

Notes About Spirit Map

This paper provides background information about Spirit Map, including:

- What Spirit Map is – and is not.
- Similarity of Spirit Map’s structure and methodology with that found in the social science and marketing research.
- Comparisons with other spiritual well-being inventories.
- Discussion of how we developed the 44 items in the Spirit Map inventory.
- The underlying domains of spiritual well-being revealed by analyzing Spirit Map response data via an Exploratory Factor Analysis (EFA) and how these domains compare with domains of spiritual well-being reported in the literature.
- Validity and reliability issues.
- The distinction New York Times columnist David Brooks makes between resume virtues and eulogy virtues and how that distinction applies to Spirit Map (a slight but pertinent tangent).
- Additional research possibilities that exist with our Spirit Map database.

What Spirit Map Is and Is Not

Survey Structure

Spirit Map is a survey-based instrument and analysis procedure that provides a point-in-time snapshot of where individuals and congregations are on their spiritual journey, helping them find their inherent spiritual strengths and their opportunities to deepen their sense of peace, compassion, and joy.

The Spirit Map inventory contains 44 items related to the domain of spiritual well-being. Individuals assess both the presence of and the importance of each item in their spiritual life:

- Presence of each item: how true is this statement for you (1 – 10 scale where 1 = not at all true and 10 = totally true)
- Importance of each item: how important is this statement to your spiritual well-being (1 – 10 scale where 1 = relatively least important to your spiritual well-being and 10 = relatively most important to your spiritual well-being)?

In asking people to rate the importance of each item, Spirit Map is almost unique among surveys of this type. We have found only one other survey that asks for another rating in addition to the presence rating.

Spirit Map’s importance rating allows people to define for themselves what matters in their spiritual life, bringing built-in motivation to the work of deepening their spiritual lives. For example, if someone gives the same presence rating to two Spirit Map items, the importance ratings assigned to the two items helps determine which item should receive the most attention. In this way the importance ratings serve as a prioritizing metric for action.

After individuals have provided their presence and importance ratings, our survey asks respondents to provide an estimate of their overall spiritual well-being both now and in five years (optional).

Key Deliverables

Spirit Map is not a predictive tool in the way that, for example, the SAT attempts to predict college success. It is also not a screening tool in the way that certain personality tests are used as part of an employment screening process. Instead, the survey methodology and analytical steps, both at the individual level and congregational level, follow generally accepted and well-established marketing research practice to give three primary deliverables:

- Top five Signature Strengths (SS) as they pertain to the individual's spiritual identity.
- Top five Key Opportunities (KO) as they pertain to the individual's spiritual growth and development. Appendix A explains how we determine Signature Strengths and Key Opportunities.
- A quadrant map where each of the 44 items that make up the survey, including the SS and KO, is plotted in the two-dimensional presence/importance space. Appendix B provides an example quadrant map.

Faith-Neutral Aspect

We developed Spirit Map as a faith-neutral inventory, believing that spirituality is a universal human experience that transcends specific beliefs. While there are items in the inventory that deal with spiritual issues, there is no direct reference, for example, to God, Creator, higher power, or prayer. While faith-neutrality is not a unique characteristic, it does place Spirit Map with a growing number of surveys with a spiritual rather than a religious orientation (Meezenbroek et al, 2012).

J. Fisher, author of another spiritual well-being inventory called SHALOM, has also noted the need to "relax" the reference to God in order to expand the relevance of his instrument to a broader audience. As he says in a recent paper "...in light of the claim of theistic bias leveled at the existing SHALOM, four of the five original Transcendental factor items had the words 'God', 'Divine', and 'Creator' replaced by the word 'Transcendent'" (Fisher, 2016, p. 49)

We also note this from Meezenbroek et al (2012) about the need for spiritual well-being surveys to be more faith neutral, "We looked for a definition of spirituality that reflects the experiences of people from different religious or secular backgrounds and that reflects current (western) culture, where many people are searching for profundity and meaning in life on the basis of personal experiences and insight instead of on the basis of external rules, norms and expectations. In current (western) culture, more and more people are searching for a connection with the divine within themselves, instead of a connection with an external almighty power." (p. 338)

Similarities with Social Science and Marketing Research

Similarities with Social Science Research

The scales used in Spirit Map for the Presence and the Importance ratings are similar to Likert scales commonly used in survey research in the social sciences.

Spirit Map's question asking individuals to provide an estimate of their overall spiritual well-being both now and in five years also has parallels in the social sciences. Here's how Spirit Map asks the questions:

Taking the items above as speaking, in aggregate, to your overall level of spiritual well-being, plus any other items we may have missed and recognizing that some items will be more important to you than others: How would you rate your current level of overall spiritual well-being? (1 – 10)? Where do you expect your overall level of spiritual well-being to be five years from now? (1 – 10)?

Social science assessments regularly use a self-defined, self-reported subjective overall assessment for constructs that are difficult to define objectively, leaving the construct's definition up to the individual respondent.

For example, Ed Diener from the University of Illinois, Urbana-Champaign in his Satisfaction with Life Scale questionnaire says, "The Satisfaction with Life Scale was developed to assess satisfaction with people's lives as a whole. The scale does not assess satisfaction with specific life domains, such as health or finances, but allows subjects to integrate and weigh these domains in whatever way they choose."

In social science research, overall constructs are often characterized by specific domains or attributes in this way. Job satisfaction surveys are another example of such a structure. In addition to an overall, self-defined, subjective rating of job satisfaction, such surveys usually include ratings of specific attributes such as salary, advancement opportunities, benefits, professional development opportunities, supervision, etc. As in the case of overall life satisfaction cited above, the overall rating of job satisfaction allows subjects to integrate and weigh these specific domains or attributes in whatever way they choose to reflect the overall rating.

In the same way that overall satisfaction with one's life or job is a function of the bundle of attributes that define the overall construct, Spirit Map views an individual's overall spiritual well-being to be a function of a specific bundle of attributes that define the overall construct: the 44 items on the Spirit Map inventory (e.g. *I care deeply about the welfare of others; my life has meaning and purpose; I seek opportunities to learn and grow.*) These are attributes that respondents evaluate, weight, and integrate in whatever way they choose to come up with a rating of overall spiritual well-being.

