAAS), Scherrer's self-efficacy questionnaire, The Schutte Self Report Emotional Intelligence Test (SSEIT), NEO Personality Inventory-Short Form (NEO-FFI), and The Perceived Stress Scale (PSS). The proposed model of the relationships between variables was tested using structural equation modeling. According to results, proposed model had an acceptable fitness regarding fitness indices. Results revealed that there is relationship between mindfulness and perceived stress, with mediating role of self-efficacy, emotional intelligence and personality traits among university students.

Keywords: Mindfulness; Perceived stress; Self-efficacy; Emotional intelligence; Personality characteristics.

1. Introduction

Stress is one of the most pervasive aspects of modern life. Various factors such as urbanization issues, complexity of social relationships, expectations, features and ease of access needs and desires, structural instability of political, social, economic and insecurity and continuous character, body and soul of man under influence, pressure and will be gradually eroded. Many of them deal to these pressures successfully but some desperate and disturbed emotional, behavioral and social problem. As a person with high self-efficacy, coping with stress also will increase skill level. Self-efficacy in ability and presence of mind and mindfulness as being in now targeted and without judgment has important role on stress. It is needless to say that these variables and personality traits such as emotional intelligence will be irrelevant [1].

Psychological problems that are part of human life, in some cases, may force us into a lot of measures and

actions that disrupt organized crime. Over time humans to regulate mental states and behavior, many strategies through personal experience and trial and error, others through parents, people, books and literature are taught. A glance at the most important factor in determining individual behavior indicates that health-related behaviors and risk their strategies. The first variable in this research is mindfulness. Mindfulness means paying attention to specific and targeted manner in present and free of judgment [2]. The clinical definition similar to definition of Buddhist mindfulness in most cases it is because this definition is consistent with concept of Buddha.

Mindfulness in Buddhism was defined as considering non-argumentative or record events without reaction or defined mental evaluation. Mindfulness is continuing to focus attention on the process by which is given content [3,4].

Kabat-Zinn defined concept of mindfulness to improve quality and showed how person will take care of health in process of mindfulness [4,5].

In other words Mindfulness is skill that allows us present events that upset less than that amount. When we are aware of present moment our attention on other past or future does not involve while most psychological impact of concentration on their past by adding 5 to 7 Quality presented by Kabat-Zinn, total of 12 of them to party [5]. These qualities include: non-judgmental, acceptance, patience, trust, openness, release, quiet, generosity, empathy, gratitude, loving kindness, and gentleness.

According mindfulness, precise and minute attention to what one is now being interpreted and based on responses from raw sensory events. Although main purpose of mindfulness relaxation but non-judgmental view negative events internal or physiological arousal causes this mode. Many scientists also found similar results from effects of mindfulness on other disorders, such as mindfulness-based stress reduction results in regression and colleagues, as well as have found success in treating the symptoms of physical and psychological suffering from chronic pain [6].

Stress is term used in medicine and biology is applied in different ways. Sometimes means an event or situation those harmful effects on organisms and sometimes in

sense of psychological stress caused by these events and situations. The biological integrity of organism in proper sense of disorder and conditions that is considered organism naturally avoided stress [7].

Stress is as psychological disorder could be influential in mind and self-consciousness; on the other hand, this variable is interacting with emotional intelligence and personality traits. In this case, level of stress associated with his personality traits and emotional intelligence. Previous studies also stress importance of emotional intelligence in adjustment process. Moore's other variable in this research is self-efficacy. The personal mechanisms, none more fundamental and more comprehensive than the self is not in control behavior and environmental applications [8].

Based on Bandura's theory in social-cognitive theory, self-perception abilities to make people's beliefs about the planned levels of performance, based on events that affect their lives. After the definition, it means that person's sense of self-efficacy and positive results cannot create dominant position [9]. In order that people's beliefs about ability to control their own lives. Self-efficacy perception in the people's efforts and patience and their perseverance in face of adversity and stress affects them [10].

In the last years of emotional intelligence for many applications in various fields such as education, jobs, personal growth, interpersonal differences, and so, is becoming increasingly popular. The reason perhaps is the claim that emotional intelligence is better predictor of success than traditional intelligence and social life. Emotional intelligence is rooted in concept of social intelligence that Thorndike belongs to others described it as skill. Gardner, raised the issue of multiple intelligences contains eight essential aspect is that two of the dimensions of interpersonal and intrapersonal intelligence is intelligence and emotional intelligence; it seems that the combination of these two dimensions is listed. Emotional intelligence is ability to specify, productivity and application, understand and manage emotions in positive ways and constructive way. Emotional intelligence involves the ability to identify and characterize emotions in themselves and others [11].

