Development and Validation of Islamic Questionnaire of Spiritual Intelligence

Sareh Dermanaki Farahani¹*, Faramarz Sohrabi¹, Masoud Azarbayejani²
1 Department of Clinical Psychology, Allameh Tabataba'i University, Tehran, Iran.
2 The Research Institute of Howzeh and University, Qom, Iran.

Abstract

Background and Objectives: Spiritual intelligence makes a major contribution to people’s health and well-being. Since religion is considered as an enriched context for Muslim communities, which can provide them with spiritual experiences, the aim of this study was to develop and validate a questionnaire in order to assess spiritual intelligence among people in these communities.

Methods: In this study, 10 components derived from the literature were examined using Islamic texts and interviews with Islamic scholars. Applying the expert opinion method, the items of interest were made. The developed questionnaire was then administered on a sample of 350 students from Tehran University and seminaries in Tehran selected by stratified sampling to establish its factor structure, validity, and reliability.

Results: Nine items were omitted in the preliminary conduction of the questionnaire. Following the explanatory factor analysis, six more questions were also eliminated due to their factor loadings being less than the critical value of 0.3. The Scree plot revealed that the factor structure of the questionnaire consisted of five main components which determined 36.99 percent of the total variance. Moreover, the Cronbach’s Alpha was obtained to be 0.92 which showed a proper internal consistency. Using King’s SISCI-24 questionnaire, the concurrent validity was also deemed relatively acceptable.

Conclusion: The main strength of this study was the development of a contextually competent instrument to assess spiritual intelligence among Muslim people. This questionnaire instrument showed relatively acceptable reliability and validity, and can be used in future research, especially in health sciences, among the population of interest.

Keywords: Factor Analysis, Islam, Spirituality, Spiritual Intelligence.

*Correspondence: Should be addressed to Ms. Sareh Dermanaki Farahani. Email: Sarehfarahanid@gmail.com

Please Cite This Article As: Dermanaki Farahani S, Sohrabi F, Azarbayejani M. Development and Validation of Islamic Questionnaire of Spiritual Intelligence. Health Spiritual Med Ethics. 2016;3(3):4-11.

Introduction

Intelligence as a controversial, yet essential concept in modern psychology has been historically under many scientific investigations, although there is no exact definition upon which all theorists agree (1,2). In this regard, the early scientific investigations on a spiritual type of intelligence (spiritual intelligence (SI;1)) suggest that intelligence quotient (IQ), emotional intelligence (3) and SI cannot distinctively explain the complex nature of actual intelligence. It is urged that a blend of these intelligences, combined with physical intelligence, can lead to a better explanation of human intelligence (4). However, Zohar and Marshal (5) in 2001 asserted SI to be “the most fundamental intelligence”, and Sisk (6) in 2002 considered SI as one “that integrates all other intelligences”.

The concerns about distinctions between spiritual and religious experiences are discussed in many studies (1,7-10). Recently, Hussain (10) stressed on an overlap between spirituality and religion constructs. Spirituality is a broader concept than religiosity, and the latter cannot always bring about spiritual experiences; however, religion may provide one with a context in which personal, subjective, and experiential orientation of spirituality can be expressed (10). An initiative study (8), for instance, which explored the components of spirituality was inspired by some of the influential western writers in addition to religious interviewees from Buddhist, Jews, Catholics and Protestants affiliations. Further, Beck (7) acknowledged
that supernatural intervention brings about a "divine indwelling" from which a religious person would get spiritual benefits. Interestingly, Beck encouraged a serious, systematic study of the world’s religions (7).

The meaning and the way of expressing SI may vary among different religious groups and spiritual contexts (11,12). In regard to the impact of cultural context on intelligence, Sternberg and Grigorenko (13) asserted that “intelligence is always displayed in a cultural context”. They also claimed that acontextual study of intelligence imposes an investigator’s world view (usually a western one) on the rest of the world. Applying this wisdom to SI can initially raise many questions, one of which is how religiosity can lead to spiritual experiences and what relevant attitudes can be found to enhance SI as a predictive ability of well-being (14).