In what might be a bit of oversimplification, we would point out the following parallel between Spirit Map and job satisfaction. Job satisfaction deals with one's professional life; Spirit Map deals with one's spiritual life. We return to this parallel in the section below titled "Resume Virtues vs. Eulogy Virtues".

Similar Correlation Metrics with Market Research

Spirit Map provides the same type of correlation metrics that we find in similarly structured marketing research studies.

Marketing research studies often correlate the self-reported overall satisfaction with a product or service (e.g., an automobile) with evaluations on the set of attributes that define the product or service (in the case of an automobile these would be attributes like safety,

styling, mpg, comfort, etc.). Correlations usually range from a high of 0.70 to a low of 0.20. These correlations, or functions of these correlations, are used to prioritize which attributes are key “correlates of overall satisfaction”.

When we look at the correlations between the overall assessment of spiritual well-being in Spirit Map and the presence ratings on the defining set of attributes, (attributes like: *I seek opportunities to learn and grow; My life has meaning and purpose; I care deeply about the welfare of others*, etc.) we find correlations that range from highs of approximately 0.70 to lows just below 0.20; in other words very much in line with what we find in marketing research studies.

Comparison of Spirit Map with Other Spiritual Well-Being Inventories

The attempt to assess spiritual well-being through a multi-item survey such as Spirit Map is well-documented in the literature. Fisher (2015) reviewed 260 such multi-item spiritual well-being questionnaires. Only one of these, however, Fisher’s own SHALOM instrument, elicits a second measurement of importance for each inventory item the way Spirit Map does. For an extensive comparison between Spirit Map and SHALOM, please request our working paper.

We would also note that the Spiritual Well-Being Questionnaire (SWBQ) developed by Fisher and Gomez (2003), which is the precursor to the SHALOM instrument and does not include the importance component, was judged the best, most promising instrument among ten instruments reviewed by Meezenbroek, et al (2012) We feel the fact that such a recognized instrument felt the need to add importance reinforces our choice to include it from the beginning.

Finally, we would note that the 44 Spirit Map items offer more “granularity” than, for example, the 20 items in Fisher’s SWBQ, giving individuals more opportunity to describe how they are doing on potentially important aspects of their spiritual well-being.

Why These 44 Items

The original inventory of items used by Spirit Map consisted of 56 items. This original 56 item set was primarily the result of thinking, writing, and research by three well-established and highly regarded Unitarian Universalist ministers reflecting a professional lifetime dedicated to helping individuals and congregations enhance their individual and collective spiritual growth, transformation, and well-being.

The reduction from 56 to 44 items is primarily the result of an exploratory factor analysis (EFA) with the original 56 items on data collected from four Unitarian Universalist congregations that agreed to participate in a pilot study in 2013 (n = 503). Factor analysis bundles together items that define a common underlying construct or factor. For example, the attributes *I care deeply about the welfare of others* and *I give to others fully and generously* are part of the same bundle.

Items in a given bundle are to some degree measuring the same thing. This redundancy means that we could consider eliminating certain items highly redundant with other items.

In addition to item redundancies, we looked at how individual item presence ratings correlated with the assessment of overall spiritual well-being. We eliminated only items with (1) a high degree of redundancy with other items as determined by the factor analysis and (2) had a relatively low correlation with overall spiritual well-being. Using this procedure we eliminated 12 of the original set of 56 items to arrive at the final set of 44.

Domains of Spiritual Well-Being

The EFA we conducted to help reduce the number of items in the Spirit Map inventory (see previous section) bundled items together into common underlying constructs or factors. We have called these underlying constructs or factors *domains*, according to the practice in the spiritual well-being literature. What is the nature of these underlying domains? We explore this question as it is answered in the literature and as it is answered by an updated analysis of our Spirit Map data.

The Domains of Spiritual Well-Being in the Literature

The National Interfaith Coalition on Aging (NICA, 1975) proposed four main themes in their framework definition of spiritual well-being: “the affirmation of life in a relationship with God, self, community and environment that nurtures and celebrates wholeness” (p. 4). Fisher (2010) says of these relationships, “An extensive review of literature revealed that these four sets of relationships are the key features mentioned when discussing spiritual well-being over the last three decades” (p. 107). Fisher (2010) describes these domains as follows:

Personal domain – wherein one intra-relates with oneself with regards to meaning, purpose and values in life . . .

Communal domain – as shown in the quality and depth of interpersonal relationships, between self and others, relating to morality culture and religion . . .

Environmental domain – beyond care and nurture for the physical and biological, to a sense of awe and wonder, for some the notion of unity with the environment.

Transcendental domain – relationship of self with some-thing or some-One beyond the human level . . . (p. 107)

The Domains of Spiritual Well-Being as Revealed by Spirit Map

In 2019, we performed a new EFA (principal component analysis, oblique rotation) on our enlarged sample of 1048 respondents with a specific goal of seeing if a three to six factor solution would compare favorably with the four domains of spiritual well-being referenced above and at the same time have good psychometric properties.

The sample for this new EFA consisted of 1048 adult respondents who have taken the Spirit Map survey on behalf of their congregation or as independent individuals motivated to want the feedback offered by our analysis. We mention this simply to contrast the fact that many of the results reported in the literature are based on data from undergraduate students in a psychology or sociology course. The Spirit Map sample is also geographically dispersed with participating congregations in the East (33.5%), Midwest (36.0%) and West (30.5%).

The chosen factor solution yields the following four underlying dimensions or domains, two with two sub-domains:

- (1) Personal
 - a. Personal: Self-Awareness
 - b. Personal: Social Awareness
- (2) Communal
- (3) Inspiration and Wonder
- (4) Spiritual
 - a. Spiritual: Curiosity
 - b. Spiritual: Practice and Meaning

The tables below show each domain, what Spirit Map items define that domain, and the factor loadings for each item. The higher the loading the higher the degree of association with the factor. We assigned each item to the domain where it has the highest loading. There are five items (2,4,5,27, and 31) whose loadings suggest membership in two or more domains as identified in the last table below.

