

## **Notes About Spirit Map**

In the following we explore a variety of topics beginning with what Spirit Map is – and is not - and ending with a discussion of the research possibilities that exist with our Spirit Map database. In between we discuss parallels with other well-established disciplines and where the 44 items in our survey come from; we discuss validity and reliability issues. In our work to arrive at the 44 survey items of Spirit Map we have “uncovered” what we are calling the underlying dimensions of spiritual well-being. We report on this work, including a comparison of our underlying dimensions with domains of spiritual well-being reported in the literature.

In a slight, but in our minds pertinent, tangent we discuss the distinction New York Times columnist David Brooks makes between resume virtues and eulogy virtues and how that distinction applies to Spirit Map; see the section on “Resume Virtues vs. Eulogy Virtues”.

### **Key Deliverables and Survey Structure**

Spirit Map is a survey-based instrument and analysis procedure that looks at spirituality as a universal human experience that transcends specific beliefs. Its deliverables provide a point-in-time snapshot of where individuals and congregations are on their spiritual journey and provides guidance for finding inherent spiritual strengths and discovering opportunities to deepen their sense of peace, compassion and joy. The phrase “transcending specific beliefs” means Spirit Map is faith neutral. While there are items in the inventory that deal with spiritual issues, there is no direct reference, for example, to God, Creator, or prayer. Survey content is discussed in more detail in the section below on content validity. 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 (see *Measuring Spirituality as a Universal Human Experience: A Review of Spirituality Questionnaires (2012)*, *Journal of Religion and Health*, 51(2), 336-354).

Spirit Map is not a predictive tool in the sense that the SAT attempts to predict college success. It is also not a screening tool in the sense that certain personality tests are used as part of an employment screening process.

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 personality, and
- Top five key opportunities (KO) as they pertain to the individual’s spiritual growth and development.
- 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 self-assessment/importance space (self-assessment/importance defined below).

These deliverables are provided based on an analysis of the response patterns to two ratings about each of 44 items related to the domain of spiritual well-being. The two ratings provided by an individual about each of the 44 items are:

- Self-assessment rating: how true is this statement for you (1 – 10 scale where 1 = not at all true and 10 = totally true) and,
- Importance rating: 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)? Spirit Map, uniquely as far we have been able to determine in surveys of this type, asks people to rate the importance of each of the items in their spiritual lives. This allows people to define for themselves what matters in their spiritual life, bringing built-in motivation to the work of deepening their spiritual lives.

In addition to these responses, our survey asks respondents to provide an estimate of their overall spiritual well-being both now and in five years (optional). This question is asked following the individual's exposure to the 44 items. The question reads as follows:

*Taking the items above as speaking, in aggregate, to your overall level of spiritual well-being, plus any other items we may have missed (tell us about them in Q4 below), 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)? How would you rate your overall spiritual well-being in five years (1 – 10 scale)?*

### Similarity with Social Science Research

#### Spirit Map Scales Have Parallels in Social Science Research

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

Our phrasing and use of the overall spiritual well-being scale also has parallels in the social sciences. 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 the last paragraph it was mentioned that an overall construct like life satisfaction can be characterized by specific life domains like health and finances.

Here's another example of such a structure. Many reading this have probably been asked at some point to evaluate the satisfaction they have with their job. In addition to an overall, self-defined subjective rating of job satisfaction the survey no doubt included ratings of specific attributes such as salary, advancement opportunities, benefits, professional development opportunities, supervision, etc.

And, 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.

So here's the key point in terms of how Spirit Map thinks about spiritual well-being. 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 one's overall spiritual well-being to be a function of a specific bundle of attributes. To be precise, 44 attributes like: *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.

We discuss the evolution of these 44 items in more detail below.

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".

### Correlation Similarities of Overall Assessments with Defining Attributes

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

In marketing research studies we often find that if we correlate the self-reported overall assessment of 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.) we will observe correlations that range from a high of something on the order of 0.70 to a low of less than 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 evaluations 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 of less than 0.20; in other words very much in line with what we find in marketing research studies.

### Validity

The primary Spirit Map measurements are focused on the 44 items that we hypothesize as covering the domain of spirituality when this construct of spirituality is viewed as pertaining to a universal human experience devoid of specific religious beliefs. A key question then is the **content validity** of these 44 items. Content validity refers to how accurately an assessment tool (in this case Spirit Map) taps into the various aspects of the specific construct (in this case spirituality) in question.