Iranian researchers (15,16,17) believe that Islamic spirituality may be to some extent different from contemporary spirituality. For example, spiritual understanding of Islam specifically includes an awareness of God (16), and unity and resurrection are to trust in order to avoid an empty and meaningless life (17). Although a variety of spiritual elements are mentioned in western literature (e.g.,18,8), inspired by Islamic texts, Iranian researchers (19,15) also outlined some traits and components of SI. Based on an interpretation of Islamic view toward SI, one can be considered as spiritually intellectual only when one’s heart, mind, and limbs achieve a wide list of traits, including a realization of the presence and domination of a supreme being in the world and semanticization of the self and the world, as well as understanding the absolute reality (19). In an attempt to develop an assessment instrument of SI, Sohrabi and Naseri (15) incorporated 8 factors consisting of patience, religious/spiritual beliefs and practices, meaning and purpose in life, divinity, inner calmness, spiritual experiences, self-understanding, and forgiveness, all of which were considered as “manifestations of SI in Iranian culture” (15).

Despite the advantages of current research, we emphasize that harms derived from lack of research, guided by Islam as an enriched cultural source in Iranian lives, may negatively affect the efforts to enhance social and individual well-being. Iranian researchers discussed the necessity of designing some treatments based on the components of spiritual intelligence, suited to sociocultural situations and disorders, to improve the level of the community health (14). Obviously, this encouragement in the first place needs to investigate how to evaluate SI among Iranian Muslims based on their contextual (i.e.,Islamic) understandings of spirituality. Other researchers (e.g.,20) urged that lack of appropriate instruments is a cause of limited research in the field. Thus, this study aimed to develop an instrument underlined by Islamic interpretations of SI and its defined components adapted from the scientific literature (21,22,18) in order to use for assessing SI in Iranian population with Islamic background.

This study was designed to meet the followings: A short review of Islamic texts about the defined components of SI. And Development and validation of an instrument underlined by Islamic interpretations of SI’s components.

**Methods**

Phase 1: Theoretical framework

For developing an instrument to assess spiritual intelligence, a brief investigation was conducted in this study to determine the components of SI. According to the literature (18,21-23), 10 components were selected which included capacity to face and use pain and suffering; reluctance to cause unnecessary harm; tendency to ask why, what if, and to seek answers; critical existential thinking; transcendental awareness; conscious state expansion; justice; compassion and kindness; responsibility and commitment; and quality of being inspired by dreams. The components were selected based on a need to apply a universal, yet competent language to the context of Iranian Muslims.

Subsequently, using Holy Quran as the primary resource and following Shi’ite hadith books and Islamic scholars’ writings (e.g.,24),
a comprehensive review was applied to examine the Islamic interpretation of each component. Next, the selected components were discussed with some of the well-knowledgeable scholars for further comprehension, the results of which are described in the following:

Conscious state expansion (21,25) is defined as an ability to spiritually enter into the state of consciousness. This higher state in Islamic view can be obtained using prayer and worship. The Ascension, and Approach which is highlighted by Islamic scholars (24), are essentially regarded as Islamic metaphors for praying which address this state. Transcendental awareness which refers to a perception of transcendent dimensions of self, others, and nature (25) is specially emphasized in Islamic texts. The signs of faith are embedded in nature (the sky and earth) and people’s selves (Quran,51:20-23). The concept of Union in Islam (26) implies a kind of self-transcendence, which is related to integrating individual goals with those of the family, community, humanity, or cosmos (25). Based on Islamic teachings, every Mystic would reach the state of Union in which the whole world with all its people or creatures is viewed as a reflection of God’s will (26).

Critical existential thinking (21,25) is an essential ability, which is encouraged by Quran’s verses (39:18,11:102,17:37). In Holy Quran, there are a number of titles devoted to people who use this ability to seek the assurance, including ‘men of understanding’ (39:18,9), ‘who are given knowledge’ (58:11), and who ‘contemplate upon the creation of the heavens and the earth’ (3:191). A tendency to ask why and what if and seek the essential answers is one of the main components of SI (18). This component is evident in the Prophet Muhammad’s (S) wisdom as he maintained “most of the knowledge is a good question” (27).

The quality of being inspired by dreams is a feature in people with developed SI (18). Inspired by dreams, such people tend to seek the meaning behind the symbols of their dreams. In Islamic literature, dreams are considered as a source of knowledge, and a prominent instance of this notion in Quran is Josef the Prophet who learned dream interpretation by God’s inspiration (Quran,12:4,6,100). Quran emphasizes the capacity to face and use suffering (18) by human who is created into toil and suffer (Quran,90:4). In many Quran verses, an affliction is defined as a context within which one may become aware of the existence and presence of God (Quran,17:67,16:54,30:33). One of the illustrative examples is Jacob the Prophet who became a “commemoration for all who have understanding” (Quran,38:41-43).