Personal: Self-Awareness		
Item #	Item	Oblique Loading *100
12	I am reflective.	69
20	I am self-aware.	55
22	I am mindful of my emotions.	47
25	Awareness of my mortality informs how I live my life.	46
2	(I think about my place in the universe.) See also Environmental.	44
23	I see something universal in all human struggle.	39
5	(I seek opportunities to learn and grow.) See also Environmental.	43
Personal: Social Awareness		
Item #	Item	Oblique Loading *100
33	I can tell the difference between what I am responsible for, and what I do not control.	78
34	I make good decisions about when to act.	65
35	I'm able to adapt when things do not turn out the way I want.	65
37	I have the ability to repent, forgive myself, and change.	60
38	I can ask for and accept forgiveness.	53
44	I can be in the presence of my own or another's pain without needing to flee or fix it.	50
26	Having good boundaries allows me to act with intention.	49
24	I accept ambiguity as inherent in life.	39

Communal		
Item #	Item	Oblique Loading *100
18	I act with the interests of others in mind.	73
19	I act with integrity.	69
16	I care deeply about the welfare of others.	68
13	I am respectful of the feelings, actions, and opinions of others.	62
14	I take responsibility for the consequences of my actions, even those that are unintended.	58
15	I act in an authentic manner.	58
10	I give to others fully and generously.	55
9	I seek harmony with others.	50
40	I am able to exercise power without corruption.	49
21	I freely and intentionally give my time and energy to others.	42
6	Leading a moral life makes me happy.	41
41	I can give loyalty to another's leadership without losing my integrity.	40
17	I believe it matters what I do.	39
Inspiration and Wonder		
Item #	Item	Oblique Loading *100
1	I see beauty all around me.	71
3	I delight in experiences both great and small.	68
39	I experience awe.	57
32	I am curious to learn more about how the world around me works.	51
5	(I seek opportunities to learn and grow.) See also Personal Insights: Within Me	47
4	(I feel part of something larger than myself.) See also Spiritual Practice and Meaning	46
2	(I think about my place in the universe.) See also Personal Insights: Within Me	43
Spiritual: Curiosity		
Item #	Item	Oblique Loading *100
29	I appreciate the beauty and power of religious symbols and rituals other than my own.	71
30	I am aware of some of the limitations or paradoxes of my own preferred religious vocabulary.	70
28	I perceive and respond to truth that is expressed in myth or poetry.	59
36	My spiritual growth is important to me.	51

Spiritual: Practice and Meaning		
Item #	Item	Oblique Loading *100
8	I actively practice my spiritual or religious faith.	55
42	I act in a religious manner.	54
11	I act in a spiritual manner.	52
7	I have a clear purpose to my life and am able to articulate that purpose to both myself and others.	51
43	I believe my life has meaning and purpose.	48
4	(I feel part of something larger than myself.) See also Environmental.	39

Items in Multiple Domains (further explanation below)		
Item #	Item	Oblique Loading *100
2	I think about my place in the universe. (Personal: Self-Awareness or Inspiration and Wonder)	44 and 43
4	I feel part of something larger than myself. (Spiritual: Practice and Meaning or Inspiration and Wonder)	39 and 46
5	I seek opportunities to learn and grow. (Personal: Self-Awareness or Inspiration and Wonder)	43 and 47
27	Even though I cannot know exactly what will happen, the promises I make give shape to my future and meaning to my life. (no significant loading on any one domain; loadings range from 12 to 31)	loading range [12,31]
31	I act with awareness of my place in the interconnected web of existence. (no significant loading on any one domain; loadings range from 12 to 26)	loading range [12,26]

Three items in the above table (2, 4, 5) have dual domain membership with relatively high loadings in both domains.

Two items in the above table (27 and 31) do not have sufficiently high loadings in any domain, but rather have some level of attachment in all domains. We will continue to use these items in the Spirit Map inventory because:

- They both have a strong theoretical connection to liberal religious faith and practice.
- Item 31 ranks relatively high (12th) as a Key Opportunity for Spirit Map respondents and ranks high (9th) as a correlate of overall spiritual well-being when computed from the responses in our database.

We also note that item 27 uses the most words of the 44 items. This “complexity” might contribute to its lack of significant association with any of the six factors.

Spirit Map does not yet report domain scores. We have and will continue to use them for research purposes. We are also in the process of investigating the potential value of telling individuals or groups what domain their Signature Strengths and Key Opportunities belong to. When we do, when items 2, 4, and 5 appear as Signature Strengths or Key Opportunities, we will assign their domain membership as provides the most potential insight for the individual. When items 27 and 31 appear as Signature Strengths or Key Opportunities, we will not make any domain reference.

We believe that the spiritual well-being domains revealed by the items in the Spirit Map inventory show good alignment with other postulated and well-researched spirituality domains. This alignment is particularly compelling, given the fact that the spiritual well-being domains of Spirit Map emerge from items generated totally independently from any consideration of the items explored by researchers like Fisher and without any consideration of domains of spiritual well-being, as posited, for example, by the NICA or Fisher.

Three important differences between Spirit Map domains and the domains discussed in the literature:

1. Spirit Map does not mention God, Creator, or prayer, but in its stated effort to remain faith-neutral substitutes items that relate to a spiritual life, such as *"I act in a spiritual manner."* Thus, in place of a Transcendental domain, the Spirit Map items partition into two Spiritual domains relating to two different aspects of a spiritual life.
2. The items in the Spirit Map inventory are such that they partition into two domains that speak to two different aspects of a relationship with oneself (Personal).
3. The two Spirit Map items that deal with meaning and purpose do not attach to either of the Personal Spirit Map domains, as might be expected from Fisher's description of that domain in his findings.

