The Mediating Roles of Marital Satisfaction and Perceived Social Support in the Relationship between Spiritual Attitudes and Quality of Life in Psychiatric Veterans

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Abstract

Background: The Iran-Iraq War has left many consequences on veterans and their families over the years and it has potentially affected the veterans' quality of life. The present study aimed to determine the mediating role of marital satisfaction and perceived social support in the relationship between spiritual attitudes and quality of life in psychiatric veterans in Kermanshah province, Iran.

Methods: The present cross-sectional study had a structural equation modeling performed on all psychiatric veterans under the protection of Martyr and Veterans Affairs of Kermanshah province in 2018. We used the simple random sampling method, and selected 10 to 15 samples for each parameter according to the rule of thumb; hence, the sample size was 280. We collected data using The World Health Organization Quality of Life-BREF (WHOQOL-BREF), the Spiritual Attitude Scale, and the Multidimensional Scale of Perceived Social Support. Furthermore, we utilized the bootstrap method to evaluate the significance of indirect relationships (paths) and mediation effects. We performed all analyses of the structural equations using AMOS 22.

Results: The results indicated that the direct effects, and factor loadings of indicators on the latent variables of the model were significant at an alpha level of 0.05. Direct coefficients of spiritual attitude on marital satisfaction (β =0.45, P= 0.001) and spiritual attitude on perceived social support (β =0.14, P= 0.05) were positive and significant. Spiritual attitude had a positive and significant effect on the quality of life through marital satisfaction and perceived social support (β =0.22, P= 0.001).

Conclusion: The results showed that spiritual attitudes increased the veterans' quality of life through mediating variables, namely marital satisfaction and perceived social support.

Introduction

Quality of life is a logical process and a concept that is based on the culture. it summarizes the values, beliefs, symbols, and experiences in that culture and provides a way to know and understand the human conditions and experiences in life ([1]). The study of long-term effects of war on the psychiatric veterans' psychological and social status indicated that passing of time into old age intensified the symptoms of the disease and increased its comorbid disorders ([2], [3], and [4]). It seems that veterans' spiritual attitudes and types of worldview may be potentially associated with their quality of life. Spiritual attitudes lead to better processing of post-traumatic stress symptoms and increase the individual's satisfaction with the current situation ([5], [6]). The higher the individuals' spiritual attitudes and religious beliefs, the more vulnerable they are to post-traumatic stress disorders, therefor it reduces the quality of their life ([7], [8]). Those with spiritual attitudes give better answers to the situation they are in, and manage the pressures better, and also have higher health ([9], [10], and [11]). The results indicated that the army soldiers' and veterans' spiritual attitudes led to the higher quality of life and mental health ([5], [7], [8]).

The perceived social support is another potential factor that can be a good and powerful precondition for the quality of life of psychiatric veterans. It is the individual's perception of love and support from family, friends, and acquaintances for life stressors that increases their quality of life ([2], [13], and [14])

Veterans with post-traumatic stress disorder have a lower perception of social and familial support than other veterans ([16]). They experience problems with marital relationships ([17]), social relationships ([18]), and healthy physical functioning ([19]). The higher the veterans' marital satisfaction, the higher their quality of life ([21]). Identifying the determinants of life quality in veterans leads to improving this factor in these people. On the other hand, increasing the veterans' quality of life enhances their wives' and children's quality of life and it is a great help in improving the general health of the veterans and their families. The present study aimed to determine the mediating role of marital satisfaction and perceived social support in the relationship between spiritual attitudes and quality of life in psychiatric veterans in Kermanshah province.

Methods

The present cross-sectional study examined psychiatric veterans under the protection of the Martyr and Veterans Affairs Foundation of Kermanshah Province, Iran in 2018.