We look at content validity from two perspectives. The first from the perspective of subject matter experts (those primarily responsible for the items in the Spirit Map inventory), and the second from the perspective of the alignment of Spirit Map items with items in other researched domains of spirituality. We conclude that the evidence establishes a high degree of content validity for Spirit Map for our target market.

Spirit Map also asks respondents to make an assessment of their current level of overall spiritual well-being (and what it will be in five years). It is important to note the following: this overall metric is not used in our deliverables for individuals; for congregations this metric is not part of our key deliverables, but we do report how the individual Spirit Map items correlate with this overall metric in an analysis called Correlates of Spiritual Well-Being. In addition, we see this metric continuing to be used for research purposes (see, for example, the second mentioned research topic in the last section of this document - Continuing and Future Research and Development Opportunities).

So, while our measurement of overall spiritual well-being plays a relatively minor role in what we currently deliver to clients, be they individuals or congregations, we spend time in what follows discussing **construct and criterion validity** for this overall assessment of spiritual well-being.

Regarding construct validity we discuss what it would take – if we had the time and resources - to establish this type of validity for our overall measure of spiritual well-being.

Establishing criterion validity would require that there exist a valid, external measure of overall spiritual well-being. Such a measure, to our knowledge, does not exist. We discuss this lack of a generally agreed upon external measure of spiritual well-being in the Construct Validity section below.

### Content Validity

As stated above content validity refers to how accurately an assessment or measurement tool taps into the various aspects of the specific construct in question. Content validity is most often measured by relying on the knowledge of people who are familiar with the construct being measured, so-called subject-matter experts (SME).

An element of subjectivity exists in relation to determining content validity based on SME that requires a degree of agreement about what a particular social construct such as spiritual well-being represents.

The current set of 44 items in the Spirit Map survey started as a set of 56 items. We discuss this reduction from 56 to 44 items in the section below titled “Why These 44 Items and the Underlying Dimensions of Spiritual Well-Being”. 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 maturity. Their familiarity with the domain of spiritual well-being establishes them as Subject Matter Experts and provides a reasonable level of confidence that the final set of 44 items 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 growing population of individuals who identify themselves as spiritual but not religious.

Another way to assess content validity is to look at how well the 44 items of Spirit Map compare to spiritual domains delineated in the literature. One well researched and highly regarded spirituality model by Gomez<sup>1</sup> and Fisher<sup>2</sup> is based on the four domains advanced by the National Interfaith Coalition on Aging (NICA). These domains are: personal (relation with self), communal (relation with others), environmental (relation with the environment), and transcendental (relation with some-thing or some-One beyond the human level). These domains are represented by 20 subscales, five for each of the four domains. We discuss in detail in the section below – “Why These 44 Items and the Underlying Dimensions of Spiritual Well-Being” – the alignment of the underlying domains (and the 44 item subscales) of Spirit Map and the four NICA domains mentioned above.

Bottom line we conclude the alignment is good. This overall agreement with

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<sup>1</sup> Gomez R, Fisher JW. Domains of spiritual well-being and development and validation of the spiritual well-being questionnaire. *Personality and Individual Differences*. 2003;35:1975–1991

<sup>2</sup> Meezenbroek E et al. Measuring Spirituality as a Universal Human Experience: A Review of Ten Spirituality Questionnaires. *Journal of Religion and Health*, 2010.

domains delineated in the literature adds additional support (in addition to our SME) for the content validity of the items in Spirit Map.

### Construct Validity

Construct validity in the case of Spirit Map has to do with whether what we are measuring does in fact measure what is intended: spiritual well-being. External measures of overall spiritual well-being are hard to come by at this stage of development. External measures could come from two sources: peer assessments and/or objective measures of overall spiritual well-being.

Regarding the first source, it would be great if we had peer assessments (aka informant reports), e.g., from friends/family members, of the overall spiritual well-being for a given individual. This would allow us to calculate correlations of our overall measure of spiritual well-being with these peer assessments across a sample of individuals. In addition to friends/family members other peer assessments could come from seminary students or members of a given congregation. At this point in time we do not have such data. The same applies to congregations: it would be great if we had assessments of the overall spiritual well-being of a set of congregations, say, by “trained denominational” raters to correlate with the aggregate of individual assessments of overall spiritual well-being across this same set of congregations. No such congregational assessments exist at this time.