We have a hypothesis for the third difference above, related to the samples used in Fisher's studies vs. those used in our Spirit Map research. The two Spirit Map items related to meaning and purpose are:

- *I have a clear purpose to my life and am able to articulate that purpose to both myself and others* (Item 7)
- *I believe my life has meaning and purpose* (Item 43)

Given Fisher's description of his Personal domain "wherein one intra-relates with oneself with regards to meaning, purpose and values in life" we would have expected these two Spirit Map items to attach to either of the two Personal Spirit Map domains. Instead, they attach to the Spirit Map domain Spiritual Practice and Meaning.

Most of the analytical work establishing Fisher's domains of spiritual well-being, using his SHALOM or the SWBQ inventories, was carried out, as many academic researchers do, with college students. All of the developmental work of Spirit Map has been carried out on older adults who came to the Spirit Map task either as an individual motivated to discover more about where they are on their spiritual journey or as member of a congregation motivated to help their congregation discover more about the spiritual well-being of its congregants and/or motivated to discover more about their own personal spiritual well-being.

What our EFA suggests is that our Spirit Map adults to a large degree associate meaning and purpose in their lives with their spiritual lives. This association is, apparently, not nearly as strong among younger, perhaps less spiritually motivated, college students.

When we examine the correlates of overall spiritual well-being, this analysis also supports finding the two meaning and purpose Spirit Map items in one of the Spiritual domains. As mentioned earlier, when people take the Spirit Map inventory, we ask them *“How would you rate your current level of overall spiritual well-being? (1 – 10).”* When we correlate the self-assessment ratings of each of the 44 items with this overall spiritual well-being rating, here are the top six correlations:

Correlation	Item number	Item
0.590	8	I actively practice my spiritual/religious faith
0.504	11	I act in a spiritual manner
0.479	7	I have a clear purpose to my life and am able to articulate that purpose to both myself and others.
0.467	31	I act with awareness of my place in the interconnected web of existence.
0.453	42	I act in a religious manner
0.444	43	I believe my life has meaning and purpose.

The domain we have named Spiritual: Practice and Meaning is defined by five of these six items (all but item 31). The fact that the meaning and purpose items (7 and 43) correlate with overall spiritual well-being as strongly as the items in the Spiritual: Practice and Meaning domain (8, 11, and 42) provides support that they belong together.

A final observation regarding the connection of spiritual practice with meaning and purpose is the ease of finding academics who make the connection. Here are three quotes:

- From Brené Brown (author of five NYT bestsellers, professor at the University of Houston), *“Practicing spirituality brings a sense of perspective, meaning, and purpose to our lives.”*
- From The Earl E Bakken Center for Spirituality & Healing website at the University of Minnesota, *“Spirituality is a broad concept with room for many perspectives. In general, it includes a sense of connection to something bigger than ourselves, and it typically involves a search for meaning in life.”*
- From Christina Puchalski (MD, Director of the George Washington Institute for Spirituality and Health), *“Spirituality is the aspect of humanity that refers to the way individuals seek and express meaning and purpose and the way they experience their connectedness to the moment, to self, to other, to nature, and to the significant or sacred.”*

Psychometric Properties of the Spirit Map Items and Six-Factor Solution

The factor analysis reported here was a principal component analysis with an oblique (oblimin) rotation. The oblique rotation was used to follow the procedure used by Gomez and Fisher (2003, p. 1980). The rest of this section details several properties of this analysis.

Sample Size and Item Number Ratio

The sample size was 1048 resulting in a ratio of N/n (sample size to number of items: 1048/44) of 23.8. Ideally this ratio is 10.0 or greater.

Sample Adequacy (KMO Measure)

A key measure of sampling adequacy (MSA) of a data set is the Kaiser-Meyer-Olkin (KMO) measure for each item and in total. Ideally these values would be ≥ 0.70 , a hurdle cleared by all items and in total as illustrated in the following table:

Item	1	2	3	4	5	6	7	8	9	10
KMO	0.94	0.94	0.94	0.96	0.93	0.96	0.95	0.96	0.97	0.95
Item	11	12	13	14	15	16	17	18	19	20
KMO	0.96	0.94	0.95	0.95	0.96	0.96	0.96	0.95	0.95	0.95
Item	21	22	23	24	25	26	27	28	29	30
KMO	0.96	0.97	0.96	0.92	0.95	0.97	0.97	0.93	0.94	0.94
Item	31	32	33	34	35	36	37	38	39	40
KMO	0.97	0.91	0.95	0.96	0.96	0.93	0.93	0.94	0.96	0.96
Item	41	42	43	44	overall					
KMO	0.96	0.96	0.94	0.97	0.95					

Internal Consistency Reliability (Cronbach's α)

When ratings for individual items are combined to form a composite score on a domain, they need to exhibit internal consistency. Internal consistency reliability reflects the extent to which a set of items is measuring the same construct. It is most often calculated using Cronbach's coefficient alpha.

General rule of thumb for Cronbach's coefficient alpha:

0.60 = OK

0.70 = Good

0.80 = Very Good

0.90 = Excellent

>0.95 = too high (items are too inter-related and therefore some are redundant).

Cronbach's alpha scores for our six domains range from a high of 0.89 to a low of 0.76, with all alphas well above 0.70 suggesting good internal reliability across the board:

Domain	Cronbach's α
Personal: Self-Awareness	0.76
Personal: Social Awareness	0.86
Communal	0.89
Inspiration and Wonder	0.80
Spiritual: Curiosity	0.79
Spiritual: Practice and Meaning	0.84

A closer look at Cronbach's Alpha examines the individual item contribution to overall scale reliabilities (Cronbach's Alpha). This further analysis indicates that most of the Spirit Map items strongly contribute to scale reliabilities. The table on the next page shows the impact

on Cronbach's alpha if a given item is removed from the domain and alpha is recalculated; in almost all cases alpha is reduced. Only in the Communal domain is the item-related reduction in alpha little or none for all items, in all likelihood due to the relatively large number of items in this domain (missing a single item will have minimal impact on the overall domain alpha).

