

The Mediating Role of Spiritual Intelligent in Relationship of Mindfulness and Resilience

Received 1 Mar 2016; Accepted 13 Apr 2016

Mojtaba Salmabadi^{1*}, Ahmad Khamesan², Ahmad Usefynezhad³, Mahdijeh Shekhipoor²

¹ Farhangian University, Birjand, Iran.

² Department of Psychology, University of Birjand, Birjand, Iran.

³ AllamehTabataba' i University, Tehran, Iran.

Abstract

Background and Objectives: Family, personal and social factors play a role in resiliency. So this study was done for investigating the Mediating Role of Spiritual Intelligent in Relationship of mindfulness and Resilience in Vali-e-asr Hospital of Birjand.

Methods: The present study is an analyzing correlation type. 120 staffs (remedial, administrative, social service) of Vali-e-asr Hospital were selected by class random sampling, and answered to King spiritual intelligence, Brown and Rayan mindfulness, and Daivdson-Konover resiliency measures.

Results: The results showed that the direct effects of mindfulness and Spiritual intelligence on resiliency, and direct effect of mindfulness on Spiritual intelligence are meaningful. Also the findings showed that the presented model has a good fitness.

Conclusion: The results show that by increasing the mindfulness one can increase moral Spiritual while leading to rising people resiliency.

Keywords: Hospital Staffs, Mindfulness, Resilience, Spiritual Intelligence.

* **Correspondence:** Should be addressed to Mr. Mojtaba Salmabadi. **Email:** M.salmabady68@yahoo.com

Please Cite This Article As: Salmabadi M, Khamesan A, Usefynezhad A, Shekhipoor M. The Mediating Role of Spiritual Intelligent in Relationship of mindfulness and Resilience. Health Spiritual Med Ethics. 2016;3(3):18-24.

Introduction

Positive psychology oriented was mentioned by Seligman et al (1). On the issues in this school is the concept of resiliency; which is considered as the successful compatibility with adverse conditions of life (2). The two major factors in most of the definitions of resiliency are: a) positive stimulus to adverse conditions and b) feeling of being strength, skill, growth and more reliability etc (3). So resiliency in addition to compatibility and problem solving includes positive change or increase (4). In the past years, a large mass of the studies were on identifying effective factors on resiliency (antecedents and aftermath factors) (5). Among factors of preparing and growing resiliency, the role of inside and oneself processes should not be ignored which one of these factors is mindfulness. Mindfulness is a kind of

meditation which roots to the learning and religious rituals of East specially Buddhism (6), and was mentioned by Jon Kabat-Zinn (7) and is defined as a 'notice' in a specific way, targeted, in present time and without judgment (8). Mindfulness is a method for better life, relieving pains, enriching and making life significant (9). Proofs and literature of the study indicates the effectiveness effects of learning mindfulness on health (10). Researches have showed there is a positive relation with mindfulness and resiliency, for example the results of a study indicated that improving mindfulness is along with increasing the life quality (11). In a research it concluded that applying mindfulness techniques will increasing ones tolerance in a significant way so the psychological life quality will increase (12,13).

One of these variables which its effect on resiliency is studied is spiritual intelligence. The structure of Spiritual intelligence, is one of the concepts was mentioned and developed by the interest of religious psychologists (14). Jain M, and Purohit P define the spiritual intelligence as an experienced capability which enables people to achieve a better knowledge and understanding and prepares development and success in life (15). According to King spiritual intelligence is a complex of mind capabilities which are involved in unity and adaptive application of spiritual and a meta-physics individual and achieving to some conclusions like the notion of deep existential, improving concept, knowing higher self and domination on spiritual levels (16).

Various researches on spiritual intelligence relation with resiliency have been done that indicate a meaningful relation between spiritual intelligence and resiliency (17,18). In a study the role of spirituality as a property and features of resilience people was mentioned (19). The results of other study showed there is a relation between spiritual teaching and resiliency and spiritual unity and spiritual connection had the most role in prediction of resiliency (20). The results of a research showed that mindfulness has a meaningful relation with spiritual welfare (21), mental health (22). Also improving the mindfulness is related with spirituality and increasing mindfulness and spirituality will cause a decrease in psychological disorders (23). Accordingly the results indicate mindfulness can influence welfare, spirituality and health and in a positive and meaningful way it will be predicted (24).

