The comparison of life satisfaction-spritual health and psychological resilience among woman with geometric meditation versus nonmeditator

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ABSTRACT--The objective of study is to evaluate Geometric Meditation (GM) on psychological variables including psychological resilience, spiritual well-being and life satisfaction between practicing and non-practicing women. In this this cross-sectional comparative study, the intervention group was a sample (n=32) of women who participated in a three- hour- weekly training meditation class in Shiraz for eight months in order to learn practical and fundamental concept of GM. The instruments were Conner-Davidson (2003), Palutzin and Ellison's spiritual well-being (1983), and life satisfaction Diener (1985). According to the validity of the given questionnaire and its result, 32 participants were selected from both groups based on their age, education, and marital status. In order to examine the hypothesis, we used the Kolmogorov-Smirnov test, then independent T test was applied for evaluating resilience. GM programs show the evidence of resiliency increase (0.046<0.05). Using Mann-Whitney and Wilcoxon's non-parametric test to analyze the variables of spiritual well-being and life satisfaction showed insignificant difference between them. However, intervention group compared to control group had a higher score mean in spiritual well-being and life satisfaction. In Conclusion, GM has a positive role in increasing resilience, life satisfaction and spiritual well-being, however, stronger studies are vital to be carried out.

Key words--Geometric Meditation, Resilience, Life Satisfaction, Spiritual Well-being, Women, descriptive survey study

I. INTRODUCTION

Meditation is one of the branches of complementary medicine that can be used to prevent mental health issues and improve the health condition, along with conventional cares. The objective of this study is highlighting the role of geometric meditation on spiritual well-being, psychological resilience and life satisfaction among women who have an important role in a family.

Geometric meditation (GM) is an effective scientific method among the various types of meditation which have been published in numerous medical journals and data bases. This kind of meditation is based on mathematics, geometry, psychology, neuroscience, cognitive science and philosophy of mind (Nazaraghaei & Bhat, 2017).

The implication of meditation is not only an effective strategy in managing the mind and function of the human brain, but it also has many impacts on improvement of the body structure and functioning (Brewer &

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Garrison, 2014; Hinterberger, Schmidt, Kamei, & Walach, 2014; Marzetti et al., 2014; Santarnecchi et al., 2014). In the geometric meditation the delicate movements appearing in our body after breathing are depicted through geometric shapes. According to the diagram for each geometric techniques based on somatic-breathing, specific mathematical functions are assumed with the variables of "r" for the range of motion or amplitude and "T" for the time, also they are indicating the oscillation of the meditative curve (Nazaraghaei, 2017). Psychological experts recommended that meditation in order to promote life satisfaction (Anulipi, 2017), spiritual health (Kim, 2014), resilience, mindfulness and psychological wellbeing (Pidgeon & Keye, 2014). In addition there are some investigations evaluating meditation such as the effect of mindfulness meditation on conscious and non-conscious components of mind (Fabbro et al., 2017), the effect of geometric meditation based on cognitive therapy in obsessive-compulsive disorder showing a significant reduction in OCD symptoms, anxiety and depression as well as increased mindfulness skills (Torkamani, Nazaraghaei, & Nami, 2019). In the Other study, investigation showed Mindfulness meditation training may progress professional functioning and decline health care operation in adults with GAD (Hoge, E. A., Guidos, B. M., Mete, M., Bui, E., Pollack, M. H., Simon, N. M., & Dutton, M. A. , 2017). Contemporary health care is thought-provoking and multifaceted. One review showed that mindfulness meditation is an effective method for preventing and handling the workplace stress, which frequently plague nursing staff and students (van der Riet, P., Levett-Jones, T., & Aquino-Russell, C. (2018).

The process of industrialization of societies and the complex changes on the one hand and the rapid process of these changes on the other hand have led to an alteration in people's view on life. The changes have caused problems in daily lives of many women. Todays, the capacity of individuals to deal with the problems and enhance these capacities are very much taken into consideration. Therefore, the main objective of this research is based on the individual's capacities such as spiritual health, life satisfaction and resilience in order to increase mental health. The present investigation is designed due to lack of sufficient research related to this kind of meditation and these psychological variables.