Domain Reliability (Cronbach's α)	Item	Reliability if item is dropped
Personal: Self-Awareness 0.76	2	0.75
	12	0.71
	20	72
	22	72
	23	73
	25	74
Personal: Social Awareness 0.86	24	0.86
	26	0.84
	33	0.84
	34	0.84
	35	0.85
	37	0.84
	38	0.84
	44	0.86
Communal 0.89	6	0.89
	9	0.89
	10	0.88
	13	0.89
	14	0.89
	15	0.88
	16	0.88
	17	0.89
	18	0.88
	19	0.88
	21	0.89
	40	0.89
Inspiration and Wonder 0.80	1	0.76
	3	0.76
	4	0.78
	5	0.79
	32	0.80
	39	0.77

Spiritual: Curiosity 0.79	28	0.73
	29	0.67
	30	0.77
	36	0.76
Spiritual: Practice and Meaning 0.84	7	0.82
	8	0.79
	11	0.79
	42	0.80
	43	0.80

RMSR

The root mean square of the residuals (RMSR) for this six-factor solution is 0.04. Ideally this metric should be ≤ 0.08 , so our results meet this benchmark.

Number of Factors Extracted

When performing a factor analysis one of the key decisions the analyst must consider is how many factors to extract. Some key considerations:

- What does theory say? In this case the literature would suggest four domains (factors) of spiritual well-being. Our six domains nicely parallel these four with an expanded Personal domain into a two-aspect relation with self and an expanded two-aspect Spiritual domain in place of a single Transcendental domain.
- Can the factors be interpreted? We think the Spirit Map factors qualify; see the discussion comparing the Spirit Map domains to those in the literature.
- Do the factors explain at least 50% of the item variance? The six extracted factors explain 54% of the variance.
- Are the eigen values for the extracted factors ≥ 1.0 ? In this case the eigen values for the six factors are all 1.30 or greater.
- How many factors does parallel analysis suggest? This analysis is based on the eigen values present in a random matrix the same size as our data set, i.e., one with 1048 rows and 44 columns. The parallel analysis suggests a factor solution of six factors.

Validity and Reliability Issues

The Idiographic Nature of Spirit Map

In considering validity, it's important to first understand in what ways Spirit Map is an idiographic or, perhaps better described as, a quasi-idiographic assessment instrument in contrast to a nomothetic assessment. Then we can consider what constitutes validity of an idiographic instrument.

Wikipedia (Wikipedia contributors 2019, April 21) captures the essence of the difference between the two forms:

In psychology, idiographic describes the study of the individual, who is seen as a unique agent with a unique life history, with properties setting him/her apart from other individuals. Nomothetic describes the study of classes or cohorts of individuals. Here

the subject is seen as an exemplar of a population and their corresponding personality traits and behaviours.

Spirit Map in its usual application is clearly focused on the individual as a unique agent with a unique life history. That said, Spirit Map does have certain characteristics that also pertain to nomothetic instruments and is why we use the term “quasi-idiographic”. Consider this characterization of nomothetic instruments from Haynes et al (2000):

Nomothetic assessment instruments: (a) involve methods that are standardized across persons, (b) provide measures of identical variables on identical dimensions across persons, (c) depend on aggregated measures obtained from other persons to derive judgments, and (d) are selected for use with a particular client from prior research with persons with similar behavior. (p. 112)

Characteristics (c) and (d) do not apply. Spirit Map does not rely on aggregated measures (or any other kind of measures) obtained from other persons to derive judgments. The Spirit Map results delivered to a given client are completely self-referenced. Plus, there is no instrument selection involved. Everyone gets the same instrument.

Characteristics (a) and (b) are more complicated. They apply to the Spirit Map instrument in that the inventory is standardized across individuals and the measures collected are across identical variables and dimensions. However, Spirit Map provides individual tailoring (an idiographic characteristic) through the importance ratings respondents provide.

The importance ratings allow the given respondent to indicate how much to count or weight a given item (for each of the 44 items), in terms of its importance to them in their spiritual life. These unique-to-the-individual importance ratings in effect tailor the resulting analysis to the given individual.

This aspect of Spirit Map is similar to the notion of “assessment congruence” discussed Haynes et al (2009). In that paper they propose that individual items should be weighted by their relevance to the individual and suggest a set of mathematical operations for developing such measures. This, in effect, is what Spirit Map does with direct assessments of importance instead of the elaborate math suggested in the paper (that math requires that a series of repeated measures be taken over a relatively short time period, e.g., assessments for depression or anxiety, which is never part of the Spirit Map protocol).

Validation of *Ideographic* Instruments: Content Validity

We turn now to consider validation issues of idiographic instruments. The literature suggests that content validity is a major consideration. For example, this quote, while clearly pertaining to a clinical setting can also apply, we believe, to the more coaching setting represented by a typical application of Spirit Map:

Content validity is a particularly important evaluative dimension for idiographic assessment instruments. The content validity of an idiographic assessment instrument is the degree to which the elements of the instrument are relevant to the client and the degree to which measures represent the array of the client's behavior problems. (Haynes et al, 2000, p. 125)

More generally, content validity refers to how accurately an assessment tool (in this case Spirit Map and its 44 items) taps into the various aspects of the specific construct in question, in this case spiritual well-being as a universal human experience that transcends specific religious beliefs.

Content Validity of Spirit Map

We look at content validity from two perspectives, that of:

- Subject matter experts (those primarily responsible for the items in the Spirit Map inventory)
- The alignment of the domains of spiritual well-being as revealed by Spirit Map data with other researched domains of spiritual well-being as reported in the literature.

Content Validity - Subject Matter Experts

Content validity is most often assessed by relying on the knowledge of people who are familiar with the construct being measured, so-called Subject-Matter Experts (SME).