According to the importance of hospital staffs, there is a need in researching on identifying and solving job problems and spiritual pressures in this occupation, so studying this issue and its relating factors is a matter of importance. In other hand, in previous researched as the researcher have studied there was no such a research with these three variables. So researcher tried to show the simultaneous relation of these three variables in the form of the presented model in figure 1. So we want to measure the role of spiritual

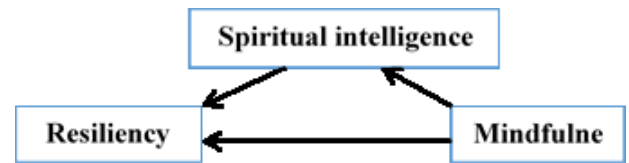


Figure 1: simultaneous relation of three variables

intelligence and mindfulness on their effects on resiliency; so that act significantly in order to improve physical and mental health and increase quality of life, occupation and citizens health; therefore the main purpose of the study is to investigate the role of intermediary of spiritual intelligence in relation with mindfulness and resiliency; so the researcher's main question is 'does spiritual intelligence has intermediary role between mindfulness and resiliency?'

Methods

Present research in accordance with the main purpose and data collection according to subject nature and study purpose is path analysis. The research population was all of the staffs of science university of Birjand in 2015. As the research sample included three subgroups of medical, official and service, so a sample of 120 people (25); were selected accidentally. In this research, three scales were used to evaluate a) mindfulness scale of Brown and Ryan b) spiritual intelligence scale of King C) resilience scale of Kounur-Davidson.

Mindfulness scale of Brown and Ryan: Brown and Ryan designed this scale to measure mindfulness or considering the present mindfulness (11). This scale consists of 15 elements, which is numbered, in a 6-degree Likert; and a total score for mindfulness is given which the range is from 15 to 90 and higher score indicates more mindfulness. Cronbach's alpha of this scale was obtained for a student sample 0.82 and for an adult 0.87 by researchers. Also this scale positive and negative solidity with other scales like, NEO-PI, NEO-FFI, depression scale of Beg and self-respect scale of Rosenberg and scale of anxiety was shown (11). Solidity and stability of a scale in Iran was approved, in this research stability was calculated by computing inside homology with coefficient of Cronbach's alpha of 0.81 (26). In the present research, total

stability calculated by Cronbach's alpha method was 0.78.

Scale of spiritual intelligence of King: this questioner was created by King and has 24 items which measures the spiritual intelligence in the scale of 5 degree Likert and its marks are 0 to 96 and consists of four scales of existence critical thoughts, creating self-meaning, transcendental intelligence, developing consciousness (16). The scale of stability by Cronbach's alpha is 0.92 and by fifty-fifty method was 0.91. Investigating the validity of each subscales also similarly the Cronbach's alpha for existence critical thoughts, creating self-meaning, transcendental intelligence, developing consciousness 0.78, 0.78, 0.87, 0.91 was calculated (16). In addition, in an Iranian research the Cronbach's alpha coefficient of this questioner was 0.89 and its validity coefficient in a sample of 70 people in a period of two weeks was calculated 0.67 (27). In the present research, the total Cronbach's alpha was obtained 0.89 for this scale.

Resilience scale of Kounur-Davidson: this scale includes 25 options that measures resiliency structure in the 5 degree Likert. Each term is numbered according to Likert scale from zero (completely false) to 4 (always true) and numbering domain is from 0-100. Pre-study results relating psychological features of the scale in normal and sick samples have proven its stability and solidity (28). In Iran the mentioned scale was fulfilled for 248 people and the stability was obtained by inside similarity of Cronbach's alpha test 0.89 and its solidity through factor analysis was 0.87 (29). In the present research, the stability was 0.81 by Cronbach's alpha.

To fulfil the questioners of mindfulness, spiritual intelligence and resiliency after specifying the sample, the researcher have attended at the hospital in specific days and times and from every group of staffs the desired sample was selected randomly and after giving enough explanation on how to answer the questions and assuring them from keeping their information secret and they will be used in a research, the questioners were delivered. Required time to complete the

questioners was 20 to 30 minutes. To analyse data mean, standard deviation and solidity coefficient and path analysis was used by AMOS software.

