

Research Paper

Investigating the Psychometric Properties of the Iranian-Islamic Spiritual Well-being Questionnaire



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ABSTRACT

Background and Objectives: This study aimed to investigate the psychometric properties of the Iranian-Islamic spiritual well-being questionnaire (SWBQ), which involves 22 items adapted to the Iranian cultural context.

Methods: The current study was descriptive-analytical. After designing the questions according to the Iranian-Islamic culture based on the literature review, the content validity was examined by experts (five people with a PhD in psychology), and the content validity index (CVI) and content validity ratio (CVR) indices were used to check the quantitative content validity. To check the face validity, ten people aged 18 to 60 were used as a sample. Also, exploratory and confirmatory factor analysis was used to check construct validity, and Cronbach's α , test re-test, and Spearman-Brown and Guttman split-half coefficients were used to check reliability. In examining the construct validity and reliability of the questionnaire, 400 adults aged 18 to 60 years were selected and assessed as a sample from Mashhad City in 2021 by available sampling.

Results: The CVR for five experts was obtained to be >0.99 , and the CVI for 22 terms of the questionnaire was obtained ≥ 0.79 , which is in the desired range. The exploratory factor analysis identified six factors, which together explained 77.25% of the total variance. The results obtained from the confirmatory factor analysis supported the proposed model. The Cronbach's α coefficient of the Iranian-Islamic SWBQ and its factors was obtained from 0.77 to 0.91. In the split-half method, Spearman-Brown and Guttman correlation coefficients were 0.88 and 0.87, respectively. The test re-test reliability coefficients of the total score of the questionnaire and subscales were between 0.78 and 0.83.

Conclusion: It can be concluded that the Iranian-Islamic SWBQ has favorable psychometric properties.

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Introduction

In recent decades, scientists have realized that the definition of health has a big flaw, and the excessive emphasis on its material aspects has caused the neglect of its other essential and fundamental dimension, the spiritual dimension of health [1]. The concept of spiritual health was first proposed in 1971 by Moberg as 'spiritual well-being'; an idea that emphasizes personal well-being and relationship with God. After him, psychologists started discussing the issue of spiritual health or well-being.

According to Elison, spiritual well-being consists of two components: Spiritual and well-being. Spiritual well-being, a religious element, is a sign of connection with a higher power, God [2]. Being purposeful in life, moral adherence, cooperating, having good faith, and paying more attention to the spiritual issues of life reduce anxiety, mental instability, and complications caused by them [3]. Spiritual well-being predicts better mental health and fewer mental disorders [4, 5]. Beliefs and spirituality are more common among the elderly than other age groups, increase life expectancy, and strongly predict better health, happiness, and life satisfaction [6].

In the life-giving religion of Islam, this matter is of particular importance. When the philosophy of life from the perspective of Islam is summed up in the evolutionary movement, a person who moves in the path of spirituality has the ideal standard of mental health. The common root of 'selm' in 'islam' and 'salamat' (health) indicates the essential connection between these concepts. 'Salam,' meaning 'wellness,' is repeated 33 times in the Holy Qur'an, alone or in combination with other words. For example, God says in the Holy Quran:

Whoever follows his pleasure, God guides them to the paths of health through that book, and by His success, He takes them out of the darkness to the light and guides them to the right path [1].

In Imam Khomeini's thought and practice, Islamic spirituality and spiritualism originated from the pure Islam of Muhammad (PBUH) and his most sincere monotheistic Islamic and religious beliefs. The defense of Islam and Islamic borders has such a value that it must be defended at any cost, and everything must be sacrificed to protect it. Therefore, one of the most essential value indicators in Imam's spirituality is the idea of defending Islam and the borders of the Islamic country, for which the Messenger of God spent his precious life, Amir-al-Mu'minin Ali (PBUH) was martyred for it, and Aba Abdullah Al-

Hussein (PBUH) and his companions generously gave their pure blood for it. This school is the result of the efforts of all the prophets and divine saints, and it is the responsibility of all Muslims, men and women, young and old, to protect and care for it. This index, among other indices, has been mentioned with more emphasis by Imam Khomeini. From Imam Khomeini's point of view, to achieve spirituality, one's actions and behaviors must be under the laws of Sharia and God [7].

