VALIDATING THE PERSIAN INTEGRATED SPIRITUAL INTELLIGENCE SCALE WITHIN AN ISLAMIC CONTEXT

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Abstract

The present study explored the reliability and construct validity of the 82-item Integrated Spiritual Intelligence Scale (ISIS) designed by Amram and Dryer (2008) in Iran. To this end the ISIS was translated into Persian by employing schema theory and administered to nine hundred and fourteen undergraduate and graduate students majoring in various fields in five universities in Mashhad. The participants' responses were submitted to principal axis factoring and Varimax with Kaiser Normalization resulting in the extraction of twenty one factors having items with at least one acceptable loading, i.e., Holistic, Positive, Detached, Purposeful, Committed, Metaphysical, Integrative, Perceptive, Receptive, Assiduous, Fragile, Prudent, Hollow, Self-Discerning, Other-Dependent, Self-Cognizant, Materialistic, Resistant, Naturalistic, Concessional, and Sensual. While fourteen factors confirm the presence of spiritual intelligence in individuals, seven are reverse revealing its absence. Both confirmatory and reverse factors correlate significantly with each other. They also show acceptable levels of reliability whenever applicable.

Key Words: Intelligence, ROS, schema, capability

1. Introduction

Intelligence gene is said to be one of the most important variables determining and shaping the survival of human beings on the earth (Darwin, 1871). As a construct intelligence itself is "the aggregate or global capacity of the individual to act purposefully, to think rationally and to deal effectively with his environment" (Wechsler, 1944, p. 3, as cited in Fancher, 1985). In order to serve the survival function within social contexts and achieve the desired objectives, humans do need the ability to judge well, to understand well, and to reason well (Binet, 1905). Although Mayer and Caruso (2002) refined and broadened the concept as "the capacity to carry out abstract reasoning, recognize patterns, and compare and contrast" (p. 2), the most germane nature of intelligence was revealed by Gardner (1993) as

> a computational capacity – a capacity to process a certain kind of information – that originates in human biology and human psychology. An intelligence entails the ability to solve problems or fashion products that are of consequence in a particular cultural setting or community. (p. 6).

In order for a capacity to be accepted as an intelligence, Gardner (1983) offered eight criteria, i.e., 1) potential isolation by brain damage, 2) the existence of idiot savants, prodigies, and other exceptional individuals, 3) having an identifiable core operation or set of operations, 4) having a distinct and identifiable developmental history, 5) an evolutionary history and evolutionary plausibility, 6) being empirically supported by tests, 7) being supported by psychometric findings, and 8) displaying susceptibility to encoding in a symbol system.

Based on the definition and the eight criteria specified above, Gardner (1983, 2000) argued that there is *not* just one intelligence, i.e., IQ, but several independent primary intelligences, i.e., linguistic, logical-mathematical, musical, bodily-kinesthetic, naturalistic, spatial, intrapersonal, and interpersonal intelligences. Amram and Dryer (2008) and King (2008) reviewed the literature and concluded that spiritual intelligence (SI) can also be treated as another independent intelligence because it meets most, if not all, of the eight criteria.

The SI is defined as "a set of mental capacities which contribute to the awareness, integration, and adaptive application of the

nonmaterial and transcendent aspects of one's existence" (King, 2008). Individuals employ the SI "when they draw on their spiritual abilities and resources to make meaningful decisions, deliberate over existential issues, or attempt problem solving in daily life" (Nasel, 2004, p. 4). Zohar and Marshall (2000) believed that the SI utilizes the emotional intelligence and IQ to "reframe or reconceptualize our experience… and thus transform our understanding of it" (p. 56).

Nasel (2004) seems to have been the first scholar who developed the 17-item SI Scale to reflect the "affective, cognitive, and experiential capacities and resources representative of spiritual intelligence" (p. 76). The scale was not, however, utilized widely in the literature because it was limited to Christian values and beliefs as well as aspects of New Age individualistic spirituality.

In contrast to Nasel (2004), King (2008) started with four spiritual capacities, i.e., critical existential thinking, personal meaning production, transcendental awareness, and conscious state expansion, and developed a pool of 84 items to tap into these capacities. King's very dependence on the capacities resulted in his final selection of only 24 items to fit his a priori model. This approach towards validating a transcendental measure results in imposing the designers' presuppositions on the measure and employing statistical approaches such as factor analysis and structural equation modeling to support their presuppositions.

Allport and Ross (1967), for example, believed that two major orientations underlie all religious behaviors, i.e., intrinsic and extrinsic. Based on this belief, they developed their Religious Orientation Scale (ROS) to measure the two motivations. Khodadady and Golparvar (2011), however, extracted four factors when they translated the 21-item ROS into Persian and administered it to 329 undergraduate university students and applied three methods of factor extraction, i.e., Maximum Likelihood, Principal Axis Factoring (PAF) and Principal Component Analysis (PCA), to their data and rotated the extracted latent variables via Varimax with Kaiser Normalization (VKN).

Khodadady and Bagheri (2012) added 12 religious indicators to the ROS and administered it to 536 undergraduate students majoring in various fields in two universities in Mashhad, Iran. They applied the PAF and VKN to the participants' responses and extracted seven factors, i.e., *Inspirational, Intrinsic, Social, Concessional, Theo-*

Pacific, *Humanitarian*, and *Sacrificial*. Their results thus showed that religion is not a simple construct whose application to everyday lives can be explained by just two orientations. Similarly, approaching a construct as complex as the SI as an independent intelligence consisting of just four capacities provides a very narrow, if not distorted, understanding of how it contributes to human survival in general and achievement in educational programs in particular.

Instead of limiting the SI to four capacities, Amram (2007), conducted 71 interviews with spiritual teachers and business leaders who applied and embodied spirituality in their work and daily life and developed the 83-item Integrated Spiritual Intelligence Scale (ISIS). In order to validate the ISIS, Amram and Dryer (2008) [henceforth A&D] administered the ISIS along with the Satisfaction With Life Scale (SWLS, Pavot & Diener, 1993) and the Index of Core Spiritual Experiences (INSPIRIT; Kass et al, 1991) to 263 adult volunteers among whom were 15 high spiritual intelligence and business acumen. Results showed that there was a significant correlation between the ISIS and SWLS, i.e., r = 0.30, $p < 0.01$, and INSPIRIT, i.e., r = 0.73, $p < 0.01$. A&D also applied the principal component analysis to their data and extracted 22 capabilities which correlated moderately with the SWLS and the INSPIRIT. (The capabilities along with their reliability coefficients are presented in the Instrument section.)