Result

Qualifying findings showed that highest frequency in the age 20-30 was 65% (78 people) and lowest frequency for people of 41 to 50 years old was 3.3% (4 people). Also 29.2% (35 people) were single, 66.7 % (80 people) married, and 4.1 % (5 people) were divorced. In table 1. solidity matrix between researches variables are reported.

Table 1. qualifying findings and solidity matrix of research variables

Variables	Mean (SD)	1	2	3
1 Mindfulness	60.8 (15.5)	1		
2 Spiritual Intelligence	56.0 (14.2)	0.82	1	
3 Resiliency	64.5 (12.3)	0.85	0.78	1

Results show that solidity between mindfulness and spiritual intelligence ($R=0.82$) and resiliency ($R=0.78$), in validity level 95% is meaningful ($p<0.05$). In order to answer the main research question based on 'Does the model of making clear the resiliency according to mindfulness and mediating role of spiritual intelligence with fitting empirical data?' we used path analysis. Amount of fitting index ($Df/x^2=1.17$, $RMSEA=0.07$, $NFI=0.91$, $NNFI=0.86$, $CFI=0.91$, $GFI=0.98$, $AGFI=0.94$) shows the model totally has a good fitness and therefore answering to the research hypotheses is permitted. In the following the final model in unstandardized coefficients and coefficients of the path (β) are reported (Table 2).

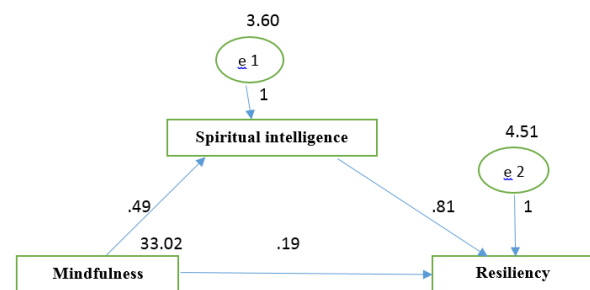


Figure 2. unstandardized coefficients paths of final model clearing resiliency

Path coefficient test in figure 2 shows that standardized coefficient of path was direct

Table 2. Coefficients And Meaningfulness Of Effects Of Mindfulness And Spiritual Intelligence On Resiliency

Criterion Variable	Predict Variable	Type of Effect	Standardized Coefficeint	B Standardized	Meaningful Statistics	Sig
Resiliency	Mindfulness	Direct	0.19	0.26	3.17	0.001
	Mindfulness	Indirect	0.49	0.83	5.53	0.001
	Spiritual Intelligence	Direct	0.81	0.64	7.81	0.001

effect of mindfulness on spiritual intelligence in level of 95% of meaningful assurance and direct effect of spiritual intelligence on resiliency was meaningful ($p < 0.05$). Another point that should be consider in figure 2 is the criterion variable that indicates direct effect of this variable in a way that as the mindfulness increases, spiritual intelligence and resiliency increases.

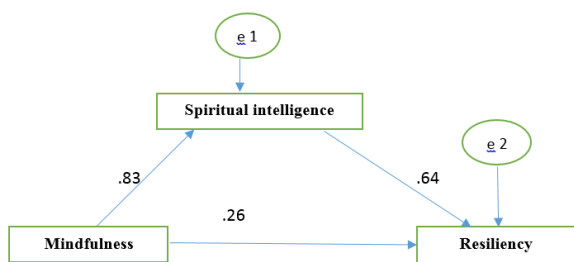


Figure 3. Unstandardized coefficients path of final model clearing resiliency

Another hypotheses that show in figure 3 is seeking for is related to the size of indirect effect of mindfulness variable on resiliency through mediating variable of spiritual intelligence. Results of the test of indirect effects in AMOS software showed the size of indirect effect of mindfulness variable on resiliency through mediating spiritual intelligence ($\beta = 0.83$) in level 95% of assurance was meaningful.

Discussion

Present research with the purpose of specifying the mediating role of spiritual intelligence in relation with mindfulness and resiliency was conducted. Suggested model on the research was based on the hypotheses that mindfulness by spiritual intelligence will lead to changing the resiliency level. As the aim of the research was to explain the mediating role of spiritual intelligence in the relation of mindfulness and resiliency of the staffs of Birjand Vali-e-Asr Hospital, researchers hypothesized the structural and path model.