The primary definition of spirituality from the perspective of Imam Khomeini is as follows: Spirituality is the living relationship with the sacred in the heart of everyday life and a rational framework on three levels: 1) Individual, including the components and indicators of piety, righteous action, and trust; 2) Collective, including the characteristics of help, cooperation, coexistence and humanity; and 3) Social, including the components of civilization building, fighting against arrogance and injustice, all three of which are based on the teachings of the Qur'an and Ahl-al-Bayt, and the way and character of Imam Khomeini [8].

Among the tools available to assess spiritual well-being, the first and most widely used tool is Paloutzian and Ellison's spiritual well-being questionnaire (SWBQ), whose psychometric properties have been confirmed in Iran. This scale includes two subscales of religious and existential well-being [9]. Gomez and Fisher designed a SWBQ that measures four spiritual well-being areas: Personal, social, environmental, and transcendental [10].

Jarel's spiritual well-being scale raises questions about self, others, and God. According to the review of the existing questionnaires, no tool was found to study spiritual well-being that pays attention to all aspects, including social spirituality. This study aimed to investigate the psychometric properties of the Iranian-Islamic SWBQ.

Methods

This study was descriptive-analytical.

Statistical population and sampling

Ten people aged 18-60 years were selected by available sampling in the face validity section. Five experts with a psychology specialization chosen by the accessible method examined the content validity. Also, 400 adults aged 18-60 in Mashhad selected using the available sampling method were used to assess the questionnaire's construct validity and reliability and completed the questionnaire. The criteria for entering the research

were in the desired age range, having literacy, not having a psychological disorder, and the subject's consent to participate.

Method of conducting research

This study used the theoretical method to create the SWBQ. As its name suggests, the theoretical approach begins with theories about the nature of a particular characteristic that is supposed to be measured. In this regard, the test's creator tries to choose its content consistent with the mentioned theories [11].

After reviewing the theories and research literature, the proposed model by the national interfaith coalition (1975) was selected to create a SWBQ. According to this model, spiritual well-being consists of four dimensions: Relationship with God, relationship with self, connection with others, and relationship with nature. Then, preliminary questions were designed according to the existing theory about each dimension of spiritual well-being. Also, to adapt the current questionnaire to the environment of the Islamic Republic, the statements of Imam Khomeini (RA) and Imam Khamenei were used, and the dimensions of action based on religious beliefs and social spirituality were added to the previous measurements.

The literature review results were extracted to obtain the factors of making the questionnaire and to determine and formulate the items that make up the questionnaire. This survey included searching keywords, such as spiritual well-being, spirituality, and spiritual health in articles, books, and internet sites. Finally, seven articles, two books, and two websites were used. Then, suitable phrases were compiled, each covering an aspect of spiritual well-being.

To determine the face validity, two qualitative and quantitative methods were used: In the qualitative determination of the face validity, ten people aged 18-60 were interviewed, and the level of difficulty (difficulty in understanding phrases and words), the proportion (proportion and the favorable correlation of phrases with the dimensions of the questionnaire), and ambiguity (possibility of wrong perceptions of the phrases or insufficiency in the meanings of the words) were investigated. After modifying the items based on the opinion of these ten people, in the next step, the item impact method was used to reduce the terms, remove the inappropriate terms, and determine the importance of each term. If the impact score is equal to or greater than 1.5, the item impact method is determined to be suitable for subsequent analyses and is saved.