This study is designed to translate the ISIS into Persian and investigate whether it has factorial validity in Iran as a religious, i.e., Islamic, country. The validation of the Persian ISIS is important because its English version was developed on various major traditions, i.e., Buddhism, Christianity, Earth-based (shamanic and pagan), Eclectic (personal integration of several traditions), Hindu, Islam/Sufism, Jewish, Non-dual (spiritual self-realization involving the transcendence of subject object duality), Taoism, and Yoga, in America which is a secular country. The study also explores whether the latent variables constituting the Persian ISIS correlate significantly with each other.

2. Methodology

2.1 Participants

Nine hundred and fourteen, 463 (50.7%) female and 451 (49.3%) male, university students voluntarily took part in the project. While 15 (1.65%) did not specify their age, the remaining were between 16 and 47 years old (mean = 21.20, SD = 4.05). With the exception of 191 (20.9%), the remaining participants (n = 723, 79.1%) were not studying English at any language institute at the time of research. While 561 (61.4%) did not specify their level of English proficiency, 77 (8.4%), 222 (24.3%) and 54 (5.9%) declared it to be elementary, intermediate and advanced learners of English, respectively. One participant had not specified her marital status whereas the majority, i.e., 740 (81%), were single students of Agriculture (n = 138, 15.1%), Engineering (n = 198, 21.7%), Humanities (n = 385, 42.1%), Science (n = 150, 16.4%) and Medicine (n = 31, 3.4%) at Above diploma (n = 4, .4%), B.A. (n = 657, 71.9%), M.A., M.S. or M.D. (n = 224, 24.5%) and PhD. (n = 27, 3.0%) levels. They spoke Arabic (n = 3, .3%), English (n = 5, .5%), Kurdish (n = 37, 4.0%), Lori (n = 20, 2.2%), Persian (n = 785, 85.9%) and Turkish (n = 52, 5.7%) as their mother language. They were all Muslims.

2.2 Instrument

Two instruments were employed in this study, i.e., a demographic scale and the Integrated Spiritual Intelligence Scale (ISIS).

2.2.1 Demographic Scale

The Persian demographic scale consisted of two short-answer questions and five multiple choice items dealing with the participants' age, the name of the institute where they studied English, their level of English proficiency, gender, marital status, field and degree of academic study, and mother language.

2.2.2 Integrated Spiritual Intelligence Scale

The Persian version of A&D's Integrated Spiritual Intelligence Scale (ISIS) was employed in this study. It consists of 82 items tapping into five logically established domains, i.e., Consciousness, Grace, Meaning, Transcendence, and Truth. (Item 83, *I have answered all the questions truthfully and to the best of my ability*, is added to secure answer validity and thus has no relationship to the domains.)

Each item is presented as a statement representing the participants' behaviour within the past 6 to 12 months. They were required to specify whether they never or almost never, seldom or rarely, sometimes, often or somewhat frequently, usually or very frequently, or always or almost always exhibited the behaviour. The values of 1 to 6 were assigned to these points, respectively. For the ease of presentation, these six values were collapsed into three points by adding up values 1 and 2 as well as values 4, 5 and 6 to form points 1 (never) and 3 (always) respectively. Value 2 (sometimes) was kept intact.

Table 1 presents the twenty two SI capabilities comprising the English ISIS. As can be seen, the number of items comprising each capability ranges from two, i.e., Gratitude, to six, i.e., Practice. The alpha reliability coefficients of these capabilities range from .88 (Presence) to .62 (Egolessness). Although Practice has the largest number of items among the capabilities, its alpha is .73. Higher-self and Sacredness with five and four items, respectively, enjoy the second highest reliability level, i.e., .87. As it can also be seen, 56 items (68.3%) are confirmatory in nature whereas 26 (31.7%) are reverse (R).

Table 1

Items constituting the capabilities measured by the English ISIS and their RCs

Capability	Items	α	Capability	Items	α
Beauty	I01, I47, I62	.79	Joy	I76R, I77, I80	.74
Discernment	I28, I42, I45, I79R	.75	Mindfulness	I04, I16, I29, I54, I72	.71
Egolessness	I46R, I63R, I78R	.62	Openness	I07R, I11R, I60R, I81R	.70
Equanimity	I03, I09R, I32	.74	Practice	I05, I17, I20, I30, I41, I66	.73
Freedom	I06, I31R, I44R	.77	Presence	I23R, I33R, I75R	.88
Gratitude	I24, I67	.72	Purpose	I10, I19, I39, I73R, I74R	.70
Higher-self	I15, I35, I53R, I58, I59	.87	Relatedness	I25, I48, I56	.68
Holism	I14, I37, I61, I65	.82	Sacredness	I08, I34, I57, I64	.87

Immanence	I13R, I21, I27, I52	.77	Service	I38, I40, I71	.82
Inner-wholeness	I18R, I55R, I69, I82R	.71	Synthesis	I36, I49, I70	.70
Intuition	I12, I43, I50, I51	.71	Trust	I02R, I22R, I26R, I68	.77

2.3 Procedure

Since the only theoretical rationale which provides translators with an objective criterion to translate passages from the source language to target language is schema theory, it was employed in this study (Khodadady, 2001, 2008; Seif & Khodadady, 2003). The theory treats each and all the words/phrases constituting the source text as schemata whose target equivalents must be chosen not only on the basis of what they stand for but also on the basis of the syntactic, semantic, and discoursal relationships they enter into with each other. In order to achieve the objective, an MA student of translation at Ferdowsi University of Mashhad was first asked to translate all the 83 items constituting the English ISIS into Persian.

The schemata employed in the Persian items were then compared with those of the English one by one. This approach resulted in the revision of almost all items by the first author. The fifth item, "I practice inner and outer quiet as a way of opening myself to receive creative insights," was, for example, translated as MAN BA TAMRIN ARAMESH DARUNI WA BIRUNI KHOD RA DAR MARAZEH DARYAFT BINESHHAYEH KHALAGHANEH GHARAR MIDAHAM. The back translation of this Persian sentence is "by practicing inner and outer quiet I expose myself to creative insights." As can be counted, the original English item consists of 16 schemata whereas the back translation contains only 12, i.e., "way" and "opening" have been deleted in the process. The missing schemata were therefore translated and the Persian statement was revised as ARAMESH DAROUNI WA BIROUNI BEONVANEH YEKI AZ TOROGEH BAZGHOSTANE KHOD BE DARYAFTEH DIDHAYEH KHALAGHANEH RA TAMRINMIKONAM.