After obtaining a list of psychiatric veterans of the province, we explained the research purpose to the veterans. After explaining the research purpose and obtaining informed consent from participants, as well as reassuring them about the confidentiality of the results, we gave them the questionnaires. According to the rule of thumb, we considered 10 to 15 samples for each parameter in the model ([22]) and the sample size was 280 due to 28 parameters in the present model. The eligible veterans was recruited using random sampling method according to the list of psychiatric veterans in Kermanshah province.

Inclusion criteria of the study were: Veterans with at least 25% injuries, being a psychiatric veteran according to the veterans' records, absence of a stressful event in life for at least the last 3 to 6 months, absence of chronic physical illness, non-addiction, and monogamy. We examined the research model using the structural equation modeling (SEM) analysis. In the analysis, we utilized the bootstrap method to examine the significance of indirect relationships (paths) and mediation effects. We performed all analyses of the SEM using AMOS 22. ([Figure 1])

We collected data using the World Health Organization Quality of Life-BREF (WHOQOL-BREF), Marital Satisfaction Scale-BREF, Spiritual Attitude Scale, and the Multidimensional Scale of Perceived Social Support.

WHOQOL-BREF is a self-report tool with 24 questions and four domains including physical health, mental health, social relationships, and environmental health. Answers to each question are scored on a five-point Likert scale (Very low, low, medium, high, and very high). First, a raw score is obtained for each subscale and should be converted to a standard score of 0 to 100 according to the formula. A higher score indicates the higher quality of life. The validity of the questionnaire was desirable and the reliability of the questionnaire was measured

using Cronbach's alpha and intra-cluster correlation resulting from the test-retest. The intra-cluster correlation and Cronbach's alpha values were above 0.7 in all domains. (23) In the present study, the reliability of dimensions and the whole questionnaire were evaluated using Cronbach's alpha coefficient. The results indicated the Cronbach's alpha coefficients of 0.75, 0.88, 0.83, 0.77, and 0.94 for physical health, mental health, social relationships, environmental health, and the whole questionnaires respectively.

Marital Satisfaction Scale-BREFwas introduced by Rajabi with 13 items that are evaluated with a five-point Likert scale. The minimum and maximum scores are between 13 and 65 and thehiger score thehigher marital satisfaction. the construct validity of the questionnaire was confirmed using the factor analysis and obtained the concurrent validity of 0.83 for the scale according to the 47-item Enrich questionnaire. The total alpha coefficient of the scale was also equal to 0.89 (24).

Spiritual Attitude Scale consists of 43 items with a 5- point Likert scale and two subscales: spiritual attitude (24 questions) and spiritual ability (19 questions) that assess the levels of spirituality and spiritual growth. The range of scores in this questionnaire is between 0 and 172, and the higher the score, the higher the spiritual intelligence. Nineteen experts examined the face and content validity of the questions. The total reliability of the questionnaire was obtained equal to 0.61 and 0.91 using the test-retest and internal consistency (Cronbach's alpha) respectively. The results of the factor analysis of the questionnaire indicated two factors with eigenvalues of higher than 5, that is, "spiritual vision" and "intellectual ability" (25). The present research used the "Spiritual Attitude" subscale.

Multidimensional Scale of Perceived Social Supportdeveloped by Zimet et al. to assesses perceived support for the individual from family, friends, and significant individuals. It has 12 items by seven-point scale, from totally agree to totally disagree. To obtain the total score of the scale, we add scores of all items and divide by 12. The minimum score is 12 and the maximum is 84. The validity and reliability of the scale was desirable (26-28).

Results

The results indicated that the participants' mean age was 54.3 years (with a range of 42-68 years). The lowest percentage of injuries in veteran was 25% and the highest was 70%. The minimum presence in the war theater was 3 months and the maximum was 6 years.

Table 1 presents the descriptive indices, including the mean, standard deviation, minimum, and maximum scores of the variables observed in the research

The results indicate that the model variables were significantly related to each other, and all variables were directly correlated (Table 2).