Data analysis indicated that spiritual intelligence variable, as a mediating variable was able to explain the relation between mindfulness and resiliency. The result of the research showed that mindfulness by spiritual intelligence leads to changing the level of resiliency. Although there is no research in codification of structural model based on these variables with resiliency, the effect of each variable was individually directly and indirectly studied and their effectiveness in increasing resiliency was investigated. Thus, they are homogenous with previous findings.

People who have a high mindfulness, have a better knowledge and insight on cognitive process and their capabilities and apply effective strategies on handling duties and using skills. Mindfulness leads to increase one's consciousness to himself, others and position in present time and this increase in consciousness can indicate that increase of health signs and compatibility will show up parallel to abilities. In other words increase in mindfulness level and overall consciousness will make an individual more conscious to oneself conditions to enable him to be present in time and get the best from the upcoming situation. Individuals with high mindfulness mostly evaluate stress, use defensive strategies less and report defensive problem oriented. In addition, compatibility responses to stress and defensive strategies in a high amount regarding to the relation between mindfulness and mental health will be balanced (30).

Researchers believe that spirituality causes that human consider the problems with more tenderness and calmness, attempt more to find a solution, tolerate more in life difficulties and give motion to their lives (31). It seems that spirituality and connection with the power source can increase individuals' tolerance in difficulties. In other hand, spirituality enables reinterpretation of uncontrollable events and as a result these events seem less stressful and

more controllable and also relating negative events to uncontrollable factors will lead to create an optimistic style (32); all of these factors will provide people with resilience and tolerance in life difficulties. We can note that spiritual experiences by creating meaning to people will create targeted feeling, self-efficiency and tolerance in difficulties.

Other finding of the research showed that mindfulness has a direct effect and meaningful on resiliency, from this finding we come to this conclusion that as the mindfulness increases, resiliency increases; that the above mentioned finding with the previous researches like (11, 12, 13, 33) showed that increase in mindfulness is along with increase in psychological welfare and in somehow is homogenous. Kingston et al. (12) in a research showed that with skill of mindfulness, mindfulness and pain tolerance will increase meaningfully and mental welfare improves. Morone et al. (13) in his study on patients with chronic disease found out that mindfulness practice will increase psychological welfare in people that this has an immediate effect on increasing mood and long-term effects on the quality of life. In fact, they found that increase in mindfulness is along with increase in psychological and health welfare. Carmody and Baer (33) believe that practicing mindfulness will increase different factors of mindfulness like observation, being non-judgmental, non-reacting and acting will be along with consciousness. Improving these factors also causes increase in psychological welfare, decreasing stress and psychological signs. To Krans et al. opinion training and practicing mindfulness has three main elements that the third principle is increasing understanding to human vulnerability, that this principle through listening techniques and direct observation will obtain experimental processes during practicing mindfulness (34). Through mindfulness, it is learnt that pain and suffering is one of our experiences and shows the patients that the existence of these pains and sufferings might be an unhealthy habit; and this will enable re-interpreting of the problems in human; that in turn increase and defence of people in events (resiliency). Kabat

Zinn have specified seven special factors that create mindfulness bases, one of these factors that is similar to resiliency in patience that means the ability to tolerate difficulties along with relaxed feeling and self-control. It not only needs understanding of this issue that things should be obvious in the correct time, but also includes a development of this insight as a person who tolerate his felt disappointments from his current success. There is no need to be impatient to yourself because of negative evaluation of the situation by your mind or because of stress. In return, patience requires us to observe experiences. This insight is useful specially when the mind in excited. Instead of being involved in your mind that may cause distraction from present time events and instead of rushing into future, patience requires the person to be present in these moments and accept them completely. So according to above mentioned items, acceptance of the above mentioned hypotheses is expected (7).