Emotional intelligence consists of four basic components: self-awareness, self-management, social awareness and social comfort [12]. Intelligence was raised as cognitive ability by Alfred Binet and Theodore Simon in 1905. Although numerous studies have been conducted on this phenomenon and offered different theories but about different aspects of intelligence experts to achieve overall alignment.

Personality traits are other important issues affecting the amount of stress in people. Basically, psychologists, psychosomatic character of the dynamics of the systems that determine specific thoughts and behaviors shows the possibility of predicting what person will do in given situation [13]. Sometimes emotional words indicate a weak personality and someone who is not able to control childish behavior [14]. Basically, with ability mood and psychological factors neuroticism and extraversion are associated with abnormal social and communicative abilities later shows, may be associated with emotional intelligence construct.

Literature review shows that few studies have been done in the field of mindfulness and perceived stress mediated

by self-efficacy, emotional intelligence and personality traits. Yang and Farn did research on relationship as "mindfulness and emotional intelligence perceived stress mediation" [15]. The results showed that emotional intelligence is known as one of the most important factors in mindfulness. In other words According to findings, higher individual's emotional intelligence, mind and bring greater awareness resulting in perceived stress was lower. Epping et al. did study entitled as "individual differences in states of mind awareness". The aim of this study was to determine individual differences are due to state of mindfulness. The results showed that personality factors inherent in any person's mind and awareness. So these two variables have reciprocal relationship with each other. Personality can predict their emotional intelligence. According to Goleman personality right combination of mind and heart and is usually symbol of wisdom, intelligence and heart symbol, emotional intelligence, but culturally correct information to their emotions as emotions do not trust defines mind.

Broderick was conducted research as "mindfulness interventions for adolescents and its role in stress reduction"; results showed that mindfulness is one of the most important factors in reducing stress [16]. In this study, between these two variables, inverse relationship was observed, so that whatever mind awareness is high, rate of stress will be reduced. A study was conducted that showed self-efficacy can stress on perception people. In this regard, such sense of self-efficacy wrote important role in person's perspective on objectives, tasks and challenges.

The results of Narimani et al. research showed that self-efficacy is significant predictor of academic stress is negative. So it can be concluded based on research done self-efficacy can be an important mediating role between mindfulness and stress is perceived [17].

As above, this study aimed to investigate causal relationship between mindfulness and perceived stress, with mediating role of self-efficacy, emotional intelligence and personality traits among undergraduate students of Islamic Azad University of Zanjan.

2. Methodology

The present study is descriptive with correlation research design. From Islamic Azad University of Zanjan, Iran, 250 students were selected with random stratified sampling and filled out Mindful Attention Awareness Scale (MAAS), Scherrer's self-efficacy questionnaire, Schutte Self Report Emotional Intelligence Test (SSEIT), NEO-Personality Inventory-Revised (NEO-FFI-R), and The Perceived Stress Scale (PSS).

2.1 Instruments

A) Mindful Attention Awareness Scale (MAAS): Mindfulness Scale is a single-factor 15-item questionnaire which assess quality of mindfulness [18]. Scoring is done positively and with six-point scale (1=almost always to 6=almost never). The minimum and maximum scores of each individual in scale are 15 to 90. The internal consistency test questions are based on Cronbach's alpha coefficient is reported 0.80 to 0.87. The reliability of scale due to its negative correlation with measures of depression and anxiety and positively correlated with measures of positive affect and

self-sufficient has been reported. Test-retest reliability coefficient of scale fixed for the period of one month has been reported [18]. The Persian version of scale Cronbach's alpha for questions on sample of 723 students was calculated 0.81.

B) Scherrer's self-efficacy questionnaire: This questionnaire was made by Scherrer et al. which measures individual beliefs about one's ability to overcome the various situations. The questionnaire consisted of 17 items that has been graded based on the Likert scale ranging from completely agree (score 5) to completely disagree (score 1). Asgharnejad et al. evaluate internal consistency items total scale by Cronbach's alpha coefficients which reported 0.83 and in research of Woodrooffe and Kashmar reported 0.84.

C) The Schutte Self Report Emotional Intelligence Test (SSEIT): This test measures general Emotional Intelligence (EI) by using four sub-scales: emotion perception, utilizing emotions, managing self-relevant emotions, and managing others' emotions. The SSEIT is structured of EI model by Salovey and Mayer (1990). The SSEIT model is closely associated with EQ-I model of Emotional Intelligence. The SSEIT includes a 33-item self-report using a 1 (strongly agree) to 5 (strongly disagree) scale for responses. Siarvch Dein's review (quoted by Khosrojavid) on adolescents 13 to 15 years old for total reliability $\alpha=0.84$ and its subscales showed for the assessment and expression of emotion, regulation and operation of excitement $\alpha=0.55$, $\alpha=0.66$, $\alpha=0.76$.