Spiritual intelligence allows people to be reluctant to cause unnecessary harm to others (18). In this regard, there are many premonitions by the prophet of Islam, Imam Sadjad, Imam Ali, and Imam Sadegh (S), all of whom called for harm avoidance if one seeks salvation (24). Responsibility is the main value of SI (22), a notion which is prioritized by the school of Islam. According to the most prominent verse in Quran, the man is a creature who assumed “the trust” (Quran,33:72). The responsibility of one’s organs (Quran,17:36) has a significant role in one’s actions (‘do not follow what you do not know’). Responsibility should not be just regarded as a sentimental, unfounded issue, as it has a root in the Islamic jurisprudence perspective stating that man is in charge of any creature who contributes to their achievement (29).

Moreover, justice (22) is an essential notion emphasized in Islamic scripture and also in the statements of Imam Ali and Muhammad, the prophet of Islam (S). A very purpose of sending messengers from God and a significant task of people is to ‘establish the scale (of justice)’ (Quran,57:25). Additionally, the Prophet of Islam (S) maintained that an hour of justice is much better than praying whole days and nights for sixty years (30). Thus, a Muslim is encouraged to hold a quality of believing and acting according to that purpose and task. Compassion (22) along with kindness and altruism are all among the necessities of being a believer in the Islamic viewpoint. In Quran, every chapter begins with an emphasis on God’s compassionateness and mercifulness. It has been also highlighted as a very trait of the
Prophet of Islam (Quran,9:128,21:107), and the believers (Quran,3:103,49:10).

Phase 2: Developing the questions
To develop the intended items, a variety of measures were adopted, including SIS (31), ISIS (32), SISRI-24 (21), and the Azarbaijani’s Religiosity Scale (33). In a preliminary version of the Islamic Questionnaire of Spiritual Intelligence (IQSI), 59 items were designed. To evaluate the content validity of the instrument, 10 experts were interviewed and their opinions were included. Consequently, 77 items were yielded and assigned to 10 components of the IQSI. Each item was then rated based on a 5-point Likert scale from ‘Absolutely Disagree’ to ‘Absolutely Agree’. Further, the scoring was based on 0 to 4 model in which 0 is devoted to Absolute Disagreement and 4 to Absolute Agreement.

Phase 3: Sampling
The sample of the study consisted of 350 participants, including the undergraduate students of Tehran University (82 females and 74 males) and Seminary students of Tehran (63 females and 87 males) in their 1st to 6th years of study (which are consistent with undergraduate level) during the 2011-2012 educational year. The sample age ranged from 18 to 25 years. In order to select the sample, a stratified sampling method was adopted. Accordingly, during consecutive days, five classes were randomly selected from five schools (Islamic Theology & knowledge, Art, Law & political science, Literature) at Tehran University, the students of which responded to the questionnaire items. Using the same method, some classes were chosen from the seminaries of Tehran, including Jame’e of Amir Al-Momenin (S) (males), Hazrat Khadija (S), and Hazrat Zahra (S) (females), and subsequently, the IQSI was administered among the students in these classes.

Phase 4: Analysis
To quantitatively evaluate construct validity, an exploratory factor analysis was used. The factor structure of the questionnaire was determined using varimax rotation. The factor loading higher than 0.3 was considered. The adequacy of sample size was determined by Kaiser-Meyer-Olkin (KMO>0.6), and Bartlett’s test of sphericity (>0.5) was employed to determine the factorability of the data (34). In regard to assessing the internal consistency of the IQSI, the Cronbach’s Alpha was employed with a value higher than 0.60. Convergent validity was evaluated using SISRI-24 (21). Employing Person’s correlation test, the correlations between the IQSI’s initial factors and the five components of SISRI were evaluated (p<0.05). The analysis was accomplished using SPSS Software. A 0.05 level of significance was set.

Result
Developing the instrument
The Cronbach’s Alpha of the preliminary questionnaire (77 items) was determined 0/90 on a sample consisted of 30 students. Eventually, due to lack of consistency, nine items were removed and a 68-item version was yielded. The theoretical components of the IQSI are as following: capacity to face and use pain and suffering (7 items); reluctance to cause harm to others (4 items); tendency to ask why, what if, and to seek answers (5 items); critical existential thinking (8 items); transcendental awareness (11 items); conscious state expansion (9 items); justice (4 items); compassion and kindness (11 items); responsibility and commitment (6 items); and quality of being inspired by dreams (3 items).