According to a well-known definition of the World Health Organization (WHO), there is three dimensions of health: the mental, the physical and the social. The elements of health are the range of personal, social, economic, and environmental factors that influence both individual and population health. They include the social and economic environment (e.g. social support networks, education, income, health services and social position), the physical environment (e.g. life and workplace environments), and the person's individual characteristics (e.g. genetics and gender) and manners (WHO.org, 2016 [internet]).

Spirituality has been known globally as an important aspect for answering to many questions regard to health and happiness. Spiritual well-being should not be mistake with psychological well-being. Furthermore, spirituality, personal beliefs and religiousness are not synonymous. Spirituality has established much interest in health care amenities; it can expand plans for handling stress and can positively impact on immune system, hormonal, cardiovascular (heart and blood vessels), and nervous systems (Chirico, 2016). Gomez presented that spiritual well-being is characterized by having meaning and purpose in life (Gomez & Fisher, 2003).

In other definition, spiritual wellbeing contains psycho-social and also religious elements (Ellison, 1983). There are various investigators in supporting this theory that spiritual health can have a positive impact on psychological function and adaptation. The positive correlations have been reported between spiritual wellbeing and variables such as depression, self-esteem and internal religious orientation (Kim, Heinemann, Bode, Sliwa, &

King, 2000), emotional well-being and life satisfaction (Miller et al., 2014). An interventional research based on spirituality and its combination with meditation techniques lead to a significant improvement in quality of life (Delaney, Barrere, & Helming, 2011).

Recently, one of the concepts of positive psychology that has become very noticeable is the concept of life satisfaction. In fact, life satisfaction is an individual general concept resulting in cognitive and emotional perception of whole life (Thimm, 2010). On the other hand, the positive psychology's approach, as a wonder of psychology, despite merely repairing injuries is to improve the quality of life and this movement seeks to take advantage of human strength as a time spent on mental illness (Robbins, 2008).

Life satisfaction as one of the components of inner well-being includes the attitude of a person to his overall life assessment such as family, life and educational experience (Seligman, 2014). Hence, this approach is constructed by factors that making people more adapted and more satisfied with the needs and treats of life of the most fundamental research construct this approach (Inzlicht, Aronson, Good, & McKay, 2006). Many studied have been done about the life satisfaction such as results of the randomized controlled trial study displayed that hope, life satisfaction, and spiritual well-being of elderly patients with mild or moderate dementia could meaningfully be improved with a 6-week spiritual reminiscence intervention (Wu & Koo, 2016). In addition, in the other study the relationship between spiritual well-being and life satisfaction among the university students has shown the significant positive correlation between spiritual well-being with perceived social support and life satisfaction(Alorani & Alradaydeh, 2018).

Other topics that can be considered along with life satisfaction and spiritual well-being is resilience. Resilience is meant to be the ability of a human being to successfully overcome and adopt with dissatisfied conditions. Despite human being difficulties facing in his life, achieves the emotional and social learning ability (Connor & Davidson, 2003). In the context of the resilient outcomes of a number of studies, there has been an indication of a higher level of mental health and life satisfaction (Lazarus, 2004). The mediating role of resilience in the effect of mindfulness on life satisfaction indicated that resilience somewhat mediated among the relationship mindfulness and life satisfaction and affect components and its result corroborate an vital role of resilience in mindfulness using its valuable effects (Bajaj & Pande, 2015).

II. RESEARCH METHOD

The present study aimed to investigate the role of geometric meditation training on some psychological components such as spiritual well-being, resilience and life satisfaction. The statistical population included women who enrolled in meditation classes in the educational institution of Social and Individual Stress Reduction Association (SISRA) - Persian Meditation Academy- in Shiraz, 2017. The sample size was 50 women. After 8 months of training, participants were engaged in follow-up test and among these people, Potential participants (N = 32) were screened by considering criteria from volunteer populations and those with previous formal meditation practice experience. The included criteria were (a) enabling to sit down on a chair in such a way that the head and neck are in a straight line along with the natural curvature of the spine (b) participating in a training class (c) willingness to participate in the study and Excluded criteria were: (a) suffering from a psychiatric or medical disorder (b) Not attending in a training class regularly. The first objective of this study is to compare

meditated group with non-meditated group. In the second objective is to evaluate the role of meditation after 8 months by doing follow-up test. According to the validity of the given questionnaire and its result, 32 participants were selected from both groups based on their age, education, and marital status.