The original 56 item set was primarily the result of thinking, writing, and research by three well-established and highly regarded Unitarian Universalist ministers reflecting a professional lifetime dedicated to helping individuals and congregations enhance their individual and collective spiritual growth, transformation, and spiritual well-being. Their familiarity with the domain of spiritual well-being establishes them as Subject Matter Experts and provides a significant level of confidence that the final set of 44 items (after an initial EFA and subsequent analysis) covers a representative sample of this domain as required to establish content validity for our target market: Unitarian Universalists, others with a progressive religious orientation, and the large and fast-growing population of individuals who identify as spiritual but not religious.¹

Content Validity - Alignment of Spirit Map domains with domains reported in the literature

While reference to Subject Matter Experts represents the primary method for establishing content validity, the alignment of Spirit Map domains of spiritual well-being with domains reported in the literature represents, in our opinion, supporting evidence of content validity as well. As discussed above, we've concluded that the alignment of the four domains in the literature and the six domains of Spirit Map is good.

Taken together, the credibility of the Subject Matter Experts behind Spirit Map and the good domain alignment, developed independently from other researchers, offer strong evidence

¹ While there are analytical procedures for combining SME assessments (see for example, Lawshe, C.H. (1975)), none was applied in this case.

for the content validity of the items in the Spirit Map inventory.

Other Validity Considerations

This section highlights two other types of validity—convergent and construct validity—and what it would take to establish them for Spirit Map, and the challenges of establishing them for Spirit Map.

Convergent validity, the degree to which two measures or constructs that theoretically should be related, are in fact related, would provide another perspective on Spirit Map's validity. For example, we could look at convergent validity by looking at the correlations between Spirit Map domain scores and SWBQ domain scores. Because the SWBQ is considered a valid inventory (Gomez and Fisher, 2003), this inventory, we believe, could be used as a benchmark for such a comparison.

To date, we have not had the luxury of asking our Spirit Map respondents (these are non-student samples) to take both surveys so that results can be compared. We will continue to look for opportunities to make this comparison.

Construct validity is the degree to which a measure accurately assesses what it is intended to measure. We could potentially investigate construct validity two ways, focusing on the assessment we ask respondents to give of their overall spiritual well-being (and what that level will be in five years):

- Peer evaluations
- Correlation of Spirit Map measures with measures from another valid instrument.

Peer evaluations

If in the future we were able to ask for peer evaluations of overall spiritual well-being, we could look at how these peer evaluations correlate with the individual self-reported ratings of their overall spiritual well-being to establish the degree of construct validity of this overall spiritual well-being metric.

Correlation with measures from another valid instrument

Again, if Spirit Map respondents completed a SWBQ inventory too, we could look at the correlation of their Spirit Map rating of overall spiritual well-being with the total SWBQ score as another check on construct validity. Again, because the SWBQ is considered a valid inventory (Gomez and Fisher, 2003), this inventory, we believe, could be used as a benchmark for such a comparison.

We haven't placed a high priority on completing this construct validity research because the rating of overall spiritual well-being is used very minimally in Spirit Map deliverables. It is not used at all in deliverables for individuals. For congregations, we only use overall spiritual well-being in a secondary deliverable called Correlates of Spiritual Well-Being. This deliverable reports how the individual Spirit Map items correlate with overall spiritual well-

being.² Thus, the cost in time and money to conduct this research is not yet supported by the benefits. We do, however, see the potential for further research using the metric of overall spiritual well-being (see the section *Continuing and Future Research and Development Opportunities* below).

We also have not investigated the construct validity of the 44 self-assessment and 44 importance ratings, because these are idiographic evaluations and are not subject to any external determination, either from peers or from comparison with measures from some other instrument. The ratings are based on an individual's personal spiritual journey and life experiences; they uniquely belong to the individual. Only the individual can determine whether one item is relatively more important than another in their spiritual life. Only the individual can accurately determine whether one item is relatively more true of them than another.

What Can We Say About Reliability?

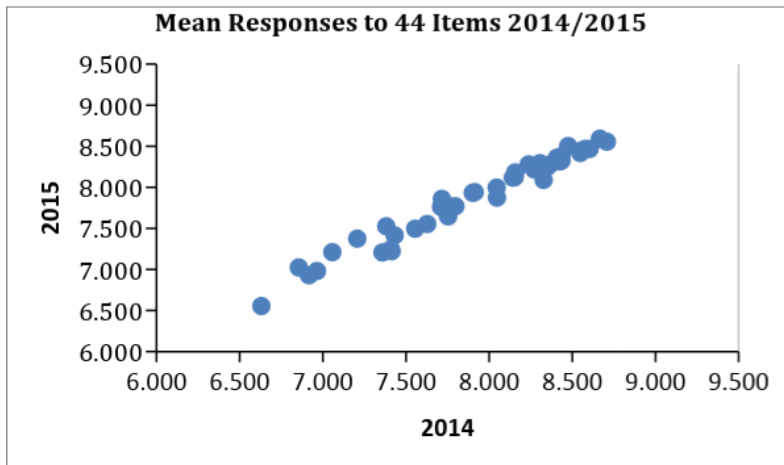
We discussed above the internal consistency reliability for the six domains of Spirit Map as measured by Cronbach's alpha. The more common type of reliability is that of test-retest reliability. This means that if the test is administered at time 1 and again at time 2, and there is no reason to expect significant changes in the ratings of the items being measured during this time interval (e.g., no "clinical" intervention), then the ratings at time 2 should not have changed significantly from the ratings at time 1.

Normally reliability is established at the individual respondent level. Do Spirit Map attribute ratings for individuals at time 1 have a high correlation with attribute ratings for the same individuals at time 2? We have administered Spirit Map at two different points in time – a year apart – in one congregation. However, these administrations have necessarily been done anonymously precluding the ability to look test-retest correlations across individuals. While not ideal, we can look at the correlation of self-assessment mean scores for the two points in time³.

This correlation of 0.985 suggests very similar, stable, readings for the 44 survey items over the two time periods ($n = 343$ in 2014 and $n = 261$ in 2015). The maximum correlation between two variables is 1.000.

² We note that all 44 items have a positive correlation (ranging from 0.10 to 0.70) with this measure of overall spiritual well-being.