We examined the structural equations modeling assumptions before testing the measurement and structural models of the research. In this section, we studied three basic assumptions of structural equation modeling, including missing data, outliers, and normality of variable distribution. We used two common indices, namely skewness and kurtosis, to evaluate the normality of the distribution of variables in the present study. If the sizes of the indices were between 3 to -3, it indicated the normal distribution of the research variables. The results indicated that the skewness and kurtosis indices for the research variables were all less than the absolute value. In other words, all the indices were in a range of -3 to 3; hence, the distribution of all research variables was normal (Table 3).

The research model consisted of four variables, among which the spiritual attitude was the antecedent variable, the marital satisfaction and perceived social support as a latent variable were the dependent mediator variables, and the quality of life variable as a latent variable was the final dependent variable. We analyzed the model by the maximum likelihood estimation (MLE) and extracted fit indices. Table 4 presents the fit indices for the proposed research model.

The results indicate that the Chi-square per degree of freedom (x2/df) was less than 5, RMSEA and SRMR were less than 0.1, and GFI, AGFI, NFI, NNFI, and CFI were greater than 0.9. The results indicated that all the fit indices of the present model were in the desired range; hence, the model fitted with the experimental data obtained from the sample group (Table 4). Figure 2 shows the estimated parameters of the research model using the maximum likelihood estimation, including standardized path coefficients, the significance of these coefficients, and the factor loadings of the indicators on the latent variables.

Figure 2: Parameters esti According to the research results, officials could identify the determinants of veterans' quality of life and provide better plans for its improvement. Furthermore, an increase in their quality of life enhances the quality of life of their spouses and marital satisfaction and it is a great help to improve the general status of veterans and their families.

Given the religious culture of Iran, it is necessary to refer families with religious values to therapists familiar with religious concepts and also train psychologists with religious approaches to provide services for such people.

The results presented in Figure 2 indicate that all path coefficients (direct effects) and all factor loadings of the indicators on the latent variables of the model are significant at an alpha level of 0.05. According to the results, the structural model of the research also had a good fit. Finally, we evaluated the size and significance

of the indirect effects of the model using the bootstrap method with 2000 re-samplings. Table 5 presents the analysis results along with the direct effects.

The results of Table 5 indicate that the direct coefficients of spiritual attitude on marital satisfaction (P= 0.001, β= 0.45) and spiritual attitude on perceived social support (P= 0.05, β= 0.14) were positive and significant. Other results can be seen in the table.

Table 1: Mean, standard deviation, minimum and maximum scores of variables observed in the research

Observed variables		Mean	standard deviation	Minimum score	maximum score
Spiritual attitude		48.29	7.01	17	55
Marital Satisfaction		23.76	7.198	9	45
social support	family	15.43	3.65	4	20
	friends	11.93	4.32	4	20
	other people	13.51	4.04	4	20
	Total score	40.88	10.12	12	60
Quality of Life	physical	8.86	4.23	0	20
	mental health	11.14	5.76	0	26
	Environmental	10.50	4.72	0	24
	Community Relations	5.21	2.67	0	12
	Total score	35.72	15.35	1	78

Table 2: Correlation of spiritual attitude, marital satisfaction, and social support with quality of life

Observed variables		Mean	standard deviation	Minimum score	maximum score
Spiritual attitude		48.29	7.01	17	55
Marital Satisfaction		23.76	7.198	9	45
social support	family	15.43	3.65	4	20
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	Environmental	10.50	4.72	0	24
	Community Relations	5.21	2.67	0	12
	Total score	35.72	15.35	1	78

** P<0.01, *P<0.05

Table 3: Indices of normality of the research variables

Observed variables		Skewness	Kurtosis
Spiritual attitude		-0.737	-0.340
Marital Satisfaction		-0.742	0.785
social support	Family	-0.902	0.492
	Friends	-0.189	-0.906
	other people	-0.582	-0.216
	Total score	0.321	-0.111
Quality of Life	Physical	0.210	-0.392
	mental health	0.046	-0.271
	Environmental	0.031	-0.462
	Community Relations	-0.902	0.492
	Total score	-0.189	-0.906