Upon revising the translated Persian items on the basis of schema theory, they were put together as a pool of 82 items to develop the Persian ISIS. The scale was then presented to several university stu-

dents similar to the sample to which it was finally administered in spring 2012. They answered the items and announced that they had no difficulty in understanding them. Upon ensuring the intelligibility of the Persian ISIS it was printed along with the demographic scale and administered to participants in person. A number of these participants provided the researchers with their email address in order to be informed about the results of study.

2.4 Data Analysis

The reliability of the Persian ISIS was assessed by utilizing Cronbach Alpha. Unlike A&D who employed the PCA to extract components, the PAF was utilized in this study. The PCA was not utilized because it fails to "differentiate between variance in measures due to the common factors (factors that influence more than one measure) and variance due to unique factors (factors that influence only one measure)" (Conway & Huffcutt, 2003, 150). Similar to A&D, however, the VKN method was used to rotate the extracted latent variables (LVs). For determining the number of LVs to be extracted, the eigenvalues of one and higher were adopted as the only criteria and the items contributing to each LV were chosen on the basis of their loadings. Following Tabachnick and Fidell (2001) items having the loadings of 0.32 and higher on a given factor were treated as acceptable because they explain approximately 10% of overlapping variance with the other items in that factor.

If any item loaded on more than one LV, its highest loading on one factor was taken as its main contribution to that particular LV only and its cross loadings on other LVs were deleted. Items which loaded acceptably but negatively on any factor were also deleted regardless of the magnitude of their loadings. Upon establishing the LVs having acceptable loadings, they were correlated with each other to explore the strength of their relationships. The descriptive and statistical analyses were run via IBM SPSS Statistics 20 to explore the hypotheses below.

1. The 82 items comprising the Persian ISIS will load on the 22 factors corresponding to the subscales established by the A&D

2. The extracted LVs will correlate significantly with each other.

3. Results and Discussion

The alpha reliability coefficient obtained on the ISIS is .90 (N = 914) in this study. Although this magnitude of alpha is "excellent" (George & Mallery, 2003, 231), it is lower than the coefficient reported by A&D, i.e., .97 (N= 263). A comparison of the participants who took part in the two studies shows that while their age ranged between 18 and older than 65 in A&D's and they were either high on spirituality or successful in business, those of the present were more homogeneous in age and career. While 32 (3.5%) of them did not specify their age, the age of the remaining participants in this study ranged between 16 and 47 (Mean = 20.85, SD = 4.96). They were all university students.

Besides the homogeneity of participants' career and smaller age range in this study, they were Muslims and thus differed from those of A&D in terms of believing in one faith only, i.e., Islam. Since the items comprising the ISIS were developed on the basis of Amram's (2007) interviews with those practicing Buddhism, Christianity, Earth-based, Hindu, Islam/Sufism, Jewish, Non-dual, Taoism, and Yoga, the ISIS included some items which did not load on any factors as will be described shortly.

In order to find out whether running a factorial analysis of the data is appropriate, KMO and Bartlett's Test were run and the KMO statistic of .90 was obtained. According to Kaiser and Rice (1974), the KMO statistic in the .90s is "marvelous," in other words, the sample selected in the study and the factor analysis employed provided the best common factors. The significant Bartlett's Test of Sphericity, i.e., X^2 = 20092.475, df = 3321, p < .001, indicated that the correlation matrix was not an identity matrix.

Table 2 presents the descriptive statistics for the 82 items along with their initial (I) and extraction communalities (ECs). As can be seen, the skewness indices range from 1.28 (I46R) to -0.96 (I02R), indicating that the items have elicited different responses from the participants as they were designed to. The ECs ranged between 0.16 (I16) and 0.58 (I51). As will be discussed shortly the items having the highest skewness and the lowest EC indices have not loaded on any factors, i.e., items I46R and I16, respectively. (The acceptable and rotated loadings and cross loadings of items on each factor are given in Appendix A.)

Table 2

Descriptive Statistics for the 82-Item Pool (N = 914)

Item	M	SD	Skew	Kurt	IC	EC	Item	M	SD	Skew	Kurt	IC	EC
I01	4.29	1.45	-.79	.12	.26	.27	I42	3.85	1.34	-.41	-.25	.45	.48
I02R	4.46	1.45	-.96	.25	.25	.24	I43	3.67	1.43	-.38	-.27	.34	.41
I03	3.51	1.25	-.06	-.25	.34	.39	I44R	4.08	1.41	-.61	-.22	.29	.41
I04	4.04	1.30	-.57	.05	.32	.39	I45	3.96	1.43	-.47	-.33	.35	.43
I05	3.27	1.48	-.08	-.59	.31	.32	I46R	2.14	1.42	1.28	.81	.38	.53
I06	3.96	1.36	-.50	-.20	.33	.35	I47	4.14	1.38	-.55	-.34	.46	.56
I07R	3.36	1.44	-.08	-.79	.19	.25	I48	4.08	1.36	-.51	-.26	.42	.46
I08	3.56	1.62	-.27	-.71	.17	.17	I49	3.60	1.36	-.23	-.43	.39	.40
I09R	3.01	1.41	.22	-.74	.33	.41	I50	3.93	1.35	-.38	-.31	.35	.41
I10	3.51	1.34	-.23	-.18	.27	.30	I51	3.84	1.34	-.39	-.27	.43	.58
I11R	3.47	1.50	-.08	-.83	.29	.34	I52	3.73	1.28	-.18	-.54	.33	.39
I12	2.90	1.63	.49	-.89	.19	.21	I53R	3.68	1.37	-.21	-.73	.17	.24
I13R	4.35	1.48	-.75	-.26	.27	.33	I54	3.69	1.39	-.10	-.65	.27	.35
I14	3.63	1.45	-.32	-.23	.33	.36	I55R	3.87	1.36	-.50	-.32	.25	.30
I15	4.13	1.55	-.69	-.31	.39	.48	I56	3.82	1.46	-.29	-.70	.31	.35
I16	3.59	1.72	-.18	-1.11	.18	.16	I57	3.62	1.50	-.32	-.55	.45	.53
I17	3.86	1.49	-.35	-.67	.29	.31	I58	4.02	1.46	-.40	-.63	.44	.50
I18R	3.87	1.50	-.43	-.61	.26	.30	I59	4.23	1.43	-.56	-.34	.51	.53
I19	3.99	1.56	-.45	-.62	.38	.42	I60R	3.28	1.58	-.07	-1.13	.25	.30
I20	3.96	1.61	-.49	-.79	.44	.50	I61	3.72	1.57	-.25	-.79	.33	.36
I21	4.07	1.54	-.41	-.72	.35	.41	I62	3.67	1.38	-.21	-.47	.41	.48
I22R	3.83	1.48	-.34	-.66	.29	.35	I63R	3.29	1.39	.04	-.60	.33	.37
I23R	3.95	1.50	-.49	-.53	.25	.28	I64	3.80	1.53	-.40	-.51	.46	.54
I24	4.09	1.44	-.45	-.54	.45	.46	I65	3.71	1.35	-.32	-.29	.46	.53
I25	4.15	1.45	-.59	-.33	.29	.31	I66	3.47	1.47	.02	-.86	.41	.53
I26R	3.91	1.52	-.47	-.70	.35	.39	I67	4.45	1.40	-.77	.00	.48	.52
I27	3.10	1.42	.39	-.54	.26	.31	I68	4.20	1.44	-.56	-.39	.46	.53
I28	4.28	1.35	-.74	.19	.40	.43	I69	4.00	1.49	-.46	-.65	.45	.52
I29	3.50	1.32	-.06	-.48	.31	.38	I70	3.35	1.36	-.14	-.27	.44	.49
I30	3.47	1.40	.01	-.07	.34	.41	I71	3.83	1.47	-.35	-.52	.44	.49
I31R	3.26	1.57	.18	-1.00	.21	.24	I72	3.77	1.40	-.33	-.46	.36	.43
I32	3.17	1.41	.22	-.77	.24	.22	I73R	2.89	1.53	.25	-.63	.36	.44
I33R	2.95	1.55	.38	-.89	.21	.23	I74R	3.71	1.50	-.42	-.45	.30	.37
I34	3.66	1.43	-.32	-.29	.28	.34	I75R	3.69	1.38	-.33	-.41	.33	.43
I35	3.82	1.32	-.29	-.32	.39	.50	I76R	3.77	1.45	-.35	-.59	.39	.51
I36	3.38	1.35	.02	-.50	.33	.38	I77	3.35	1.41	.09	-.56	.24	.23
I37	3.78	1.38	-.39	-.17	.41	.51	I78R	3.27	1.58	.10	-.97	.24	.34
I38	4.31	1.36	-.63	-.24	.46	.55	I79R	3.87	1.51	-.53	-.36	.26	.35