III. DATA COLLECTION

The first research instrument was the Satisfaction with Life Scale (SWLS; Diener, Emmnos, Larsen, & Griffin, 1985) which was developed as a measure of the judgmental component of subjective well-being (SWB). This is a five-item scale measurement has designed to measure global cognitive judgments of one's life satisfaction, Paloutzian and Ellison spiritual well-being questionnaire (1983). Regarding the second research instrument, the Spiritual well-being scale was designed to measure two aspects of religious well—being, and existential one. Paloutzian and Ellison defined religious well-being as "the vertical dimension referring to our sense of well-being in relation to God." In contrast, existential well-being is "the horizontal dimension referring to a sense of life purpose and life satisfaction, with no reference to anything specifically religious" (Paloutzian & Ellison, 1979a; cited in Elljson, 1983; p. 331).

The Connor-Davidson Resilience Scale (CD-RISC) which is the ability to "thrive in the face of adversity." developed in 2003 is used for resilience as the third instrument (Conner, K.M., Davidson, J. R. (2003). These questionnaires had been completed by two groups.

IV. Statistical Analysis

		Intervention Meditated women		Control Non meditated women		Resilience	Spiritual wellbeing	Life satisfaction P value
	Range	Frequency	Percentage	Frequency	Percentage	P value	P value	nP value
	30-39	11	34.4	18	56.3			
A (30)	40-49	12	37.5	9	28.1	0.487	0.371	0.881
Age	50-59	8	25	4	12.5	0.487		
	60-69	1	3.1	1	3.1			
	Diploma	3	9.4	1	3.1			
Education	Bachelor	16	50	21	65.6	0.210	0.542	0.430
	MA	10	31.3	8	25	0.210		
	Doctorate	3	9.4	2	6.3			
	Single	13	40.63	9	28.1	0.204	0.226	0.117

Table 1: Frequency distribution and the percentage of two groups

Marital	Married	19	59.37	23	71.9	
statues	Married	17	59.51	23	/1.9	
Total		32	100	32	100	

First, we evaluated the descriptive findings of the research variables, and then the results of analyses on the research hypotheses were presented. Socio-demographic samples were described, using marital status' mean, SD and frequencies (percentage) in table 1. According to the result, all of P values are greater than 0.05, so there is no significant difference between these groups.

In the inferential statistics section, we first examined the normal distribution of variables and then analyzed the data based on the result. To examine the information homogeneity using the Kolmogorov-Smirnov test, we examined the hypothesis of the normal variables. The pre-test resilience, follow-up test resilience, pre-test of spiritual wellbeing and pre-test of life satisfaction has a significant level of more than 0.05. Therefore, these variables are normally distributed and homogeneous. However, spiritual wellbeing and life satisfaction fallow-up tests and have a significant level of less than 0.05. Nevertheless, these variables are not normally distributed and neither homogeneous. We, therefore, used parametric tests to analyze the resiliency variable and non-parametric test to analyze the variables of spiritual health and life satisfaction.

	Meditative	non -	Fallow-up
variables	women	women meditative	
	(Intervention)	women	
	0	Significance	Significance
	Significance level	level	level
Resilience	0.2	0.2	0.2
Spiritual	0.2	0.2	0.0003
wellbeing	0.2	0.2	
Life satisfaction	0.2	0.002	0.006

 Table 2: result of Kolmogorov-Smirnov test for homogeneity test for meditative women and non-meditative women.

Objective one: Comparing resiliency, life satisfaction and spiritual well-being in meditative women versus non-meditative.

The assumption of the equality of variables was investigated by Levene's test. The level of significance is greater than 0.05, so the variances of two groups are equal.

By using independent T Test, the value of the meaningful level less than 0.05 and as a result the test was significant (Table3).