Regarding the second source, there does not appear to exist any generally accepted external, objective measure of spiritual well-being (something like a clinical assessment of depression) for a given individual. It is doubtful that any such measure could exist for spiritual well-being in the same sense that there is no external, objective measure for “happiness” or “life satisfaction”.

The following quote speaks to the probably impossible task of finding a universally agreed upon definition of spirituality and by extension spiritual well-being. It is from a paper titled, “*Measuring Spirituality as a Universal Human Experience: A Review of Spirituality Questionnaires*” published in 2010 in the peer reviewed Journal of Religion and Health by six academic researchers in the Netherlands.

“Spirituality is a complex multidimensional concept (Cook 2004; Hill et al. 2000; George et al. 2000; Moberg 2002). The concept defies clear-cut boundaries, which also applies to other latent constructs that are often used, such as character, well-being and health (Miller and Thoresen 2003)...It seems almost impossible to find a description with which the majority of people would agree. Zinnbauer<sup>3</sup> et al. (1999) described five studies in which various groups of people were asked to define spirituality. They concluded that differences in the responses of the participants outweighed by far the similarities. McSherry and Cash ( 2004 ) even stated that we should accept that the word ‘spirituality’ has different meanings.” (underline added)

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<sup>3</sup> Zinnbauer BJ, Pargament KI, Scott AB. The emerging meanings of religiousness and spirituality: Problems and prospects. Journal of Personality. 1999.

What is true for defining spirituality is also true for defining spiritual well-being. Given the individual nature of the definition of overall spiritual well-being, Spirit Map does not attempt to define this construct. The measurement elicited is a subjective, self-defined, measure of overall spiritual well-being. As noted above this measure is not used in the Spirit Map analysis for individuals and is not used as part of our key deliverables for congregations. We are using, and will continue to use, this measure for research purposes. It thus makes sense for us to seek opportunities to establish construct validity for this metric via the peer assessment route.

The following considerations offer opportunities to provide supporting evidence for construct validity (and probably the best opportunities for Spirit Map). For example, studies with subjective measures of life satisfaction have shown that they are predictive of things like future health and longevity. Subjective measures of happiness have been shown to correlate with income (at least up to a point). These kinds of correlations support the validity of these constructs. Going forward we will be looking at whether our measure of overall spiritual well-being is correlated with things like age, participation in a religious community, levels of education, and income (would we necessarily expect or want to see a high correlation of spiritual well-being with income?). A special study would be required for us to look for correlation between overall spiritual well-being and constructs like happiness and life satisfaction; these are not constructs our inventory currently ask about.<sup>4</sup>

A word about construct validity regarding the 44 self-assessment and importance ratings. When it comes to these ratings the notion of construct validity is a less pressing, or even non-, issue. These 88 individual item ratings - self-assessment (44 ratings) and importance (44 ratings) - are idiographic<sup>5</sup> evaluations. They are based on an individual's personal spiritual journey and life experiences; they uniquely belong to the individual. So, for example, whether one item is relatively more important than another in the spiritual life of an individual at a given point in time is not subject to any objective external standard; similarly whether one item is relatively more true of an individual than another item at a particular point in time is in the eye of the individual.

#### Criterion Validity (Predictive and Concurrent)

Evidence for criterion validity involves the correlation between a test measure and a criterion variable already held to be valid. For example, employee selection tests are often validated against measures of job performance (the criterion), and IQ tests

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<sup>4</sup> For additional background on this discussion, see "Theory and Validity of Life Satisfaction Scales", Diener, Inglehart, and Tay, May 2012, Springer Science+Business Media B.V. 2012 .

<sup>5</sup> 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.

are often validated against measures of academic performance (the criterion).

If the test data and criterion data are collected at the same time, this is referred to as concurrent validity evidence. If the test data are collected first in order to predict criterion data collected at a later point in time, then this is referred to as predictive validity evidence.

In the case of Spirit Map establishing criterion validity would require a significant (positive) correlation between our overall measure of spiritual well-being and a criterion variable already held to be valid as a measure of overall spiritual well-being. As we mentioned above when discussing construct validity such a measure does not exist.

We should note that the self-assessment ratings for each of the 44 Spirit Map items has a positive correlation with the measure of overall spiritual well-being; higher self-assessment ratings on any of the 44 Spirit Map items (test measures) are associated with higher scores on overall spiritual well-being (our difficult to validate criterion variable).