I39	4.05	1.42	-.46	-.46	.35	.40	I80	3.97	1.41	-.45	-.40	.45	.49
I40	3.77	1.53	-.23	-.89	.46	.55	I81R	3.25	1.38	.12	-.58	.30	.53
I41	4.06	1.47	-.47	-.65	.41	.48	I82R	4.11	1.73	-.55	-.93	.23	.29

Table 3 presents the descriptive statistics of 21 rotated factors extracted in this study. As can be seen, out of 82 items, twenty have not loaded acceptably on any factors, i.e., I01, I07R, I12, I16, I19, I21, I25, I31R, I32, I34, I43, I46R, I49, I53R, I55R, I56, I60R, I63R, I77, and I82R. The 23 rotated factors extracted explain 39.691 of variance in the ISIS. However, when the magnitudes of the loadings were scrutinized and the lower cross loadings on more than one factor were removed, no item loaded acceptability on factors 14 and 23, indicating that 21 rotated factors underlie the ISIS (see Appendix A).

Table 3

Descriptive statistics, reliability, and variances (V) of factors (F) underlying the ISIS

F	#	Factor name	Items	α	Rotation Sums of Squared Loadings		
					Total	% of V	C V%
1	9	*Holistic*	I03, I04, I05, I06, I08, I10, I14, I15, I17	.71	3.137	3.826	3.826
2	5	*Positive*	I59, I67, I68, I69, I80	.76	2.592	3.161	6.987
3	6	*Detached*	I02R, I13R, I18R, I22R, I23R, I26R	.60	2.425	2.958	9.945
4	4	*Purposeful*	I24, I38, I39, I40	.71	2.242	2.734	12.679
5	3	*Committed*	I20, I41, I42	.65	2.231	2.721	15.400
6	6	*Metaphysical*	I57, I58, I61, I62, I64, I71	.73	2.150	2.622	18.022
7	3	*Integrative*	I35, I36, I37	.61	1.712	2.088	20.110
8	3	*Perceptive*	I50, I51, I52	.63	1.501	1.831	21.941
9	3	*Receptive*	I48, I70, I72	.57	1.398	1.705	23.646
10	2	*Assiduous*	I65, I66	.62	1.397	1.704	25.350
11	3	*Fragile*	I09R, I11R, I33R	.50	1.255	1.530	26.880
12	3	*Prudent*	I28, I29, I30	.55	1.146	1.397	28.278
13	2	*Hollow*	I75R, I76R	.59	1.052	1.283	29.561
14	-	-	-	-	1.047	1.276	30.837
15	1	*Self-Discerning*	I45	-	.931	1.135	31.972
16	2	*Other-Dependent*	I78R, I79R	.39	.929	1.133	33.106

17	1	*Self-Cognizant*	I54	-	.897	1.094	34.199
18	2	*Materialistic*	I73R, I74R	.41	.882	1.076	35.275
19	1	*Resistant*	I81R	-	.857	1.045	36.320
20	1	*Naturalistic*	I27	-	.752	.918	37.238
21	1	*Concessional*	I44R	-	.749	.914	38.151
22	1	*Sensual*	I47	-	.701	.855	39.006
23	-	-	-	-	.562	.685	39.691

As shown in Table 3, while no items load acceptably on F14 and F23, six Fs, i.e., 15, 17, 19, 20, 21, and 22, consist of only one item, i.e., I45, I54, I81R, I27, I44R, and I47, respectively. The alpha reliability coefficient (RC) of these Fs could not, therefore, be estimated. The RC of the remaining 15 Fs, however, ranged from 0.76 (F2) to 0.39 (F16). In spite of having the lowest RC, F16 correlates significantly with seven Fs, i.e., 2, 3, 11, 13, 18, 19, 21, and thus establishes its relevance to the ISIS. (The factor correlation matrix in given in Appendix B). The correlations thus answer the second question and show that factors are significantly related to each other.