³ In these congregational studies we used a derived measure of importance based on the item correlations with the overall measure of spiritual well-being. In our work with individuals we use a direct rating of importance as described in the first section of this paper (referred to as a self-explicated measure of importance). For the derived importance measures the correlation of mean scores across the 44 items in the two administrations of the survey is 0.764.



Resume Virtues vs. Eulogy Virtues: Comparison Between Strengths Finder and Spirit Map

David Brooks (2015) discusses eulogy virtues (how we want to be remembered) and resume virtues (important for competition with others):

It occurred to me that there were two sets of virtues, the résumé virtues and the eulogy virtues. The résumé virtues are the skills you bring to the marketplace. The eulogy virtues are the ones that are talked about at your funeral — whether you were kind, brave, honest or faithful. Were you capable of deep love? We all know that the eulogy virtues are more important than the résumé ones. But our culture and our educational systems spend more time teaching the skills and strategies you need for career success than the qualities you need to radiate that sort of inner light. Many of us are clearer on how to build an external career than on how to build inner character.

A popular survey and analysis tool called Strengths Finder (from Gallup) deals with resume virtues. Spirit Map deals with eulogy virtues. Spirit Map, in addition to identifying your Signature (Eulogy) Strengths – to parallel the (Resume) Strengths of Strength Finder - also identifies those areas – Key Opportunities – that offer opportunities for spiritual growth and development.

The Key Opportunities Spirit Map identifies, particularly when addressed using the Signature Strengths Spirit Map identifies, can help close the gap that Brooks (2015) says “opens between your actual self and your desired self...” when “you live for external achievement, [and] years pass and the deepest parts of you go unexplored and unstructured. You lack a moral vocabulary . . . you live with an unconscious boredom, separated from the deepest meaning of life and the highest moral joys.” Work with Spirit Map’s Signature Strengths and Key Opportunities can help reconnect people with their meaning, purpose, peace and joy.

Continuing and Future Research and Development Opportunities

Responses to the Spirit Map inventory offers a rich set of data. We briefly discuss four such opportunities for continuing and future research and development:

1: Determine Domain Patterns in Signature Strengths and Key Opportunities

First, we would perform a Confirmatory Factor Analysis (CFA) to confirm our four-domain (two with two sub-domains) model of spiritual well-being. Then, we would study whether these domains help in developing higher-level themes for Key Opportunities and Signature Strengths. We would look at the extent to which the domains of spiritual well-being associated with an individual's or congregation's Signature Strengths and Key Opportunities overlap. If they don't overlap, and preliminary analysis suggests they tend not to, we would explore the degree to which individuals or congregations find it useful to know what domain of spiritual well-being their Signature Strengths and Key Opportunities belong to.

2: Determine What Items Are Related to Spiritual Well-Being Categories

Suppose we group people into overall spiritual well-being categories, something like the following:

- 9 or 10 = very high spiritual well-being
- 7 or 8 = high
- 5 or 6 = moderate
- 1 through 4 = low spiritual well-being

We could then use a data-mining tool like CART to determine a decision-tree to predict category membership based on the self-assessment ratings of the 44 items. We could determine which of the 44 items would be involved in predicting membership in a given category and how would the items differ category-to-category.

3: Develop Spiritual Types

We now have sufficient sample size to perform a statistical procedure called cluster analysis to see if we can identify four to six meaningful segments or "Spiritual Types" We anticipate four to six segments because that has been our typical result in marketing research studies.

Such segments or types would differ from one another in terms of what respondents in a given segment thought were particularly important (or relatively unimportant) to them. For example one segment or type may indicate that items like *"I seek opportunities to learn and grow"*, *"I am curious to learn more about how the world around me works"*, and *"I think about my place in the universe"* are particularly important to them and other items much less important in a relative sense. Another segment or type may find that items like *"I seek harmony with others"*, *"I give to others fully and generously"*, and *"I care deeply about the welfare of others"* are particularly important to them and other items relatively less important. The first segment/type might be labeled the "Curiosity Type", the second segment/type the "Caring Type". Our analysis would also allow us to estimate the size of each segment/type, e.g. Curiosity Types are 15% of the population; Caring Types are 27%. This kind of segmentation analysis is a routine marketing research activity.

4: Compare the Dissonance/Harmony and Distance Results

Fisher (2010) introduces the notion of a harmony/dissonance calculation as a function of the two measurements elicited for each item in the SHALOM survey. In our working paper that compares Spirit Map and SHALOM (available on request) we note how the Spirit Map

distance calculation and the dissonance/harmony calculation can lead to different prioritizations among multiple items. We need to better understand the nature and implication of these differences.

References

- Brooks, D. (2015, April 11) The Moral Bucket List. Retrieved December 20, 2019 from <https://www.nytimes.com/2015/04/12/opinion/sunday/david-brooks-the-moral-bucket-list.html>
- Fisher, J. (2010). Development and Application of a Spiritual Well-Being Questionnaire Called SHALOM. *Religions, 1*, 105-121.
- Fisher, J.W. (2015). A Critique of Quantitative Measures for Assessing Spirituality and Spiritual Well-Being. In E.C. Roberts (Ed.), *Spirituality, Global Practices, Societal Attitudes and Effect on Health* (91-131). New York, NY: Nova Science Publishers Inc.
- Fisher, J. (2016). Selecting the Best Version of SHALOM to Assess Spiritual Well-Being. *Religions 7*(5), 45
- Gomez, R. & Fisher, J.W. (2003). Domains of spiritual well-being and development and validation of the Spiritual Well-Being Questionnaire. *Personality and Individual Differences, 35*(8), 1975-1991.
- Haynes, S. N. & Hayes O'Brien, W. (2000). Idiographic and Nomothetic Assessment. In *Principles and Practice of Behavioral Assessment* (109-126). New York, NY: Kluwer Academic/Plenum Publishers.
- Haynes, S. N., Mumma, G. H., Pinson, C. (2009). Idiographic assessment: Conceptual and psychometric foundations of individualized behavioral assessment. *Clinical Psychology Review 29*, 179-191.
- Lawshe, C.H. (1975). A quantitative approach to content validity. *Personnel Psychology, 28*, 563-575.
- Meezenbroek E, Garaawn B, van den Berg M, van Dierendonck D, Visser A, Schaufeli W. (2012). Measuring Spirituality as a Universal Human Experience: A Review of Spirituality Questionnaires. *Journal of Religion and Health 51*, (2), 336-354.
- National Interfaith Coalition on Aging. (1975). *Spiritual Well-Being: A Definition*. Athens, GA.
- Wikipedia contributors. (2019, April 21). Nomothetic and idiographic. In *Wikipedia, The Free Encyclopedia*. Retrieved 17:06, December 20, 2019, from https://en.wikipedia.org/w/index.php?title=Nomothetic_and_idiographic&oldid=893406198