			Levene's te	st for Equality of		
D:1:		CD	variances		T	Significance
Resilience	mean	SD	F	significant level	Т	level
intervention group	72.55	19.10	2.645	0.110	2.037	0.046
control group	65.58	33.15				

Table3: T-test results of two independent groups for the resilience variable

In regards to Spiritual well-being, using the Mann-Whitney test, we compared the spiritual well-being between treatment and control group. The results showed that the level of significance of the test was more than 0.05, so the test was not significant. However, spiritual well-being score was higher than the non- meditator scores (Table4).

	5 1		0	
VARIEBLEs & groups	Mean	SD	Т	Significance level
Spiritual wellbeing intervention group	89.35	22.79		
(meditated)	07.55	22.19	-1.022	0.307
Spiritual wellbeing control group	86.65	18.88	-1.022	0.307
(Non- meditated)	80.05	10.00		
Life satisfaction in intervention group	27.15	3.61		
(meditated)	27.15	5.01	-1.266	0.205
Life satisfaction in control group	25.43	11.36	-1.200	0.205
(Non- meditated)	23.45	11.30		

Table 4: Result of the Mann-Whitney U test for spiritual well-being and life satisfaction

Speaking of life satisfaction, the result of Mann-Whitney test showed that a significant level is more than 0.05. By comparing, however, the mean score of satisfaction with treatment group was higher than control group (Table4).

Objective Two: Examining the effect of geometric meditation on the level of resilience of intervention group in pre-test and follow-up test. Comparing resiliency between intervention (meditative women) and their fallow-up test, we used the paired T-Test. The value of the significance level of the test is less than 0.05, so the test is meaningful. This means that Geometric Meditation affects the level of women's resilience in intervention group. Furthermore, according to the average follow-up score, we found out that the amount of women's resilience after training has increased

Table 5: paired T-Test results for the resilience variable

resilience	mean	SD	Т	Significance level
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Intervention group	69.29	11.99		
test	07.27	11.77	-2.091	0.048
follow-up test	73.70	9.80		

Afterwards, we used Wilcoxon's non-parametric test to investigate the effect of geometric meditation on the spiritual well-being on these women. According to the table 5, the value of significance is greater than 0.05, so the test is not significant. However, the average follow-up scores are higher than the average pre-test scores, spiritual well-being has been increased after training meditation.

Table 6: The Wilcoxon test result table for the spiritual wellbeing and life satisfaction

Variable	Mean	SD	Z	Significance level
Pre-test spiritual wellbeing	82.79	24.84	-0.415	0.678
Fallow-up test spiritual wellbeing	87.87	24.12	-0.415	0.078
Pre-test life satisfaction	24.15	5.82	-3.016	0.002
Follow-up life satisfaction	27.15	3.61	-3.010	0.003

We used Wilcoxon's non- parametric test to investigate the effect of geometric meditation on life satisfaction on these women. The value of the significance is less than 0.05, so the test is meaningful. This means that Geometric Meditation affects the level of women's life satisfaction in intervention group. Moreover, the average of the fallow-up test score of women's life satisfaction after training has been increased (Table 5).

Regard to Pearson correlation coefficient test, life satisfaction has a strong relation with spiritual well-being and resilience in significant level 0/001 and amount of correlation coefficient 0.453 (Table 6).

Variables	Amount of correlation coefficient	Significant level
Resilience and spiritual wellbeing	0.601	0
Resilience and life satisfaction	0.438	0.001
Spiritual wellbeing and life satisfaction	0.453	0.001

Table 6: the results of the correlation coefficient between variables

V. RESULTS

Spiritual well-being

Hours of practicing didn't show significant difference in pre-test and follow-up test among meditator women. Although the fallow-up mean score was higher, the meditation had a positive role in increasing the mean scores among individuals [M; 82.79 < 87.87]. Comparison of spiritual well-being meditated group versus non-meditated showed no difference (p; 0.307 > 0.05, Z= -1.022). However, the mean score was higher [M; 86.65 < 89.35]. Furthermore, the mean score showed that the level of spiritual well-being was increased after training in fallow-up test. In order to investigate the relationship between spiritual wellbeing, resilience and life satisfaction, we used Pearson correlation coefficient test. Results showed that there is a direct relationship between these variables

(Table6); Therefore, when the level of spiritual well-being increases, the level of resilience and life satisfaction also increases and conversely. So, the mean score of spiritual well-being has also contributed to the increase in resilience.