Nine items, i.e., I03, I04, I05, I06, I08, I10, I14, I15, and I17, load acceptably on F1. Since they belong to seven capabilities established by A&D, i.e., Equanimity (I03), Freedom (I06), Higher-self (I15), Holism (I14), Mindfulness (I04), Practice (I05 and I17), Purpose (I10), and Sacredness (I08), new labels were employed to stand not only for F1 but also for other Fs whose constituting items pertained to A&D's various capabilities. The labels given to factors extracted in this study are therefore different from those of A&D. (The items comprising the ISIS, the factors upon which they load and the magnitudes of their loadings are given in Appendix C).

The fist factor called *Holistic* shows that individuals having the SI monitor their thoughts and emotions, sense the necessity of nonconformity, remain aware and steady under chaotic circumstances, approach life cyclically, resort to higher consciousness to find their path, are open to creative insights, align themselves with destiny, resort to wisdom and find the source of life immanent and present in their everyday life. *Holistic* F correlates the highest with F4 (*Purposeful*) and F6 (*Metaphysical*), i.e., r = .47, p <.01.

Five items, i.e., I59, I67, I68, I69, and I80, load acceptably on F2 called *Positive*. Individuals having the SI are *Positive* when they have

faith that everything will work out for the best, accept themselves as they are, feel grateful for the abundance of positive things in their lives, render their activities joyful and draw on their faith when they face day-to-day challenges. The *Positive* attribute of spiritually intelligent individuals correlates the highest with F6 (*Metaphysical*), i.e., r=.59, *p* <.01.

Six reverse items, i.e., I02R, I13R, I18R, I22R, I23R, and I26R, load acceptably on reverse F3 called *Detached*. Spiritually intelligent individual get *Detached* when they feel limited by having few options available, are driven and ruled by fears, think about either future or the past without attending to the present, expect the worst, get disconnected from nature and do not know how to be themselves in interactions with others. It has the highest correlation with both F11 (*Fragile*) and F13 (*Hollow*), i.e., r = .36, *p* <.01.

Four items, i.e., I24, I38, I39, and I40, load acceptably on F4 called *Purposeful*. Spiritually intelligent individuals will be *Purposeful* if they feel that their work is an expression of love and in alignment with their greater purpose. They derive meaning from the pain and suffering and treat their life as a gift and try to make the most of each moment. F4 correlates the highest with *Positive* F, i.e., r = .51, *p* <.01.

Items I20, I41, and I42 load acceptably on F5 called *Committed*. It involves using rituals, rites, or ceremonies during times of transition, having a daily spiritual practice such as meditation or prayer drawn on to address life challenges and aligning one's actions with one's soul or essential and true nature. *Committed* correlates the highest with *Positive* F, i.e., r = .50, *p* <.01.

Items I57, I58, I61, I62, I64, and I71 load acceptably on F6 called *Metaphysical*. It involves living in harmony with the divine to act spontaneously and effortlessly, feeling like being part of a larger cosmic organism, gaining insights in dealing with daily problems by experiencing ecstasy, having goals and purpose extended beyond the material world, feeling one's work is in service to the larger whole, and finding ways to express one's true self creatively. Similar to *Purposeful* and *Committed* Fs, *Metaphysical* correlates the highest with *Positive* F, i.e., r = .59, *p* <.01.

Items I35, I36, and I37 load acceptably on F7 called *Integrative*. It entails striving for the integration or wholeness of all things, holding as true and integrate seemingly conflicting or contradictory points of

view and being aware of a wise- or higher-self in oneself to listen to for guidance. *Integrative* correlates the highest with *Purposeful and Metaphysical* Fs, i.e., r = .42, *p* <.01.

Items I50, I51, and I52 load acceptably on F8 called *Perceptive* in this study. It involves listening deeply to both what is being said and what is not being said, listening to one's intuition in making important choices and being mindful of body's five senses during one's daily tasks. *Perceptive* correlates the highest with *Holistic*, i.e., r = .41, *p* <.01.

Items I48, I70 and I72 load acceptably on F9 called *Receptive*. It entails being able to see things from the other person's perspective, even when one disagrees with a given argument. It also deals with enhancing one's effectiveness through connections and receptivity to others and accepting and going beyond paradoxes or seemingly contradictory viewpoints to solve problems. *Receptive* correlates the highest with *Metaphysical*, i.e., r = .51, *p* <.01.

Items I65 and I66 load acceptably on F10 called *Assiduous*. It requires setting aside daily and weekly times for self-reflection and rejuvenation and taking a wide view or holistic perspective to gain insights in daily problems. Similar to *Perceptive*, *Assiduous* correlates the highest with *Metaphysical*, i.e., r = .51, *p* <.01.

Reverse items I09R, I11R and I33R load acceptably on F11 called *Fragile*. It reflects getting upset when things don't go the way one wants them to do, finding it upsetting to imagine that one will not achieve desired outcomes and finding it frustrating when one does not know what the truth is. *Fragile* correlates the highest with F13 (*Hollow*), i.e., r = .26, *p* <.01.

Items I28, I29, and I30 acceptably on F12 called *Prudent*. It entails pausing several times to step back, observe, and re-assess the situation in meetings or conversations, aligning one's actions with one's values and using objects or places as reminders to align oneself with what is sacred. *Prudent* correlates the highest with *Holistic*, i.e., r = .45, *p* <.01.

Reverse items I75R and I76R load acceptably on F13 called *Hollow*. It reveals being frustrated by one's inability to find meaning in daily life and finding one's mind wandering away from what one is doing. *Hollow* correlates the highest with F16 (*Other-Dependent*) and F21 (*Concessional*), i.e., r = .27, *p* <.01.

While no item loads acceptably on F14, item I45 loads on F15 called *Self-Discerning*. Spiritually intelligent individuals are *Self-Discerning* if they are aware of their inner truth or what they know inside to be true. It correlates the highest with *Metaphysical*, i.e., r = .37, p <.01.

Reverse items I78R and I79R load acceptably on F16 called *Other-Dependent* in this study. It reflects the desires of individuals who want to be treated as special and for this very reason they have a hard time standing firm in their inner truth, i.e., what they know inside to be true. It correlates the highest with *Hollow*, i.e., r = .27, p <.01.

Similar to F15, only one item, i.e., I54, loads on F17 called *Self-Cognizant*. It shows that spiritually intelligent individuals look for and try to discover their blind spots. It correlates the highest with *Holistic*, i.e., r = .29, p <.01.

Reverse items I73R and I74R load acceptably on F18 called *Materialistic*. It reflects the views of those individuals who see financial rewards as being the primary goal of their work. They also see advancing in their career as the main reason to do a good job. *Materialistic* correlates the highest with *Detached* and *Fragile*, i.e., r = .13, p <.01.