To determine the content validity, qualitative and quantitative methods were used, and the researchers asked five experts to check the quality of the questionnaire based on the criteria of compliance with the grammar, using the appropriate words, necessity, importance, placing the phrases in their proper place, and providing relevant feedback. After collecting experts' comments, the necessary changes in the tool were applied. Then, to quantitatively evaluate the validity of the content and to ensure the selection of the most important and correct content (necessity of the question), the content validity ratio (CVR), and the instruments' question are best designed to measure the content, the content validity index (CVI) was used.

To determine the content validity, five experts were asked to examine each item based on a three-part spectrum (it is necessary, it is helpful but not necessary, and it is not necessary). Based on the Lawshe table, to determine the minimum value of the CVR index, expressions whose CVR value was higher than 0.99 (based on the evaluation of five experts) and significant ($P < 0.05$) were preserved [12]. Then, CVI was assessed based on Waltz & Bausell's content validity index [13]. Therefore, the researchers requested the specialists consider the designed questionnaire and asked them to determine each statement's relevance, simplicity, and clarity based on the validity content index. Thus, three criteria, simplicity, relevance, and clarity, were evaluated separately on a four-point Likert scale for each item by five specialists (for example, the following options were used for relevance criteria: 1=not related, 2=relatively related, 3=related, and 4=entirely related). In this research, the content validity index score of each phrase was calculated by dividing the number of experts agreeing with words three and four by the total number of experts [14]. Hyrkäs et al. recommended a score of 0.79 and above to accept items based on the CVI score [15].

Exploratory and confirmatory factor analyses were used to check the construct validity of this scale. First, exploratory factor analysis was applied using the Kaiser-Meyer-Olkin (KMO) sampling index test and Bartlett's test of Sphericity (BT), principal component analysis, scree plot, and orthogonal VARIMAX rotation. The turning point of 0.40 was considered the minimum factor loading needed to maintain each term in the factors extracted from the factor analysis. Also, to check the confirmatory factor analysis of model fit indices (chi-square, goodness of fit statistic, root mean square error of approximation (RMSEA), standard root mean square residual (SRMR), goodness of fit index (GFI), adjusted goodness of fit index (AGFI), comparative fit index

(CFI), normalized fit index (NFI), non-normed fit index (NNFI) were used [16]. Cronbach's α , Spearman-Brown, Guttman's dichotomization, and re-test coefficients with a two-month interval were used to check reliability.

In the current study, the ethical principles required, including the participants' full knowledge of the research implementation process, the confidentiality of their information, and the permission to withdraw from the study whenever they want, have been observed. Written informed consent was also obtained from the participants.

Results

After designing 102 phrases, ten phrases were modified in the context of insufficient words and sentences during the formal validity check. During the review of content validity based on the opinion of experts, expressions whose numerical value of CVR was >0.99 (based on the evaluation of five experts) and significant ($P < 0.05$) were evaluated and preserved [12]. Also, in the CVI examination, expressions with a score of 0.79 and those with the highest score were accepted. According to the content validity section results, among the 102 terms proposed for the questionnaire, only the coefficients of 22 terms specified in Table 1 had the minimum suggested coefficients.

The SWBQ's construct validity (factorial structure) was examined through exploratory factor analysis using principal components with varimax rotation. The findings showed that the KMO value for sampling adequacy was 0.80, and the Bartlett value for the data correlation matrix was obtained ($P < 0.001$). According to the results of these two tests, it can be concluded that the implementation of factor analysis based on the resulting correlation matrix in the studied sample will be justified. Exploratory factor analysis identified six interpretable factors, and these six factors (communication with God (four questions), practicing religious beliefs (four questions), communication with others (four questions), communication with nature (three questions), communication with oneself (three questions), and social spirituality (four questions) explained 77.25% of the total variance.

The matrix of factor load in Table 1 shows that all extracted factor loadings were >0.40 .

As shown in Figure 1, the results of the slope diagram of factors (scree plot) showed the existence of six components with value greater than one.

The model's fit indices were used using the confirmatory factor analysis method to test the six-factor hypothesis extracted from the SWBQ. The six-factor model showed an acceptable fit (Table 2). The indices reported in Table 2 are model fit indices [17].