#### What Can We Say About Reliability?

One property we would like to see in a test instrument is that if it 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), that the ratings at time 2 will not have changed significantly from the ratings at time 1. In other words there is test-retest reliability.

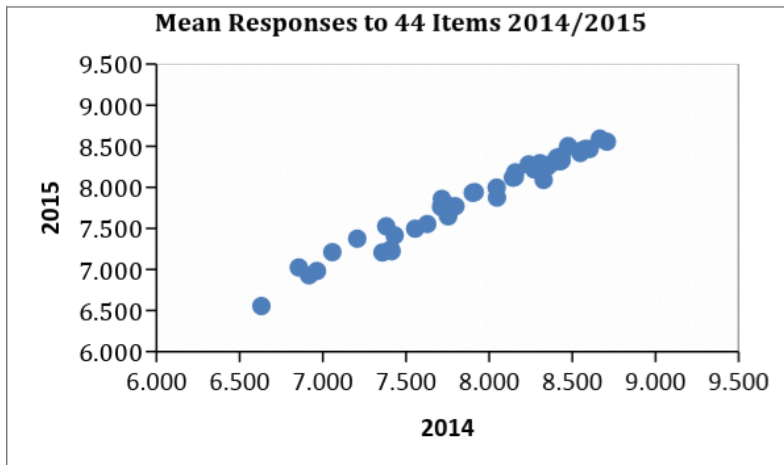
Normally reliability is established at the individual respondent level. Do Spirit Map attribute ratings for individuals at time 1 have a high correlation with attribute ratings for the same individuals at time 2? We have administered Spirit Map at two different points in time – a year apart – in one 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 time<sup>6</sup>.

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

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<sup>6</sup> 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.





There is a second kind of reliability: internal consistency reliability. Internal consistency reliability reflects the extent to which a set of items is measuring the same construct. It is typically reported as part of the psychometric properties of an exploratory factor analysis. We report positive results below in the section titled “Psychometric Properties of the Spirit Map Items and Five Factor Solution”.

#### Why These 44 Items and the Underlying Dimensions of Spiritual Well-Being

The reduction from 56 to 44 items mentioned above in the section on content validity is primarily the result of an exploratory factor analysis (EFA) with the original 56 items on data collected from four Unitarian Universalist congregations 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 self-assessments 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.

Since this original EFA in 2013, we have run “live” versions of Spirit Map in three congregations and for approximately 135 individuals not connected with any of these three denominations. These combined applications of Spirit Map provide a new sample of 625 respondents. We did a new EFA on this new set of respondents with a specific goal of seeing if a four – 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 chosen factor solution yields the following five underlying dimensions or domains which we have named: Communal: Relationship and Right Action, Personal: Insights and Meaning/Purpose, Spiritual, Environmental, and Curiosity. The items defining these underlying dimensions/domains are listed in the table below along with their factor loadings (the higher the loading the higher the degree of association with the factor).

We believe the first four of these domains correspond fairly directly with those posited in the literature with the recognition regarding the Transcendental domain that Spirit Map does not mention God, Creator, or prayer, but substitutes instead items that relate to a spiritual life. Our analysis seems to justify a fifth domain dealing with the attribute of curiosity.

Our conclusion is that the spiritual domains covered by Spirit Map shows good and somewhat expanded agreement with other postulated and well researched spirituality domains while offering more “granularity” (for example, then the 20 items in the SWBQ) in terms how individuals are able to describe their spiritual lives.