The reverse item I81R, *I strongly resist experiences that I find unpleasant*, loads acceptably on F19 called *Resistant*. The responses of participants in this study show that while 30% seldom resist unpleasant experiences, the majority (63%) do so and thus the RF upon which it loads acceptably reveals the highest negative correlation with *Holistic*, *Positive*, and *Purposeful*, i.e., r = -.21, p <.01. (Appendix C provides the percentage of answers given to the indicators of the ISIS.)

Similar to F15 and F17, one item, i.e., I27, loads on F20 called *Naturalistic*. It represents spiritually intelligent individuals who set aside daily and weekly times to ground themselves in nature. *Naturalistic* correlates the highest with *Holistic*, i.e., r = .30, p <.01.

Similar to F19, one reverse item, I44R, loads on F21 called *Concessional*. It reflects those individuals who are not as successful as they could be because they follow the conventions of their society. *Concessional* correlates the highest with *Detached*, i.e., r = .33, p <.01.

And finally similar to F15, F17, and F20, one item, I47, loads acceptably on F22 called *Sensual*. Individual having the last attribute notice and appreciate the sensuality and beauty of their daily life. *Sensual* correlates the highest with *Purposeful*, i.e., r = .46, *p* <.01.

4. Conclusion

The administration of the Persian ISIS to nine hundred and fourteen Muslim university students in Mashhad, Iran, and factorially analyzing their responses showed that out of eighty two indicators of SI collected by Amram (2007) and validated by Amram and Dryer (2008), sixty two load acceptably on twenty one factors. The latent variables underlying the Persian ISIS are similar to those of the Persian ROS because they are either confirmatory factors (CFs) or reverse factors (RFs). While the fourteen CFs consist of indicators which reveal the behaviours of spiritually intelligent individuals, i.e., *Assiduous, Committed, Holistic, Integrative, Metaphysical, Naturalistic, Perceptive, Positive, Prudent, Purposeful, Receptive, Self-Cognizant, Self-Discerning,* and *Sensual*, the remaining seven RFs comprise indicators revealing the lack of spiritual intelligence, i.e., *Concessional, Detached, Fragile, Hollow, Materialistic, Other-Dependent,* and *Resistant*.

All the CFs correlate significantly with each other. The strongest relationship is, however, between *Metaphysical* and *Positive* factors explaining thirty five percent of variance in each other. Future research must show whether these relationships are held with educationally important variables such as English language achievement and proficiency. Similarly, the seven RFs correlate the highest with each other. Two of them, however, correlate negatively with the CFs, i.e., *Materialistic* and *Resistant*. The first correlates significantly but *negatively* with *Purposeful* and *Sensual* whereas *Resistant* does the same with all the fourteen CFs. Future research must show what type of relationships the RFs hold not only with various types of intelligences but also with abilities such as English language achievement and proficiency.

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Appendix A: Rotated Factor Matrix[a]

Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
I01	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I02R	*	*	.40	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I03	.46	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I04	.50	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I05	.36	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I06	.47	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I07R	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-.34	*	*
I08	.32	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I09R	*	*	*	*	*	*	*	*	*	*	.50	*	*	*	*	*	*	*	*	*	*	*	*
I10	.35	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I11R	*	*	.35	*	*	*	*	*	*	*	.36	*	*	*	*	*	*	*	*	*	*	*	*
I12	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I13R	*	*	.39	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I14	.44	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I15	.41	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I16	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I17	.35	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I18R	*	*	.36	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I19	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I20	*	*	*	*	.57	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I21	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I22R	*	*	.47	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I23R	*	*	.47	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I24	*	*	*	.34	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I25	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I26R	*	*	.53	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I27	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.37			
I28	*	*	*	*	*	*	*	*	*	*	*	.41	*	*	*	*	*	*	*	*	*	*	*
I29	*	*	*	*	*	*	*	*	*	*	*	.50	*	*	*	*	*	*	*	*	*	*	*
I30	*	*	*	*	*	*	*	*	*	*	*	.34	*	*	*	*	*	*	*	*	*	*	*
I31R	*	*	*	*	*	*	*	*	*	*	*	*	*	-.43	*	*	*	*	*	*	*	*	*
I32	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I33R	*	*	*	*	*	*	*	*	*	*	.43	*	*	*	*	*	*	*	*	*	*	*	*
I34	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I35	*	*	*	*	*	*	.37	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I36	*	*	*	*	*	*	.53	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
I37	*	*	*	*	*	*	.57	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I38	*	*	*	.57	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I39	*	*	*	.46	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I40	*	*	*	.61	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I41	*	*	*	*	.59	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I42	*	*	*	*	.41	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I43	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I44R	*	*	.35	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.45	*	*
I45	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.43	*	*	*	*	*	*	*	*
I46R	*	*	*	*	*	*	*	*	*	*	*	*	*	-.34	-.48	*	*	*	*	*	*	*	*
I47	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.48	
I48	*	*	*	*	*	*	*	*	.40	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I49	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I50	*	*	*	*	*	*	*	.51	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I51	*	*	*	*	*	*	*	.64	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I52	*	*	*	*	*	*	*	.40	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I53R	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	-.46	*	*	*	*	*	*
I54	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.40	*	*	*	*	*	*
I55R	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I56	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I57	*	*	*	*	*	.52	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I58	*	*	*	*	*	.44	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I59	*	.39	*	*	.33	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I60R	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I61	*	*	*	*	*	.47	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I62	*	*	*	*	*	.34	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I63R	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I64	*	*	*	*	*	.44	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I65	*	*	*	*	*	*	*	*	*	.50	*	*	*	*	*	*	*	*	*	*	*	*	*
I66	*	*	*	*	*	*	*	*	*	.59	*	*	*	*	*	*	*	*	*	*	*	*	*
I67	*	.52	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I68	*	.62	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I69	*	.59	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I70	*	.34	*	*	*	*	*	*	.34	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I71	*	*	*	*	*	.40	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I72	*	*	*	*	*	*	*	*	.53	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I73R	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.44	*	*	*	*	*
I74R	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.49	*	*	*	*	*

Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
I75R	*	*	*	*	*	*	*	*	*	*	*	*	.53	*	*	*	*	*	*	*	*	*	*
I76R	*	*	*	*	*	*	*	*	*	*	*	*	.53	*	*	*	*	*	*	*	*	*	*
I77	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I78R	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.53	*	*	*	*	*	*	*
I79R	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.44	*	*	*	*	*	*	*
I80	*	.40	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I81R	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.66	*	*	*	*
I82R	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