Resilience

Considering the results, evidence showed that significant differences in pre-test and follow-up test (P; 0.048<0.05, T= -2.091). Resilience mean score was higher in fallow-up test [\bar{x} ; 69.29<73.70].

By comparing meditative women with non-meditative, evidence revealed a higher score for the meditative women (P; 0.046<0.05, T= 2.037). The mean score in meditative women was increased [\bar{x} ; 65.58<72.55]. Furthermore, in correlation test amount of correlation coefficient between spiritual well-being was 0.601 and resilience with life satisfaction was 0.438 in significant value of 0.001, which shows a strong relation between them (Table6).

Life satisfaction

The result showed that geometric meditation has affected trained group (P=0.003<0.05, Z=-3.016). Moreover, a higher mean score in follow-up test shows that geometric meditation has increased life satisfaction [M: 24.15 < 27.15] (Table5).

The comparison of life satisfaction between meditative and non-meditative women didn't show any significant differentness (sig. = 0.205, Z=-1.266), while life satisfaction of intervention group was higher than the non-meditator women. Therefore, geometric meditation training had a positive role to increase the mean score [M: 25.43 < 27.15].

Based on Pearson correlation coefficient test, life satisfaction has a strong relation with spiritual well-being and resilience in significant level 0.001 and amount of correlation coefficient 0.453.

VI. DISCUSSION

To our knowledge, this is the first study on the role of Geometric Meditation as an academic meditation, introduced based on the principles of mathematics, geometry, psychology and philosophy of mind, which was carried out on psychological variables such as resilience, spiritual well-being and life satisfaction. Our review indicates that geometric meditation techniques can increase the psychological resilience. Nowadays, the objective and scientific aspects of meditation have become more and more noticeable, so that it could conquer the heart of contemporary psychotherapy to the core of clinical neuroscience research. Among the various ways, mindfulness based on academic meditation is an effective technique on the basis of a lot of research published in medical journals and databases. Meditation effectiveness not only serves an effective strategy for managing the mind and functions of the human brain, but also has many effects on improving its body structure and function. In this study, analyzing pre-test and post-test after 8 months showed the increase of life satisfaction and resilience in training group. It is obvious, when we compare the follow-up test of training group with the pre- test, we observed just the increase of resilience and did not have any significant difference in life satisfaction. In similar study, Chaiwutikornwanic (2015)- a researcher from Thailand – did two comparative study about life satisfaction and

meditated people. In one study the comparison of life satisfaction was between Christians and meditated Christians. And the comparison of life satisfaction was between Buddhists and meditated Buddhists. Both studies were not significantly different. My investigation was among Muslim people and indicate the same result about life satisfaction. The result of this study about life satisfaction is in line with the result of the study that has mentioned above. It can express that life satisfaction is a person's attitude that can be stable over time. The present study was carried to address between GM training and psychological resilience.

As well, many studies have been done by experts about resilience and is talked about a conjunction between resilience and life satisfaction. For example a review was done by Lazarus (2004) showed that resilience has a significant effect on the level of mental health and life satisfaction. In fact, life satisfaction is a general conception of cognitive and Emotional behavior of the whole life, according to Thimm (2010). Satisfaction of life exists when there is a situation in a family circumstance along with expectations. In general, life satisfaction is a cognitive emotional variable, affected by several factors. Meditation can have a positive effect on the recognition and emotions. According to Seligman (2014) meditation can also provide the ability to watch life without judgment which helps the person to devote himself to the moments of life's challenges and problems. According to Solano (2016), resilience as a process agreeable to change over time, considering resilience building intervention is vital. And we can improve hope and quality of life either to cancer or non- cancer patients (Solano, J. P. C., da Silva, A. G., Soares, I. A., Ashmawi, H. A., & Vieira, J. E., 2016). In a similar research, Pidgeon's study (2014) showed that there is a significant relationship between mindfulness meditation and resilience. Furthermore, Shapiro (2003) resulted that meditation can improve resilience and have a positive role on stress reduction. In this study, the higher mean score of resilience compared with the non-meditated women and the first study and increase number in the follow-up test in meditation training group shows the positive role of the intervention of meditation. And it is recommended in order to resilience building intervention.