Appendix A – Determination of Signature Strengths and Key Opportunities

Spirit Map creates a prioritizing metric for each of the 44 items based on a straight-forward distance calculation.

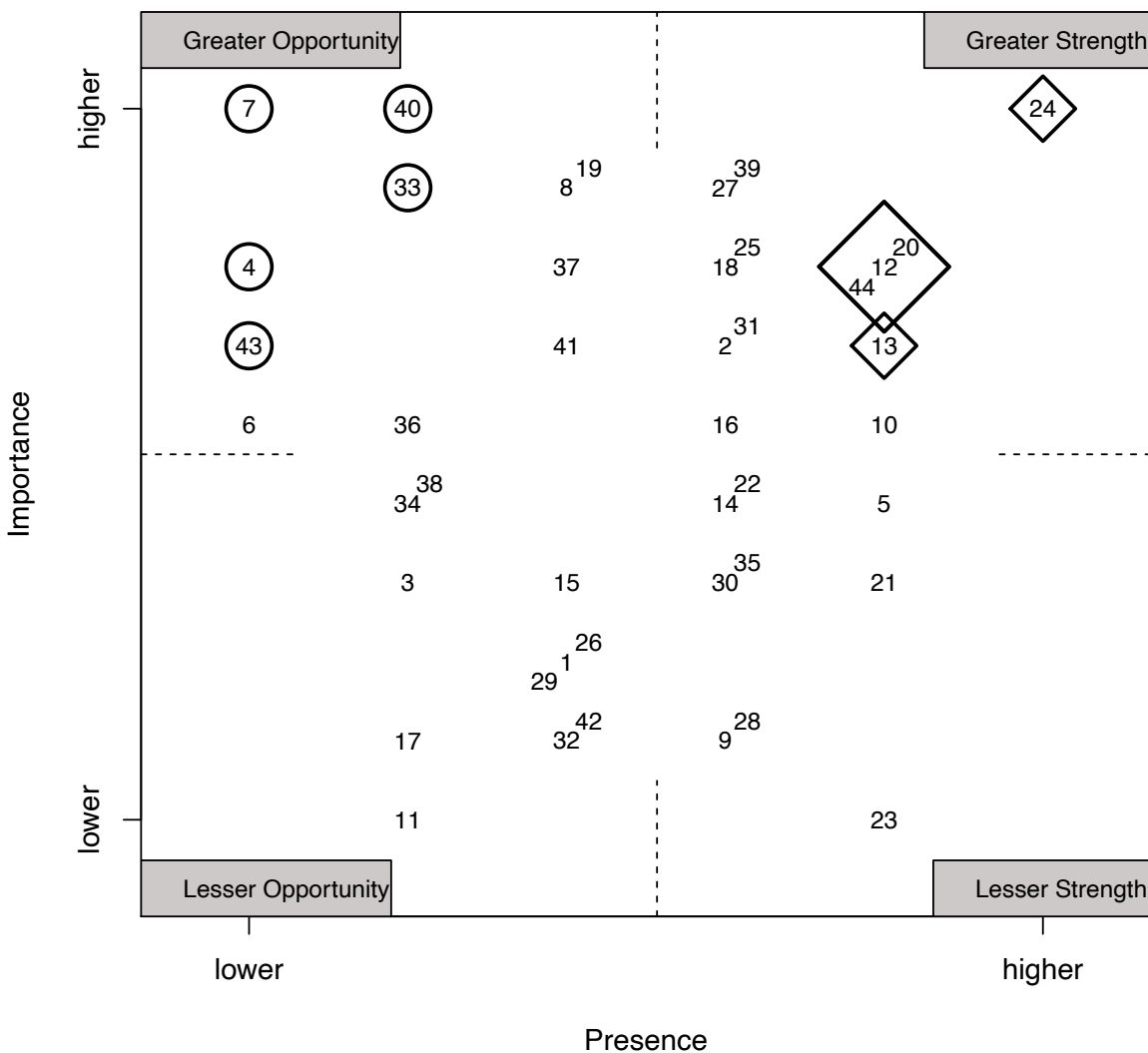
Assumptions: The point (10,10) – self-assessment rating a 10, importance rating a 10 – represents maximum strength. An item with these coordinates is one maximally important and one that is maximally true of an individual. This item is the ultimate Signature Strength. The point (1,10) – self-assessment rating a 1, important rating a 10 – represents maximum opportunity. Such an item is maximally important, but one that is minimally true for an individual. This item is the ultimate Key Opportunity. Based on these assumptions, Spirit Map performs the following calculations for each of the 44 items.

For items with self-assessment ratings \geq the average self-assessment rating, calculate the distances to the point with maximum strength, (10,10). The five items closest (shortest distance) to (10,10) are Signature Strengths. On the quadrant map in Appendix B these items are identified by diamonds.

For items with self-assessment ratings $<$ the average self-assessment rating, calculate the distances to the point with maximum opportunity, (1,10). The five items closest (shortest distance) to (1,10) are Key Opportunities. On the quadrant map in Appendix B these items are identified by circles.

Appendix B - Quadrant Map Example for "Jordan Jones" (not a real person)

Quadrant Map (Jordan Jones)



◇ Signature Strength

○ Key Opportunity