D) NEO Personality Inventory-Short Form (NEO-FFI): NEO-FFI-R was proposed by McCrae and Costa (1989) and has 60 items and 5 subscales of neuroticism (N), extraversion (E), openness to experience (O), agreeableness (A), and conscientiousness (C). The answers are scored based on a Likert scale. Some items of the questionnaire are directly and some are reversely scored.

NEO-FFI-R reliability in Iran between students indicated values of 0.83, 0.75, 0.80, 0.79 and 0.79 for N, E, O, A, and C factors.

E) The Perceived Stress Scale (PSS): The Perceived Stress Scale (PSS) is the most widely used psychological instrument for measuring the perception of stress. It is measure of degree to which situations in one's life are appraised as stressful. Items were designed to assess how unpredictable, uncontrollable, and overloaded respondents find their lives to be. The scale also includes a number of direct queries about current levels of experienced stress. Moreover, questions are of a general nature and hence

are relatively free of content specific to any sub-population group. The questions in ask about feelings and thoughts during last month. In each case, respondents are asked how often they felt certain way.

3. Results

In order to analyze the data and the analysis method by using Analysis of Moment Structures (AMOS) version 20 and also SPSS software was used. Chi-square test was used to study hypothesized model fit observed data and comparison with other alternative patterns of.

The results of the study (Table 1) showed that model fit chi-square goodness of fit index χ^2 amount equal to 8.67, degrees of freedom and significance level of 5, $p \leq 0.001$. Since chi-square test increase sample size and correlations between variables are concerned so there was most significant indicator of this. The other indices were used to understand model (Table 2).

Therefore, results can be seen in Table 3 that proposed model for entire study sample ratio chi-square test subjects on degree of freedom (df/χ^2) equal to 1.73 goodness of fit index (GFI) equal to 0.99, adjusted goodness of fit index (AGFI) equal to 0.96, incremental fit index (IFI) 0.98, comparative fit index (CFI) equal to 0.98, normalized fit index (NFI) equal to 0.95, Tucker-Lewis index (TLI) equal to 0.94 and root mean square error of approximation index (RMSEA) is equal to 0.04 stating that the proposed model was good fit (Figure 1).

The findings of assumptions proposed implicit in model. Relations bootstrapped by using the software AMOS-20 were tested (Table 4).

4. Discussion and Conclusion

The present study aimed to investigate causal relationship between mindfulness and mediated by self-perceived stress, emotional intelligence and personality traits took place. The results show Standard path of mindfulness and perceived stress factor is significant. This study is consistent with results' Farid and Salibi [19].

The results showed there is significant relationship between levels of self-efficacy and coping styles. But the results of Creswell et al. and Broderick were antithetic with findings of this study [16,20]. To explain these findings can be explained not only by the mind sometimes facilitates positive assessment to reduce the detrimental consequences of stressful situations; but also through use of appropriate coping strategies to reduce problems

Table 1. The correlation coefficient between the variables in present study.

Variables	1	2	3	4	5	6
Mindfulness	1					
Emotional Intelligence	0.15*	1				
Self-Efficacy	0.12*	0.28**	1	1		
Introversion	0.13*	0.14**	0.16**	0.16**		
Neuroticism	-0.15*	-0.12*	-0.11*	-0.11*		1
Perceived Stress	-0.14*	-0.24**	-0.11*	-0.11*	0.27**	1

Table 2. Direct effect measurement parameters, standard error, the critical and significant levels proposed in present study.

Parameters Direction	B	β	S.E	Critical rate	P
Mindfulness → emotional intelligence	0.062	0.159	0.025	2.538	0.011
Mindfulness → Self- efficacy	0.029	0.125	0.014	1.985	0.047
Mindfulness →personality traits	0.015	0.149	0.006	2.304	0.021
Mindfulness → perceived stress	-0.021	-0.208	0.010	-2.065	0.030
Emotional intelligence→ perceived stress	-0.274	-0.227	0.069	-3.971	0.000
Self-efficacy→ perceived stress	-0.042	-0.114	0.020	-2.139	0.033
Personality traits → perceived stress	0.403	0.282	0.091	4.414	0.000

Table 3. The proposed model fit indexes in present study.

Index	χ^2	Df	df ² / χ	GFI	AGFI	IFI	CFI	NFI	TLI	RMSEA	Sig.
The proposed model	8.67	5	1.73	0.99	0.96	0.98	0.98	0.95	0.94	0.04	P ≤ 0.001

Table 4. Results present study in the proposed bootstrap method in mediating path.