According to Table 2, the fit indices of the model and confirmatory factor analysis model were proved. This questionnaire had good internal consistency, and Cronbach's α for the whole scale was 0.84 (Table 3).

To check the reliability of the questionnaire, two methods of calculating Cronbach's α coefficient and the split-half method were used. In the split-half method, by dividing the questionnaire questions into even and odd parts and using the Spearman-Brown and Guttman correlation coefficient index, the values of these coefficients 0.88 and 0.87 were obtained, respectively. According to Table 3, this questionnaire had a good reliability coefficient. To check the stability of the questionnaire and its subscales, the questionnaire was administered twice among 100 people with a time interval of two months. The test re-test reliability coefficients of the total score and subscales were between 0.78 and 0.83. These coefficients indicate the stability of questionnaire scores over time.

In Table 4, descriptive information about the subjects assessed for the construct validity of the questionnaire (400 samples) is shown.

Table 5 shows descriptive indices of the subjects of the construct validity stage.

In total, this questionnaire has 22 statements that are graded on a 5-point Likert scale from one (totally disagree) to five (totally agree) and has six factors, including communication with God, practicing religious beliefs, communication with others, communication with the nature, communication with yourself, and social spirituality. The minimum score of this questionnaire is 22, and the maximum score is 110.

Discussion

The current research aimed to construct and examine the psychometric properties of the Iranian-Islamic SWBQ. The result of the construct validity of the Iranian-Islamic SWBQ through exploratory factor analysis showed that this scale consists of six factors (communication with God: Four questions; practicing religious beliefs: Four questions, communication with others: Four questions, communication with nature: Three questions, communication with oneself (three questions), and so-

Table 1. Content and rotated factor loading of the items of each factor and the explained variance of the spiritual well-being questionnaire along with CVI and CVR coefficients

		Factors	Factor Load Ro- tated	Determined Variance (%)	CVR	CVI
Connection with GOD	1	I feel God's presence in my life.	0.80	20.62	0.99	0.79
	2	During worship, I experience a pleasure that relaxes me.	0.69		0.99	0.80
	3	I ask God to help me in my daily activities.	0.68		1	0.89
	4	I am grateful for the blessings that God has given me.	0.73		0.99	0.80
Practicing religious beliefs	5	I am interested in working in religious groups.	0.65	14.83	1	0.82
	6	I try to use the perspective of religion in different aspects of my life.	0.50		0.99	0.86
	7	If financial aid is needed for the blowout of religion, I am willing to donate my property in this way.	0.67		0.99	0.91
	8	If I must pay Khums and Zakat, I am gratified to pay them.	0.72		0.99	0.83
Relationship with others	9	I feel inner satisfaction from doing good things for others.	0.80	11.57	0.99	0.79
	10	I feel God's love for me through others.	0.61		0.99	0.84
	11	I feel responsible towards people of my kind.	0.59		1	0.80
	12	I feel sad when I see the suffering of my fellow human beings.	0.64		0.99	0.80
Connection with nature	13	In my opinion, nature should be respected.	0.65	10.50	0.99	0.88
	14	Most of the time, the beauty of nature, which is a sign of God's greatness, attracts my attention.	0.58		0.99	0.85
	15	I understand the beauty and greatness of the world through religious and spiritual rituals.	0.67		1	0.90
Communication with yourself	16	I have specific life goals and am optimistic about my future.	0.66	10.22	0.99	0.87
	17	I feel that living with spirituality is a positive and valuable experience.	0.66		0.99	0.79
	18	I feel satisfied with my religious and spiritual life.	0.61		1	0.81
Social spirituality	19	I cannot tolerate domination and authority, colonialism, and cultural, political, and economic exploitation of foreign countries in my country.	0.60	9.51	0.99	0.92
	20	I do not accept the interference of foreigners in my country's political, religious, economic, and social affairs.	0.58		1	0.91
	21	Seeking justice, as one of the manifestations of spirituality, should be within the system and in the direction of strengthening the system, and one should refrain from highlighting the country's problems too much.	0.59		0.99	0.86
	22	The cultural and religious achievements resulting from the Islamic revolution should be exported to other countries as a basis for Islamic civilization.	0.60		0.99	0.85