There is a close relationship between meditation and spirituality. According to Candy (2012), meditation as a spiritual caring and protector has been published in many articles. Although the effect of meditation on increase of some psychological components as life satisfaction and spiritual well-being was not shown in the study, but their mean scores were higher than control group. The finding of this study is the same with Jines Kim (2014) who examined the effect of the teaching of religious church meditation on the increase in the spirituality of Korean adolescents in the United States. In addition, the current study is partly consistent with Delaney's interdisciplinary research findings (2011) which is based on spirituality and its combination with meditation techniques that significantly improve the quality of life.

Miller (2014) shows that a thicker cortex connected with a high importance of religion or spirituality may counsel resilience to the growth of depressive illness in individuals at high familial risk for major depression, probably by developing a cortical reserve that counters to some extent the vulnerability that cortical thinning poses for developing familial depressive illness. Anastasia (2017) investigated the effect of mindfulness meditation on conscious and non-conscious parts of mind and presented how meditation has been connected with the psychotherapeutic practice of psychoanalysis as a therapeutic technique to access the unconsciousness part of the mind. It can be concluded that spirituality with different method in different religions has a positive impact on brain and meditation can be used in psychoanalysis and psychotherapy.

Finally, the specific objectives of the present investigation can be response of a result of Korean study that is done by Son (2017). Regard to the result of son study, which is done among nursing students to improve their adaptation to university life, suitable academic methods were needed to reduce the life stress and rise health status, spiritual well-being, satisfaction, and resilience. This study indicate that GM can be used an educational strategy. This evidence reported that GM has a positive role on improving these psychological variables.

Limitation of the study:

Limitations of this research include small sample size, and self-report bias. Moreover, the reports of participant about their emotion and feeling after doing each technique in a week remained unknown.

VII. CONCLUSION

A substantial body of evidence indicate the efficacy of training in Geometric meditation in context a women group. There is a statistically significant difference between the level of resilience of meditative and non-meditative women in a comparative study. This improvement appeared in the research protocol and were increased at 8-month follow-up. There was statistically nonsignificant tendency for spiritual well-being in follow up. Although the improvement in member's mean score increased in psychological resilience, life satisfaction and spiritual wellbeing in follow up.

It is worth mentioning that all three variables, resilience, life satisfaction and spiritual well-being, have a direct and positive relationship with each other.

The Geometric meditation training program as an intervention can take place in a nonpsychiatric medical setting in order to promote psychological variables. So, it is recommended that GM as a complimentary and academic method can be used to increase the mental health in common treatments.

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REFERENCES

- 1. Agarwal, A., & Dixit, V. (2017). The role of meditation on mindful awareness and life satisfaction of adolescents. Journal of Psychosocial Research, 12(1), 59.
- Alorani, O. I., & Alradaydeh, M. T. F. (2018). Spiritual well-being, perceived social support, and life satisfaction among university students. International Journal of Adolescence and Youth, 23(3), 291-298. https://doi.org/10.1080/02673843.2017.1352522
- 3. Anulipi A, Vidushi D (2017). The Role of Meditation on mindful Awareness and life Satisfaction of Adolescents. Journal of psychosocial Research. 2017; 12 (1): 59-70.
- Bajaj, B., & Pande, N. (2016). Mediating role of resilience in the impact of mindfulness on life satisfaction and affect as indices of subjective well-being. Personality and Individual Differences, 93, 63-67. https://doi.org/10.1016/j.paid.2015.09.005.