Validating the instrument
To evaluate contingent validity of the 10-component IQSI on a sample of 30 subjects, the King’s SISCI-24 questionnaire (21) was employed. Table 1 reports the correlation coefficients between the components of IQSI and the total number of SISCI-24, distinctively. The results showed a significant correlation between each component of the IQSI and the total score of SISCI-24.

During the 3rd phase, among a sample of 350 participants, 44 participants did not completely respond to the questionnaire and thus, the remaining 306 questionnaires were retained for further data analysis.

The significant value of Bartlett’s test of sphericity (χ²(2278)=8332.644, p<0.0001) and KMO index (=0.875) statistically permitted to execute factor analysis on the data.
Table 1. The Pearson correlation between 10 components of the IQSI and SISCI-24 (25)

<table>
<thead>
<tr>
<th>Components</th>
<th>IQSI</th>
<th>SISCI-24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conscious state expansion</td>
<td>0.74</td>
<td></td>
</tr>
<tr>
<td>Transcendental awareness</td>
<td>0.68</td>
<td></td>
</tr>
<tr>
<td>Critical existential thinking</td>
<td>0.71</td>
<td></td>
</tr>
<tr>
<td>Tendency to ask why, what if, and to seek answers</td>
<td>0.58</td>
<td></td>
</tr>
<tr>
<td>Compassion and kindness</td>
<td>0.63</td>
<td></td>
</tr>
<tr>
<td>Capacity to face and use pain and suffering</td>
<td>0.66</td>
<td></td>
</tr>
<tr>
<td>Responsibility and commitment</td>
<td>0.54</td>
<td></td>
</tr>
<tr>
<td>Justice</td>
<td>0.69</td>
<td></td>
</tr>
<tr>
<td>Reluctance to cause harm to others</td>
<td>0.61</td>
<td></td>
</tr>
<tr>
<td>Quality of being inspired by dreams</td>
<td>0.59</td>
<td></td>
</tr>
</tbody>
</table>

The scree plot (Fig. 1) shows 19 experimental factors which are observed to be inconsistent with our 10 theoretical factors. Considering eigenvalues greater than 0.1, 68 items could be divided into five experimental factors in terms of congruency and relevancy.

![Scree Plot](Fig 1: Scree Plot)

In order to obtain simple and interpretable factors (34), a varimax rotation with factor loading higher than 0.3 was used. The five yielded factors contributed altogether to 36.99 percent of the total variance. Table 2 demonstrates the rotated component matrix with factor loadings of each of the 68 items based on five extracted factors. As illustrated in Table 2, the factor loadings of six items no. 3, 4, 10, 14, 17, 53, were below than 0.3, by removing which, 62 items remained. Based on the meanings and content of the items, an appropriate name was assigned to each of the five experimental factors as following: approaching consciousness (14 items), moral awareness (18 items), spiritual self-awareness (11 items), critical fundamental thinking (10 items), and meaning-of-life awareness (9 items).

![Rotated Component Matrix](Table 2. Rotated Component Matrix)
Eventually, applying Cronbach’s Alpha, the total internal consistency of IQSI was determined as 0.92. The determined Cronbach’s Alpha for approaching consciousness, moral awareness, spiritual self-awareness, critical fundamental thinking, meaning of life awareness were as 0.89, 0.84, 0.79, 0.82 and 0.76, respectively. This indicated a desired internal consistency for the whole questionnaire and each component.

Discussion

The present study aimed to develop and validate a questionnaire based on Islamic viewpoint towards the defined components of spiritual intelligence. Among a variety of components in the literature (18,21,22), 10 major components were adopted, and Islamic aspects of each were investigated to develop valid items of interest. An initial 10-component questionnaire was statistically examined, which resulted in five experimental components called approaching consciousness, moral awareness, spiritual self-awareness, critical fundamental thinking, and meaning of life awareness. Finally, a 62-item questionnaire was yielded, which could explain 36.99% of the total variance.

The ability of approaching consciousness, as a kind of vertical component of SI (4), can be essentially obtained by worshiping, praying, and gaining a state of approach based on an Islamic practice. This higher state which can be experienced during praying God, pilgrimage, and/or reading Quran and Supplications, may lead to an experience of spiritual supplication (Quran,6:63) and submission (Quran,98:7-8). Islamic adaptation of this component may serve as a direction toward promoting the transcendent-spiritual aspects of religious practices in order to enhance the health of the community (14). This component could also explain about 9.35 percent of the variance of the IQSI.