Extraction Method: Principal Axis Factoring. Rotation Method: Varimax with Kaiser Normalization. a. Rotation converged in 78 iterations. * Loadings less than .32

Appendix B: Correlations Matrix

	SI62	F01	F02	F03	F04	F05	F06	F07	F08	F09	F10	F11	F12	F13	F15	F16	F17	F18	F19	F20	F21	F22
SI62	1	.73**	.74**	.46**	.71**	.64**	.75**	.56**	.54**	.61**	.62**	.28**	.58**	.35**	.45**	.17**	.34**	.09**	-.18**	.39**	.22**	.54**
F01	.74**	1	.44**	.21**	.47**	.46**	.47**	.40**	.41**	.41**	.41**	.11**	.45**	.09**	.34**	-.01	.29**	-.06	-.21**	.30**	.06	.330**
F02	.74**	.44**	1	.26**	.51**	.50**	.59**	.33**	.36**	.48**	.46**	.05	.37**	.25**	.33**	.08*	.21**	-.01	-.21**	.22**	.08*	.45**
F03	.46**	.21**	.26**	1	.26**	.18**	.13**	.04	.08*	.11**	.16**	.36**	.09**	.36**	.07*	.20**	.01	.13**	-.05	.14**	.33**	.22**
F04	.71**	.47**	.51**	.26**	1	.49**	.50**	.42**	.37**	.39**	.43**	.10**	.42**	.14**	.31**	-.00	.28**	-.07*	-.21**	.28**	.13**	.46**
F05	.64**	.46**	.50**	.18**	.49**	1	.48**	.34**	.31**	.33**	.34**	.04	.44**	.10**	.24**	-.02	.20**	-.04	-.18**	.22**	.05	.35**
F06	.75**	.47**	.59**	.13**	.50**	.48**	1	.42**	.40**	.51**	.51**	.05	.41**	.15**	.37**	.04	.27**	.02	-.16**	.25**	.08*	.39**
F07	.56**	.40**	.33**	.04	.42**	.34**	.42**	1	.36**	.41**	.39**	.05	.33**	.04	.34**	-.02	.26**	-.01	-.16**	.18**	.02	.27**
F08	.54**	.41**	.36**	.08*	.37**	.31**	.404**	.36**	1	.35**	.32**	-.02	.35**	.05	.32**	-.05	.22**	-.05	-.18**	.18**	.08*	.26**
F09	.61**	.41**	.48**	.11**	.39**	.33**	.51**	.41**	.35**	1	.38**	.05	.34**	.14**	.28**	.02	.22**	-.04	-.15**	.22**	.06	.37**
F10	.62**	.41**	.46**	.16**	.43**	.34**	.51**	.39**	.32**	.38**	1	.10**	.34**	.14**	.29**	.03	.26**	.02	-.13**	.27**	.10**	.31**
F11	.28**	.11**	.05	.36**	.097**	.04	.05	.05	-.02	.05	.10**	1	.05	.26**	-.02	.16**	-.03	.13**	.09**	.12**	.14**	.10**
F12	.58**	.45**	.37**	.09**	.10*	.44**	.41**	.33**	.35**	.34**	.34**	.05	1	.06	.27**	.02	.20**	-.03	-.19**	.27**	.02	.35**
F13	.35**	.09**	.25**	.36**	.14**	.10**	.15**	.04	.05	.14**	.14**	.26**	.06	1	.05	.27**	.02	.08*	.09**	.09**	.27**	.17**
F15	.45**	.34**	.33**	.07*	.31**	.24**	.37**	.34**	.32**	.28**	.29**	-.02	.27**	.06	1	.02	.13**	-.04	-.09**	.15**	-.02	.26**
F16	.17**	-.01	.08*	.20**	-.00	-.02	.04	-.02	-.05	.02	.03	.17**	.02	.269**	.021	1	-.011	.155**	.072**	.008	.13**	.02
F17	.34**	.29**	.21**	.01	.28**	.20**	.27**	.26**	.22**	.22**	.26**	-.03	.20**	.02	.13**	-.01	1	-.07*	-.11**	.12**	.05	.15**

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	SI62	F01	F02	F03	F04	F05	F06	F07	F08	F09	F10	F11	F12	F13	F15	F16	F17	F18	F19	F20	F21	F22
F18	.09**	-.06	-.01	.13**	-.07*	-.04	.02	-.01	-.05	-.04	.02	.13**	-.03	.08*	-.04	.16**	-.07*	1	.12**	.02	.06	-.10**
F19	-.18**	-.21**	-.21**	-.05	-.21**	-.18**	-.16**	-.16**	-.18**	-.15**	-.11**	.09**	-.14**	.09**	-.10**	.07*	-.11**	.12**	1	-.10**	-.05	-.16**
F20	.39**	.30**	.22**	.14**	.28**	.22**	.25**	.18**	.18**	.22**	.27**	.12**	.27**	.09**	.15**	.01	.12**	.02	-.10**	1	.049	.24**
F21	.22**	.06	.08*	.33**	.13**	.05	.08*	.02	.08*	.06	.10**	.14**	.02	.27**	-.02	.13**	.050	.06	-.05	.04	1	.11**
F22	.54**	.33**	.45**	.22**	.46**	.35**	.39**	.27**	.26**	.37**	.31**	.10**	.35**	.17**	.26**	.02	.15**	-.09**	-.16**	.24**	.11**	1

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

Appendix C: Indicators and factors (F) underlying the ISIS and the frequency of responses (in percentage)

No	F	Load	Indicator	Never %	Sometimes %	Always %
I01			I notice and appreciate the beauty that is uncovered in my work.	9	17	67
I02R	3	.398	I expect the worst in life, and that's what I usually get.	11	9	61
I03	1	.462	When things are chaotic, I remain aware of what is happening without getting lost in my experience.	18	34	76
I04	1	.496	During an activity or conversation, I monitor and notice my thoughts and emotions.	12	18	76
I05	1	.357	I practice inner and outer quiet as a way of opening myself to receive creative insights.	27	26	63
I06	1	.466	I have a good sense for when my purpose requires nonconformity, out-of-the-box thinking, or taking an unpopular stand.	13	20	74
I07R			I resist events that I don't like, even when they need to occur.	29	20	63
I08	1	.323	In my daily life, I feel the source of life immanent and present within the physical world.	23	19	60
I09R	11	.496	I get upset when things don't go the way I want them to go.	40	21	55
I10	1	.352	In my day-to-day activities, I align my purpose with what wants to and needs to happen in the world.	19	28	72
I11R	11	.360	I find it frustrating when I don't know what the truth is.	28	20	61
I12			I pay attention to my dreams to gain insight to my life.	49	17	40
I13R	3	.392	In my daily life, I am disconnected from nature.	13	12	60
I14	1	.436	Seeing life's processes as cyclical rather than linear gives me useful insights to daily challenges.	17	26	70
I15	1	.408	A higher consciousness reveals my true path to me.	14	15	63
I16			I live and act with awareness of my mortality.	28	17	54
I17	1	.351	In difficult moments, I tap into and draw on a storehouse of stories, quotes, teachings, or other forms of time-proven wisdom.	19	20	65
I18R	3	.362	I don't know how to just be myself in interactions with others.	19	16	66