- Brewer, J. A., & Garrison, K. A. (2014). The posterior cingulate cortex as a plausible mechanistic target of meditation: findings from neuroimaging. Annals of the New York Academy of Sciences, 1307(1), 19-27. doi:https://doi.org/10.1111/nyas.12246
- Candy, B., Jones, L., Varagunam, M., Speck, P., Tookman, A., & King, M. (2012). Spiritual and religious interventions for well-being of adults in the terminal phase of disease. Cochrane Database of Systematic Review. doi:https://doi.org/10.1002/14651858.CD007544.pub2.
- Chaiwutikornwanich, A. (2015). Belief in the afterlife, death anxiety, and life satisfaction of Buddhists and Christians in Thailand: Comparisons between different religiosity. Social Indicators Research, 124(3), 1015-1032.
- 8. Chirico, F. (2016). Spiritual well-being in the 21st century: It's time to review the current WHO's health definition. Journal of Health and Social Sciences, 1(1), 11-16. https://doi.org/10.19204/2016/sprt2
- 9. Connor, K. M., & Davidson, J. R. (2003). Development of a new resilience scale: The Connor-Davidson resilience scale (CD-RISC). Depression and anxiety, 18(2), 76-82. doi:https://doi.org/10.1002/da.10113
- Delaney, C., Barrere, C., & Helming, M. (2011). The influence of a spirituality-based intervention on quality of life, depression, and anxiety in community-dwelling adults with cardiovascular disease: A pilot study. Journal of Holistic Nursing, 29(1), 21-32. doi:https://doi.org/10.1177/0898010110378356..
- 11. Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. Journal of personality assessment, 49(1), 71-75. https://doi.org/10.1207/s15327752jpa4901_13
- 12. Ellison, C. W. (1983). Spiritual well-being: Conceptualization and measurement. Journal of psychology and theology, 11(4), 330-338. doi:https://doi.org/10.1177/009164718301100406.
- Fabbro, A., Crescentini, C., Matiz, A., Clarici, A., & Fabbro, F. (2017). Effects of mindfulness meditation on conscious and non-conscious components of the mind. Applied Sciences, 7(4), 349. doi:https://doi.org/10.3390/app7040349
- Gomez, R., & Fisher, J. W. (2003). Domains of spiritual well-being and development and validation of the Spiritual Well-Being Questionnaire. Personality and individual differences, 35(8), 1975-1991. doi:https://doi.org/10.1016/S0191-8869(03)00045-X.
- Hinterberger, T., Schmidt, S., Kamei, T., & Walach, H. (2014). Decreased electrophysiological activity represents the conscious state of emptiness in meditation. Frontiers in psychology, 5(99). doi:https://doi.org/10.3389/fpsyg.2014.00099
- Hoge, E. A., Guidos, B. M., Mete, M., Bui, E., Pollack, M. H., Simon, N. M., & Dutton, M. A. (2017). Effects of mindfulness meditation on occupational functioning and health care utilization in individuals with anxiety. Journal of psychosomatic research, 95, 7-11. https://doi.org/10.1016/j.jpsychores.2017.01.011
- Inzlicht, M., Aronson, J., Good, C., & McKay, L. (2006). A particular resiliency to threatening environments. Journal of Experimental Social Psychology, 42(3), 323-336. doi:https://doi.org/10.1016/j.jesp.2005.05.005.
- 18. Kim, J. (2014). The Efficacy of Christian Devotional Meditation on Stress, Anxiety, Depression, and Spiritual Health with Korean Adults in the United States: A Randomized Comparative Study.
- Kim, J., Heinemann, A. W., Bode, R. K., Sliwa, J., & King, R. B. (2000). Spirituality, quality of life, and functional recovery after medical rehabilitation. Rehabilitation Psychology, 45(4), 365., 45(4), 365. doi:http://dx.doi.org/10.1037/0090-5550.45.4.365.