Table 5: Direct and indirect effects and standardized general effects of variables in the model

Effects		Spiritual attitude	Marital Satisfaction	social support
Marital Satisfaction	direct impact	0.45	-	-
	Indirect effect	0.000	-	-
	Total effect	0.45	-	-
social support	direct impact	0.14	0.73	-
	Indirect effect	0.33	0.000	-
	Total effect	0.47	0.73	-
Quality of Life	direct impact	0.000	0.21	0.54
	Indirect effect	0.22	0.39	0.000
	Total effect	0.22	0.60	0.54

Table 4: Fit indicators related to the analysis of the proposed model Source: (Kalantari, 2009)

Type of goodness fit index	Indicative limits for acceptable fit	Indicator limits for a good fit	Indicator limits for excellent fit	Observed size	Fit result
Value (df) x^2				(23) 80/42	
p-value x^2 test	X^2 ratio of freedom to less than 5	X2 ratio of freedom to less than 3	X2 ratio of freedom to less than 2	0/001	acceptable
X^2 to freedom ratio				3/49	
RMSEA	Less than 0.1	Less than 0.8	Less than 0.05	0.089	acceptable
SRMR	Less than 0.1	Less than 0.8	Less than 0.05	0.068	Good
CFI	More than 0.8	More than 0.9	More than 0.95	0.956	Excellent
NFI	More than 0.8	More than 0.9	More than 0.95	0.940	Good
NNFI	More than 0.8	More than 0.9	More than 0.95	0.931	Good
GFI	More than 0.8	More than 0.9	More than 0.95	0.938	Good
AGFI	More than 0.8	More than 0.9	More than 0.95	0.902	Good

Discussion

The present study aimed to present a structural model of the mediating roles of marital satisfaction and perceived social support in the relationship between spiritual attitude and quality of life in psychiatric veterans in Kermanshah province. The results indicated that all path coefficients (direct effects) and all factor loadings of the indicators were significant on the latent variables of the model. The direct coefficients of spiritual attitude on marital satisfaction, and spiritual attitude on perceived social support were positive and significant. The direct coefficient of spiritual attitude on quality of life through marital satisfaction and perceived social support was positive and significant. The research results were consistent with the results of studies by Sharma et al. (5), Koenig et al. (7), and Kanani et al. (8) on the positive relationship between spiritual attitudes and quality of life. Explaining this finding, we can conclude that spiritual attitudes increase the quality of life and mental health of war soldiers by increasing the purpose in life (5).

Other results of the present study indicated a positive and significant relationship between spiritual attitude and marital satisfaction. Spiritual beliefs allow some people to make sense of the adversity, stress, and inevitable loss that occur in their life cycle, and to be hopeful and optimistic about the next life (hereafter) where there are no such difficulties. (27) These people often have healthier physical and mental lifestyles characterized by fidelity and marital satisfaction, altruistic and socialistic behavior, moderation in nutrition, and hard work (29).

The results indicated that the relationship between perceived social support and quality of life was positive and significant. The results of several studies also showed that the higher the level of social support perceived by veterans, the better their quality of life (2, 13, 14). Social support and quality of life are strongly correlated. The individuals' cognitions and behaviors to cope with stressful life situations may be affected by the social network's readiness to provide support. If a person does not have any symptoms based on the need for help, significant individuals may fail to provide support. The inhibitory or harmful effects of social support on difficulties are often mediated as a means of coping behavior. The social environment may affect the selection of specific coping strategies and their effectiveness.