The last finding of the research showed that spiritual intelligence has a direct and meaningful effect on resiliency, from these findings we can elicit that the more spiritual intelligence is, the -more resiliency will be that the result is like the results of previous researches like (17,18). Research findings showed that there is a meaningful relation between spiritual intelligence and resiliency and spiritual intelligence can predict resiliency (22). In addition, the existence of positive and meaningful solidity between spiritual intelligence and resiliency in some researches was proved (35). In explaining the result, it can be stated that spiritual intelligence indicates for a group of abilities, capabilities and spiritual resources that their application in daily life can improve ones' versatility, specially is emphasized on its role in solving existence issue, finding concept and purpose in daily events (14,36). Facing stress, creating personal concept (spiritual intelligence item) enables individual to find a concept or purpose in new conditions that if its stressful and worrying and be able to adapt to new conditions, so change stress making factor and decrease its negative effects, similarly while facing hard situation,

creating personal concept may guide the individual toward a meaningful solution and act as an effective problem solution (37). Lysne et al. believe that believes words and images that need source of love, support and convenience decrease stress and has an effective effect on special functions of the body and maybe by this mechanism, spiritual Intelligence factors improve resiliency (38).

As the study was conducted on staffs of Vali-e-Asr hospital in Birjand so in generalization of the results it should be concerned. There should be more researches on studying these variables for populations of the women, the men, the elderlies, people who had accident, crises etc. and compare the results and about the effects of the believes' functions and spiritual intelligence on resiliency there should be more researches. Also the results of the study can be effective in policy making and programing of this population.

Conclusion

Above mentioned findings state applied explanations on spiritual intelligence. So considering spiritual intelligence and mindfulness is important in improving resiliency.

Conflict of interest

The authors declare no conflict of interest.

Acknowledgements

The authors are also thankful Birjand Vali-Asr Hospital staff for their participation in this study.

References

1. Luthans F, Avolio BJ, Avey JB, Norman SM. Positive psychological capital: Measurement and relationship with performance and satisfaction. *Pers Psychol*. 2007;60(3):541-72.
2. Zautra AJ, Hall JS, Murray KE. A new definition of health for people and communities. *Handbook of adult resilience*. New York: Guilford; 2010.
3. Simon JB, Murphy JJ, Smith SM. Understanding and fostering family resilience. *Fam J*. 2005;13(4):427-36.
4. Plakson D. Resiliency in victims if Bullying victims and its impact on higher Educational goals. [Thesis]. United States: Walden University; 2011.
5. Jalili A, Hchari M. Explaining Psychological Resilience Based on Self-Efficacy in Athlete and Non-Athlete University Students. *Dev Mot Learn*. 2010;2(3):131-53. [Persian]
6. Ost LG. Efficacy of the third wave of behavioral therapies: A systematic review and meta-analysis. *Behav Res Ther*. 2008;46(3):296-321.
7. Kabat-Zinn J. Full catastrophe living: The program of the stress reduction clinic at the University of Massachusetts Medical Center. New York: Delta; 1990.
8. Moore A, Malinowski P. Meditation, mindfulness and cognitive flexibility. *Conscious Cogn*. 2009;18(1):176-86.
9. Siegel RD. *The mindfulness solution: Everyday practices for everyday problems*: Guilford Press; 2009.
10. Kohls N, Sauer S, Walach H. Facets of mindfulness—results of an online study investigating the freiburg mindfulness inventory. *Pers Individ Dif*. 2009;46(2):224-30.
11. Brown KW, Ryan RM. The benefits of being present: mindfulness and its role in psychological well-being. *J Pers Soc Psychol*. 2003;84(4):822.
12. Kingston J, Chadwick P, Meron D, Skinner TC. A pilot randomized control trial investigating the effect of mindfulness practice on pain tolerance, psychological well-being, and physiological activity. *J Psychosom Res*. 2007;62(3):297-300.
13. Morone NE, Lynch CS, Greco CM, Tindle HA, Weiner DK. "I felt like a new person." The effects of mindfulness meditation on older adults with chronic pain: qualitative narrative analysis of diary entries. *J Pain*. 2008;9(9):841-8.
14. Nasel DD. *Spiritual Orientation in Relation to Spiritual Intelligence a Consideration of Traditional Christianity and New Ageindividualistic Spirituality*. [Thesis]. Australia: the university of south Australia; 2004.
15. Jain M, Purohit P. Spiritual intelligence: A contemporary concern with regard to living status of the senior citizens. *J Indian Acad appl Psychol*. 2006;32(3):227-33.
16. King DB. *Rethinking claims of spiritual intelligence: A definition, model, and measure*. Michigan: ProQuest; 2008.
17. Khodabakhshi Koolae A, Heidari S, Khoshkonesh A, Heidari M. Relationship between Spiritual Intelligence and Resilience to Stress in Preference of Delivery Method in Pregnant Women. *Iran J Obstet Gynecol Infertil*. 2013;16(58):8-15. [Persian]
18. Keshavarzi S, Yousefi F. The Relationship between Emotional Intelligence, Spiritual Intelligence and Resilience. *J Psychol*. 2012;16:299-318. [Persian]
19. Greeff AP, Loubser K. Spirituality as a resiliency quality in Xhosa-speaking families in South Africa. *J Religion Health*. 2008;47(3):288-301.
20. Hashemi L, Jowkar B. Study of Relationship between Spiritual Transcendence and Resilience. *J Educ Psychol Stud*. 2011;8(13):123-42. [Persian]
21. Ghasempour A, Jamal S, Mansoore Mahmoudim A, editors. *The relationship between mindfulness and spiritual well-being of students. The first National Conference on Student Social Determinants of Health*.