- 20. Lazarus, A. (2004). Relationships among indicators of child and family resilience and adjustment following the September 11, 2001 tragedy. The Emory center for myth and ritual in American life. Available on: www.marila.emory.edu/faculty/Lazarus.htm
- Marzetti, L., Di Lanzo, C., Zappasodi, F., Chella, F., Raffone, A., & Pizzella, V. (2014). Magnetoencephalographic alpha band connectivity reveals differential default mode network interactions during focused attention and open monitoring meditation. Frontiers in human neuroscience, 8(832). https://doi.org/10.3389/fnhum.2014.00832
- Miller, L., Bansal, R., Wickramaratne, P., Hao, X., Tenke, C. E., Weissman, M. M., & Peterson, B. S. (2014). Neuroanatomical correlates of religiosity and spirituality: a study in adults at high and low familial risk for depression. JAMA psychiatry, 71(2), 128-135.https://doi.org/10.1001/jamapsychiatry.2013.3067.
- 23. Nazaraghaei, F. (2013). FG Meditation Animation, English version.
- 24. Nazaraghaei, F., & Bhat, K. K. (2017). Highlighting Neuro-Psycho-Physiological Aspects of Yogic Meditation in Respect to Psychological Stress and Anxiety in New Era. Anxiety, 6.
- Nazaraghaie, F., Torkamani, F., Kiani, B., & Nami, M. (2017). Quantitative Electroencephalogram-Informed Geometric Medita-tion: A Pilot Validation Study. Journal of Advanced Medical Sciences and Applied Technologies, 3(3), 163-168. doi:https://doi.org/10.32598/jamsat.3.3.163.
- Pidgeon, A. M., & Keye, M. (2014). Relationship between resilience, mindfulness, and pyschological well-being in University students. International Journal of Liberal Arts and Social Science, 2(5), 27-32.
- Robbins, B. D. (2008). What is the good life? Positive psychology and the renaissance of humanistic psychology. The humanistic psychologist, 36(2), 96-112. doi: https://doi.org/10.1080/08873260802110988.
- Santarnecchi, E., D'Arista, S., Egiziano, E., Gardi, C., Petrosino, R., Vatti, G., & Rossi, A. (2014). Interaction between neuroanatomical and psychological changes after mindfulness-based training. PloS one, 9(10), e108359. doi:https://doi.org/10.1371/journal.pone.0108359
- Seligman, M. E., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction (Vol. 55, No. 1, p. 5). American Psychological Association.
- Seligman, M. E., & Csikszentmihalyi, M. (2014). Positive psychology: An introduction. In Flow and the foundations of positive psychology (pp. 279-298). Springer, Dordrecht.
- Solano, J. P. C., da Silva, A. G., Soares, I. A., Ashmawi, H. A., & Vieira, J. E. (2016). Resilience and hope during advanced disease: a pilot study with metastatic colorectal cancer patients. BMC palliative care, 15(1), 70.
- 32. Son, H. G., Kwon, S., & Park, H. J. (2017). The influence of life stress, ego-resilience, and spiritual wellbeing on adaptation to university life in nursing students. Journal of the Korea Academia-Industrial cooperation Society, 18(5), 636-646. https://doi.org/10.5762/KAIS.2017.18.5.636
- Shapiro, S. L., & Walsh, R. (2003). An analysis of recent meditation research and suggestions for future directions.
 The humanistic psychologist, 31(2-3), 86-114. doi:https://doi.org/10.1080/08873267.2003.9986927
- Thimm, J. C. (2010). Personality and early maladaptive schemas: A five-factor model perspective. Journal of behavior therapy and experimental psychiatry, 41(4), 373-380. doi:https://doi.org/10.1016/j.jbtep.2010.03.009.

- 35. Torkamani, F., Nazaraghaei, F., & Nami, M. (2019). Geometric Meditation-Based Cognitive Behavioral Therapy in Obsessive-Compulsive Disorder: A Case Study. . arXiv preprint arXiv:1904.05024,.
- 36. van der Riet, P., Levett-Jones, T., & Aquino-Russell, C. (2018). The effectiveness of mindfulness meditation for nurses and nursing students: An integrated literature review. Nurse education today, 65, 201-211. https://doi.org/10.1016/j.nedt.2018.03.018
- 37. Wu, L. F., & Koo, M. (2016). Randomized controlled trial of a six-week spiritual reminiscence intervention on hope, life satisfaction, and spiritual well-being in elderly with mild and moderate dementia. International journal of geriatric psychiatry, 31(2), 120-127. https://doi.org/10.1002/gps.4300
- 38. WHO.org [internet]. Trade, foreign policy, diplomacy and health. Glossary of globalization, trade and health terms. Geneva: World Health Organization [cited 2016 Jan 04]. Available from: www.who.int/trade/glossay/story046.
- WHO.org [internet]. The determinants of health. Geneva: World Health Organization [cited 2016 Jan 04]. Available from: www.who.int/hia/evidence/doh.