No	F	Load	Indicator	Never %	Sometimes %	Always %
I19			I hold my work as sacred.	16	20	62
I20	5	.568	I have a daily spiritual practice – such as meditation or prayer – that I draw on to address life challenges.	20	15	60
I21			I enjoy the small things in life – such as taking a shower, brushing my teeth, or eating.	16	18	60
I22R	3	.471	I am driven and ruled by fears.	20	18	66
I23R	3	.466	I tend to think about the future or the past without attending to the present moment.	18	16	65
I24	4	.344	My life is a gift, and I try to make the most of each moment.	14	19	66
I25			I draw on my compassion in my encounters with others.	13	18	67
I26R	3	.531	I am limited in my life by the feeling that I have very few options available to me.	20	14	64
I27	20	.370	I set aside daily and weekly times to ground myself in nature.	37	28	55
I28	12	.409	My actions are aligned with my values.	9	16	72
I29	12	.503	In meetings or conversations, I pause several times to step back, observe, and re-assess the situation.	23	26	70
I30	12	.338	I use objects or places as reminders to align myself with what is sacred.	23	28	68
I31R			I have a hard time going against conventions, expectations, or rules.	37	18	52
I32			Even when things are upsetting and chaotic around me, I remain centered and peaceful inside.	35	25	59
I33R	11	.429	I find it upsetting to imagine that I will not achieve my desired outcomes.	45	19	47
I34			In my day-to-day tasks, I pay attention to that which cannot be put into words, such as indescribable sensual or spiritual experiences.	17	25	70
I35	7	.367	I am aware of a wise- or higher-self in me that I listen to for guidance.	15	24	74
I36	7	.529	I can hold as true and integrate seemingly conflicting or contradictory points of view.	25	29	68
I37	7	.571	I strive for the integration or wholeness of all things.	15	24	73
I38	4	.565	My work is in alignment with my greater purpose.	11	15	68
I39	4	.462	I derive meaning from the pain and suffering in my life.	14	18	68

No	F	Load	Indicator	Never %	Sometimes %	Always %
I40	4	.611	I feel that my work is an expression of love.	23	19	62
I41	5	.592	I use rituals, rites, or ceremonies during times of transition.	17	17	65
I42	5	.411	My actions are aligned with my soul – my essential, true nature.	15	22	75
I43			I remember to consider what is unspoken, underground, or hidden.	17	25	72
I44R	21	.455	Because I follow convention, I am not as successful as I could be.	14	14	69
I45	15	.431	I am aware of my inner truth – what I know inside to be true.	15	19	69
I46R			Being right is important to me.	71	12	24
I47	22	.479	I notice and appreciate the sensuality and beauty of my daily life.	13	17	70
I48	9	.404	I enhance my effectiveness through my connections and receptivity to others.	12	18	72
I49			Even in the midst of conflict, I look for and find connection and common ground.	20	25	72
I50	8	.510	I listen to my gut feeling or intuition in making important choices.	13	22	73
I51	8	.641	I listen deeply to both what is being said and what is not being said.	14	23	75
I52	8	.399	I am mindful of my body's five senses during my daily tasks.	17	24	74
I53R			I seek to know what is logically provable and ignore the mysterious.	22	19	69
I54	17	.400	I look for and try to discover my blind spots.	20	24	68
I55R			I have a hard time integrating various parts of my life.	16	18	74
I56			I work toward expanding other peoples' awareness and perspectives.	19	21	67
I57	6	.520	I live in harmony with a force greater than myself, a universal life force, the divine, or nature, to act spontaneously and effortlessly.	20	23	68
I58	6	.436	My goals and purpose extend beyond the material world.	17	17	64
I59	2	.387	I draw on deep trust or faith when facing day-to-day challenges.	11	18	65
I60R			I hold resentment towards those who have wronged me.	34	16	58
I61	6	.474	I feel like part of a larger cosmic organism or greater whole.	21	22	62
I62	6	.340	I find ways to express my true self creatively.	18	26	71

No	F	Load	Indicator	Never %	Sometimes %	Always %
I63R			When looking at others, I tend to focus on what they need to do to improve.	30	24	63
I64	6	.443	Experiences of ecstasy, grace, or awe give me insights or direction in dealing with daily problems.	18	20	65
I65	10	.503	To gain insights in daily problems, I take a wide view or holistic perspective.	16	26	74
I66	10	.590	I have daily and weekly times set aside for self-reflection and rejuvenation.	28	23	62
I67	2	.519	I remember to feel grateful for the abundance of positive things in my life.	9	13	62
I68	2	.616	I have faith and confidence that things will work out for the best.	13	16	65
I69	2	.590	I accept myself as I am with all my problems and limitations.	18	17	64
I70	9	.342	To solve problems, I accept and go beyond paradoxes or seemingly contradictory viewpoints.	22	31	70
I71	6	.402	In my daily life, I feel my work is in service to the larger whole.	17	22	68
I72	9	.531	In arguing or negotiating, I am able to see things from the other person's perspective, even when I disagree.	18	22	70
I73R	18	.438	I see advancing my career as the main reason to do a good job.	39	24	51
I74R	18	.494	I see financial rewards as being the primary goal of my work.	19	19	68
I75R	13	.527	My mind wanders away from what I am doing.	20	19	71
I76R	13	.530	I am frustrated by my inability to find meaning in my daily life.	20	18	68
I77			Even when I seem to have very few choices, I feel free.	26	31	65
I78R	16	.527	I want to be treated as special.	34	20	54
I79R	16	.435	I have a hard time standing firm in my inner truth – what I know inside to be true.	17	17	67
I80	2	.402	I bring a feeling of joy to my activities.	15	19	70
I81R	19	.659	I strongly resist experiences that I find unpleasant.	30	28	63
I82R			I am my own worst enemy.	21	12	49