Path	Low limit	High limit	P
Mindfulness → emotional intelligence → perceived stress	-0.007	-0.039	0.007
mindfulness → self-efficacy → perceived stress	-0.16	-0.32	0.001
mindfulness → personality traits → perceived stress	-0.13	-0.27	0.001

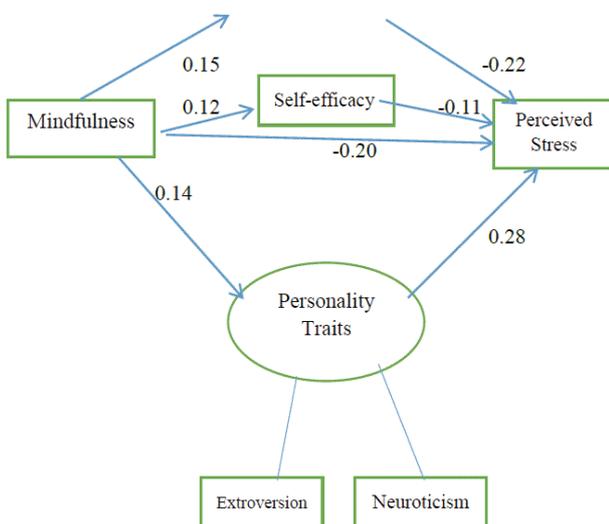


Figure 1. The proposed model fit.

related to stressful situations.

Findings show that the path of mindfulness and self-report standardized coefficient is statistically significant. In this regard, results of Narimani et al. are consistent with this research. In this regard, we can say that mindfulness is the ability to modify behavior patterns and negative automatic thoughts and help set positive behaviors related to health [17]. Needless to say, person who has the ability

Mindfulness is therefore likely to have high emotional intelligence.

The results of structural model derived from study show that standard rate of mindfulness with personality traits was significant. The results of Rostami et al. in this regard showed significant relationship between self-efficacy and mindfulness.

The results of Hosseini showed that relationship between attachment styles and trends of drug is only meaningful avoidant attachment style [21]. Between personality characteristics and tendencies of agreeableness and conscientiousness were significantly associated material dimensions. The relationship between self-control and significant material tends to be negative. There was no significant relationship between mindfulness and towards drug abuse. Mindfulness, self-control substances mediating role in the relationship between the characters tend to do as well as mindfulness, self-control and character mediating role in relationship between attachments styles are biased material.

The results showed that the standard coefficient is statistically significant efficacy and perceived stress. In this context, the results Cassidy is consistent with the study. Explanation of this finding can be explained by events in our lives when we experience stress, causes emotional responses, cognitive, behavioral and physical health is our event.

The results showed that the standard rate of emotional intelligence and perceived stress was significant. In this

regard, the findings Yang and Farn and Au et al. are consistent with our results [15,22]. These findings are explained in the traditional model of social protection, three models buffered effect of the original model and the mediator can justify appropriate. The model assumes that effect of cushioning social protection of individuals against stressful experiences protection. Striker stress reduces the negative effects of stress on health. In fact, social support can prevent or reduce stress by providing better resources to deal with stress.

Study findings showed that the standard rate of personality and perceived stress is significant. The results of Eastin; Holland et al. are consistent [23]. The results of Samari and Lali were also consistent with the findings of the present study [24]. To explain these findings buffer model suggests the presence of situational factors (eg, social support, empathy others) or certain personality traits (eg, sociability) can lead to negative effects of stress.

In this regard, findings of Robins are also consistent with current research. Through breathing and thinking people will be trained. The results show that between mindfulness and emotional intelligence perceived stress levels through there. In this regard, results of Tenney et al. were in line with the findings of the present study [25]. These findings can be justified that when person is having difficulty in maintaining social and emotional issues, feelings of inadequacy and worthlessness; so, this would create stress in people. However, this understanding, beliefs, thoughts are important contribution to resistance and negative interpretations of their inner experiences.

In present study, this study, like other research in field of humanitarian issues faced by constraints and problems. Trying to resolve them in future research, it can be confirmed on results obtained in this study.

These restrictions include: This research has been performed only on Azad University of Zanjan and its results on this group of patients in other cities should be generalized with caution. Also, due to the fact that students were each has special family circumstances, there is possibility of impact of these items, so should be caution exercised in generalizing results.

Structural stress has multiple components. Increasing concerns about the quality of evidence that mindfulness training, perceived stress levels low self-efficacy, emotional intelligence and personality traits seen as desirable features. Based on theoretical foundations and research institutions should be increased in designing and implementing mindfulness, self and emotional intelligence of students to be aware of these consequences. Due to effect of personality traits of mindfulness and emotional intelligence, perceived stress, self-efficacy students, it is suggested that these findings to be universities. It is also expected that mindfulness-based interventions through increasing mindfulness is also affected by other variables.

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