The main aspects of moral awareness, as a kind of horizontal component of SI (4), consisted of compassion and kindness, reluctance to cause harm to others, and responsibility and justice (22,23). This component could explain about 7.96 percent of the variance of the IQSI. Since the “completion of moral virtues” was a significant purpose of the Prophet of Islam (35), it is no surprise that a believer who adheres to Islamic moral beliefs, needs to spiritually exhibit these essential virtues. The spiritual essence of this morality may be embedded in having a kind of deep awareness of good deeds toward self, others, and the world, which distinguished this state from a form of slavish conformity to social morals.

The third component of the IQSI, spiritual self-awareness, consisted of a self-knowledge of one’s own spiritual abilities, and could explain about 6.98 percent of the variance of the IQSI. The self of a believer is a source of God’s signs (Quran, 51:21,41,35). Thus, being aware of spiritual facts of one’s self (i.e., the soul of a believer) is acknowledged as a necessity for spiritually exploring one’s inner world.

Critical fundamental thinking as another component of the IQSI, is a combination of critical existential thinking (21) and tendency to ask (22), and could explain about 6.78 percent of the variance of the IQSI. The tendency of reasoning and thinking is a basic doctorin in Islamic scriptures, which is illustrated in all the question-based verses of Quran (e.g. Quran,90:7-10,27:60-64). A key dictum of Islam implies that thinking is more effective in one’s soul than regular, ritualistic praying (36). Thus, engaging to think about essential, existential matters (e.g., the purpose of creation, World Thereafter, death, cosmos, sky, earth, creatures, etc.) not only needs a spiritual ability, but also can bring about a spiritual experience as a religious practice.

Awareness of meaning of life could explain 5.90 percent of the variance of the IQSI and includes meaning-related items of critical existential thinking (21) and capacity to face and transcend pain (22); the latter contributed as a major aspect. The notions of pain and suffering in Quran have a main role in description of human’s life. For example, ‘affliction’ (Quran,57:22,42:30), ‘fear, hunger, and loss of property and lives and fruit’, metaphorically or real, (Quran,2:155), ‘fatigue’ (Quran,90:4), and a state of ‘hard striving’...
(Quran,84:6) as well as concomitance of ‘hardship’ and ‘ease’ (Quran,94:5-6) are all the inevitable aspects of life. Therefore, spiritually interpreting uneasiness as a sacred part of one’s life would result in a transcendental adjustment. However, further research is needed on this matter.

In an attempt to evaluate convergent validity of the IQSI, the correlations between 10 theoretical components of the IQSI with SISRI-24 (21), ranging from 0.54 to 0.74, were relatively acceptable. According to the results, the IQSI were identified as a relatively valid instrument. Moreover, the internal consistency of the IQSI based on Cronbach’s Alpha was obtained between 0.76 to 0.88 for the components and 0.92 for the whole, indicating a relatively high reliability. The other scales of SI had Cronbach’s Alpha, including 0.97 (32), 0.95 (21), 0.87 (31), and 0.98 (15), which means that the reliability of the IQSI is quite satisfying.

Of the items excluded after analysis, three belonged to compassion, two to being inspired by dreams, and one to tendency to ask why and what if. These may have cultural and contextual implications for further research considerations. For example, a removed item about how one likes animals was considered as an aspect of compassion towards God’s creatures. This is while there are some constraints about treating some animals (e.g., pigs, dogs, cats) based on Islamic Sharia. However, the notion of kindly treating animals was remained valid, which implies a need to more carefully account for the cultural aspects of people’s attitudes (i.e., Muslims) towards these matters.

**Conclusion**

The main strength of this study was the development of a contextually competent instrument to assess spiritual intelligence among Muslim people. Although, spirituality is a broader concept than religiosity (7,10), the religious contributions to meet the goals of spiritual experiences cannot be neglected. As a result of this view, the IQSI instrument was developed with relatively acceptable reliability and validity, and resulted in some of Islamic-based interpretations of SI’s components to be yielded. This questionnaire can be used in future research, especially in health science, among the population of interest. Further investigation is also recommended to enhance the psychometric properties of the IQSI.

**Conflict of interest**
The authors declare no conflict of interest.

**Acknowledgements**

This article was derived from the first author’s dissertation in 2012. We sincerely thank all the respondents and their respective institutions for their cooperation and support. We are thankful of all Islamic scholars whose insights made important and lasting contributions to development of this questionnaire.

**References**

13. Sternberg RJ, Grigorenko EL. Intelligence and culture: How culture shapes what intelligence means, and the implications for a science of well-being. Philos
Development and Validation of Islamic Questionnaire