Given the role of marital satisfaction on the quality of life through perceived social support, the most important aspect of it was it's perception by significant individuals. When couples feel that they cannot express their feelings to their spouses or their spouses do not understand them, do not cooperate and sympathize with them, cannot easily talk to them about having a child and their problems, and even feel estranged and may lose each other, they feel loneliness and attempt to bear the burden of this problem alone so that shows the sadness in crying, nervousness, aggression, and other inefficient strategies that lead to a reduction of healthy marital relationships and the person receives less support from the significant individual person, thereby decreasing the marital adjustment and satisfaction.

About the weak relationship between quality of life and spiritual attitude, we can infer that since the research samples were psychiatric veterans and they had lower levels of control over their diseases, they had less quality of life and since the relationship between spiritual attitude and quality of life was not linear and many variables could affect the quality of life and it was a totally personal concept, which was invisible for others and was based on the individuals' perception of different aspects of their lives, the weak relationship made sense for the above reasons. A major limitation of the present study was that the results were obtained from self-report questionnaires; hence, problems in the implementation of the questionnaires (e.g. social approval or hypocrisy) might affect the test results.

Conclusion

According to the research results, officials could identify the determinants of veterans' quality of life and provide better plans for its improvement. Furthermore, an increase in their quality of life enhances the quality of life of their spouses and marital satisfaction and it is a great help to improve the general status of veterans and their families.

Given the religious culture of Iran, it is necessary to refer families with religious values to therapists familiar with religious concepts and also train psychologists with religious approaches to provide services for such people..

Ethical statement

Ethical considerations of this research have been done with the informed consent of the participants and also individuals have been assured about the confidentiality of the results

Conflict of interest

There is no conflict of interest

Author contributions

Zhila Khani Abad First Writer, Introduction Writer, Methodologist, Principal Researcher, Discussion Writer 60%, Hassan Amiri Second Author Methodologist Author of Discussion 25%, Keyvan Kakabraee Third Author, Methodologist, Analyst 15%

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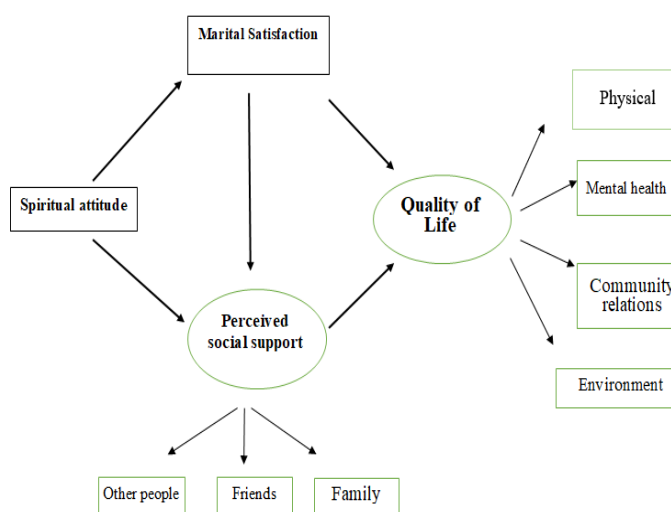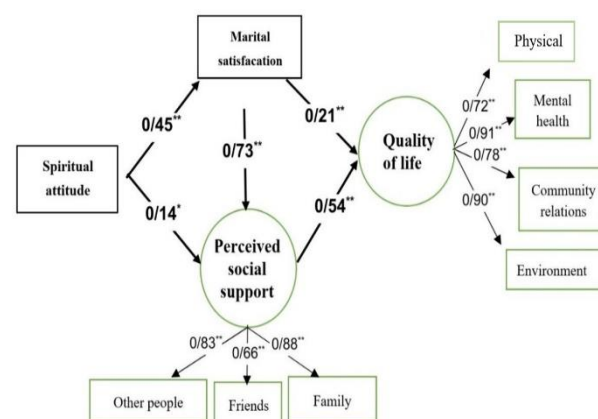Figure 1: Conceptual model of research

Figure 2 - Estimated parameters in the research model