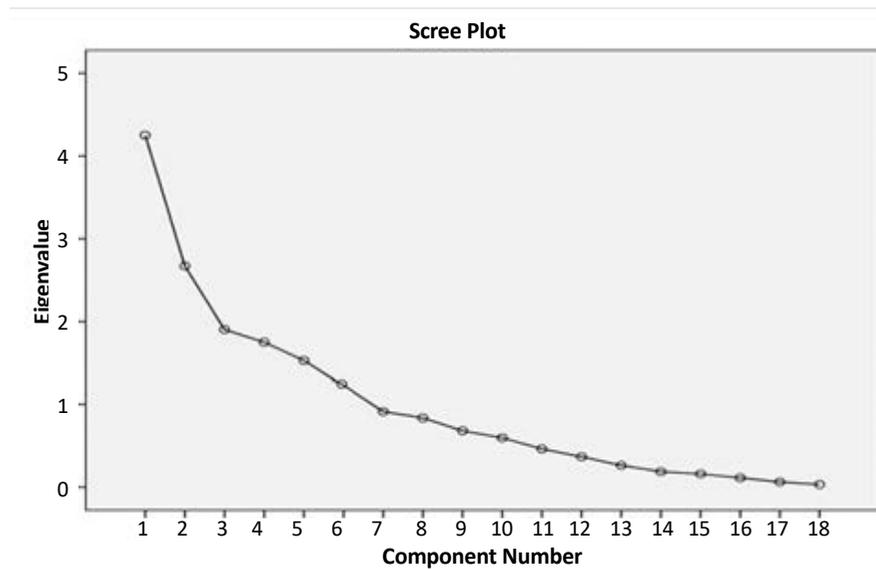


Figure 1. The slope of the range of factors (scree plot) of the spiritual well-being questionnaire.



cial spirituality (four questions). In this study, the confirmatory factor analysis results confirmed the six-factor model of the SWBQ. All the significant coefficients and fitness indices were obtained at the desired level.

Although the current scale differs from the scales prepared by other researchers regarding the number of factors and dimensions, there are also similarities. For example, in the study by Ghobari Bonab et al. [18], one of the dimensions of the scale of spiritual experience was obtained: Communication with God. Another scale was prepared by McSherry et al. [19], and one of its dimensions was to have a good relationship with others, which is similar to the dimension of communication with others in the scale created in the

current study, with the difference that other dimensions are also measured in this scale. Another scale was designed by Dehshiri et al. [20], which includes four dimensions of relationship with God, self, others, and nature, similar to the current questionnaire's dimensions. Still, the dimensions of action to religious beliefs and social spirituality are specific to the present study.

Regarding confirmatory factor analysis indicators, there were similarities and differences between the current questionnaire and some other questionnaires. For example, there was a similarity between the IFI (0.92) and NFI (0.91) in the current study and the research by Deshiri et al. [20], in which slight differences were observed.

Table 2. Model fit indices by confirmatory factor analysis

Goodness of Fit Index	Index Limits for Acceptable Fit	Index Limits for Good Fit	Index Limits for Perfect Fit	Observed Size	Fitness Result
χ^2/df	$\chi^2/df < 5$	$\chi^2/df < 3$	$\chi^2/df < 2$	2.92	Good
RMSEA	<0.1	<0.08	<0.05	0.073	Good
SRMR	<0.1	<0.08	<0.05	0.06	Perfect
CFI	>0.8	>0.9	>0.95	0.95	Good
NFI	>0.8	>0.9	>0.95	0.91	Good
NNFI	>0.8	>0.9	>0.95	0.90	Good
GFI	>0.8	>0.9	>0.95	0.93	Good
IFI	>0.8	>0.9	>0.95	0.92	Good
AGFI	>0.8	>0.9	>0.95	0.91	Good