- Tehran: Tehran University of Medical Sciences; 2010. [Persian]
22. Narimani M, Zahed A, Golpoor R. Relation Between mindfulness, coping style and emotional intelligence with mental health. *J Teach Eval*. 2012;5(19):91-105. [Persian]
 23. Carmody J, Reed G, Kristeller J, Merriam P. Mindfulness, spirituality, and health-related symptoms. *J Psychosom Res*. 2008;64(4):393-403.
 24. Shapiro S. Exploring the effects of mindfulness meditation on health, well-being, and spirituality. *Spiritual High Educ Newsletter*. 2008;4(2):1-6.
 25. Delaware A. *Research Methods in Psychology and Educational Sciences*. Tehran: Virayesh; 2014. [Persian]
 26. Nejad Ahmadi N. Relationship between mindfulness, perceived stress coping and quality of life of cancer patients [Thesis]. Tehran: Teacher Training University; 2010. [Persian]
 27. Raghbi M, Bakhshani NM, Moallemy S. Investigation of simple and multiple between mental healths. Spiritual intelligence and dysfunctional attitudes. [Thesis]. Zahedan: University of Sistine and Baluchestan; 2010. [Persian]
 28. Connor KM, Davidson JR, Lee LC. Spirituality, resilience, and anger in survivors of violent trauma: A community survey. *J Trauma Stress*. 2003;16(5):487-94.
 29. Mohammadi M. Effective factors on resiliency in individuals at risk for substance abuse. [Thesis]. Tehran: University of Welfare and Rehabilitation; 2006. [Persian]
 30. Siddighi Arfaee F, Yazdkhasti A, Nadi Ravandi M. Resiliency Rate Predictability Based on Spiritual Intelligence among Students and Religion Researchers. *Cult Islam Univ*. 2014;4(3):353-72. [Persian]
 31. Elkins M, Cavendish R. Developing a plan for pediatric spiritual care. *Holist Nurs Pract*. 2004;18(4):179-84.
 32. Aukst-Margetic B, Margetic B. Religiosity and health outcomes: review of literature. *Coll Antropol*. 2005;29(1):365-71.
 33. Carmody J, Baer RA. Relationships between mindfulness practice and levels of mindfulness, medical and psychological symptoms and well-being in a mindfulness-based stress reduction program. *J Behav Med*. 2008;31(1):23-33.
 34. Crane C, Barnhofer T, Duggan DS, Hepburn S, Fennell MV, Williams JMG. Mindfulness-based cognitive therapy and self-discrepancy in recovered depressed patients with a history of depression and suicidality. *Cognit Ther Res*. 2008;32(6):775-87.
 35. Movlavi Z. Investigate the relationship between spiritual intelligence and mental health in Hamedan University. [Thesis]. Hamedan: Abouali Sina University; 2009. [Persian]
 36. Zohar D, Marshall I. *Spiritual capital: Wealth we can live by*. Oakland: Berrett-Koehler Publishers; 2004.
 37. Wachholtz AB, Pargament KI. Migraines and meditation: does spirituality matter? *J Behav Med*. 2008;31(4):351-66.
 38. Lysne CJ, Wachholtz AB. Pain, Spirituality, and Meaning Making: What Can We Learn from the Literature? *Religions*. 2010;2(1):1-16.