Table 3. Values of the indicators related to the reliability of the spiritual well-being questionnaire

	Variables	Cronbach's α	Spearman-Brown Coefficient	Gottman's Split-half Coefficient	Retry Coefficient
1	Communication with GOD	0.81			0.78
2	Practicing religious beliefs	0.83			0.79
3	Communication with others	0.80			0.80
4	Communication with nature	0.79			0.81
5	Communication with yourself	0.77			0.81
6	Social spirituality	0.91			0.83
7	Total score of spiritual well-being questionnaire	0.84	0.88	0.87	0.82

Table 4. Descriptive information of the subjects assessed for the construct validity of the questionnaire (n=400)

Gender	No. (%)	Age (y)	No. (%)	Education	No. (%)
Female	188(47)	18-24	76(19)	Diploma and below	73(18.3)
Male	212(53)	25-31	64(16)	Associate degree	51(12.8)
Total	400(100)	32-38	78(19.5)	Masters' degree	177(44.2)
		39-45	60(15)	Masters' degree	78(19.5)
		46-52	54(13.5)	PhD	21(5.2)
		53-60	68(17)	Total	400(100)
		Total	400(100)		

Table 5. Descriptive indices of the research variables in the construct validity stage variables

Variables	Mean \pm SD	Minimum-Maximum
Communication with GOD	14.49 \pm 4.31	6-20
Practicing religious beliefs	15.80 \pm 3.15	5-19
Communication with others	13.22 \pm 4/23	6-18
Communication with nature	9.93 \pm 3.31	4-14
Communication with yourself	10.06 \pm 2.23	6-13
Social spirituality	14.91 \pm 3.45	7-20
Total score of the spiritual well-being questionnaire	78.41 \pm 9.11	32-102

In the current research, the binomial method was also used to check the reliability of the questionnaire. In the dichotomization method, by dividing the questionnaire questions into even and odd parts and using the Spearman-Brown and Guttman correlation coefficient index, the values of these coefficients were obtained as 0.88 and 0.87, respectively. Also, the internal consistency of the questionnaire subscales was obtained using Cronbach's α from 0.77 to 0.91, and the value of Cronbach's α for the total score of the SWBQ was 0.84. The value of the re-test reliability coefficient for the total score of the questionnaire and its subscales was between 0.78 and 0.83. In the study by Dehshiri et al. [20], the Cronbach's α value for the total score of the SWBQ and its dimensions was in the range of 0.85 to 0.94, and the re-test coefficient was in the range of 0.80 to 0.89, which were higher than in the present study. One of the reasons that can be mentioned for the better coefficients in the research of Dehshiri et al. [20] is that their samples were students who were more similar to each other in terms of age and the situation they faced during their lives, while the samples in the current study were more scattered in terms of age range. In general, the current research results showed that the current questionnaire has good validity and reliability, and can assess the issue of spiritual well-being appropriately following Iranian-Islamic culture.

Our results should be cautiously generalized since the participants were from the same city and did not represent the general population. In addition, this research was conducted with self-reported data. Therefore, the data are naturally subject to bias. It is suggested that the validity and reliability of the current questionnaire be investigated in other societies.

Conclusion

This research shows that the Iranian-Islamic SWBQ has acceptable psychometric properties, and researchers can use it as a valid tool to measure spiritual well-being among Iranian adults.

Ethical Considerations

Compliance with ethical guidelines

In the current study, all ethical considerations were observed.

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Authors' contributions

Study design: Amir Karami and Mohammad Shahmohammadi; Sampling, writing and statistical analysis: Amir Karami; Supervision and review: Mohammad Shahmohammadi.

Conflict of interest

The authors declared no conflict of interest.

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