Item	Factor Loading	Item description	Domain
18	0.75	I act with the interests of others in mind.	Communal: Relationship and Right Action
19	0.70	I act with integrity.	
16	0.65	I care deeply about the welfare of others.	
13	0.64	I am respectful of the feelings, actions, and opinions of others.	
14	0.63	I take responsibility for the consequences of my actions, even those that are unintended.	
10	0.62	I give to others fully and generously.	
15	0.58	I act in an authentic manner.	
9	0.53	I seek harmony with others.	
40	0.50	I am able to exercise power without corruption.	
21	0.49	I freely and intentionally give my time and energy to others.	
6	0.47	Leading a moral life makes me happy.	
41	0.45	I can give loyalty to another's leadership without losing my integrity.	
17	0.45	I believe it matters what I do.	
33	0.69	I can tell the difference between what I am responsible for, and what I do not control.	Personal: Insights and Meaning/Purpose
34	0.68	I make good decisions about when to act.	
37	0.65	I have the ability to repent, forgive myself, and change.	
26	0.63	Having good boundaries allows me to act with intention.	
35	0.62	I'm able to adapt when things do not turn out the way I want.	
38	0.61	I can ask for and accept forgiveness.	
43	0.55	I believe my life has meaning and purpose.	
25	0.53	Awareness of my mortality informs how I live my life.	
44	0.53	I can be in the presence of my own or another's pain without needing to flee or fix it.	
7	0.51	I have a clear purpose to my life and am able to articulate that purpose to both myself and others.	
27	0.47	Even though I cannot know exactly what will happen, the promises I make give shape to my future and meaning to my life.	
22	0.39	I am mindful of my emotions.	
20	0.35	I am self-aware.	
36	0.71	My spiritual growth is important to me.	Spiritual
42	0.68	I act in a religious manner.	
11	0.66	I act in a spiritual manner.	
8	0.64	I actively practice my spiritual or religious faith.	
29	0.64	I appreciate the beauty and power of religious symbols and rituals other than my own.	
28	0.57	I perceive and respond to truth that is expressed in myth or poetry.	
30	0.54	I am aware of some of the limitations or paradoxes of my own preferred religious vocabulary.	
31	0.15	I act with awareness of my place in the interconnected web of existence.	
3	0.72	I delight in experiences both great and small.	Environmental
1	0.71	I see beauty all around me.	
39	0.55	I experience awe.	
4	0.51	I feel part of something larger than myself.	
32	0.58	I am curious to learn more about how the world around me works.	Cognitive
12	0.50	I am reflective.	
24	0.49	I accept ambiguity as inherent in life.	
23	0.49	I see something universal in all human struggle.	
5	0.45	I seek opportunities to learn and grow.	
2	0.44	I think about my place in the universe.	

### Psychometric Properties of the Spirit Map Items and Five Factor Solution

The factor analysis reported here was a principal component analysis with varimax rotation. The sample size was 625 resulting in a ratio of N/n (sample size to number of items: 625/44) of 14.2. Ideally this ratio is at least 10.0.

A key measure of sampling adequacy (MSA) of a data set is the Kaiser-Meyer-Olkin (KMO) measure for each item and in total. You want to see values  $\geq 0.70$ , a huddle cleared by all items and in total as illustrated in the following table.

Kaiser-Meyer-Olkin factor adequacy

**Overall MSA = 0.94**

**MSA for each item =**

sa1 sa2 sa3 sa4 sa5 sa6 sa7 sa8 sa9 sa10 sa11 sa12 sa13 sa14 sa15 sa16  
0.93 0.93 0.93 0.95 0.90 0.95 0.94 0.95 0.94 0.95 0.96 0.92 0.93 0.95 0.95 0.95

sa17 sa18 sa19 sa20 sa21 sa22 sa23 sa24 sa25 sa26 sa27 sa28 sa29 sa30 sa31 sa32  
0.95 0.94 0.95 0.94 0.94 0.96 0.96 0.91 0.94 0.96 0.96 0.92 0.92 0.93 0.97 0.89

sa33 sa34 sa35 sa36 sa37 sa38 sa39 sa40 sa41 sa42 sa43 sa44  
0.94 0.94 0.96 0.91 0.91 0.92 0.94 0.96 0.95 0.95 0.93 0.96

When ratings for individual items are combined to form a composite score on an underlying dimension 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:

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 five underlying dimensions range from a high of greater than 0.90 to a low of 0.72, with most alphas well above 0.70 suggesting good internal reliability across the board.

<b>Underlying Dimension</b>	<b>Cronbach's <math>\alpha</math></b>
Communal: Relationship and Right Action	0.90
Personal: Insights and Meaning/Purpose	0.90
Spiritual	0.87
Environmental	0.78
Curiosity	0.72

The root mean square of the residuals (RMSR) for this five factor solution is 0.05. Ideally this metric should be  $\leq 0.08$ .

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 factors.

We added a fifth to account for the fact that Spirit Map has items dealing with cognition (e.g. I seek opportunities to grow) and the literature domains do not support such a domain or factor.

- Interpretability. Can the factors be interpreted? We think the Spirit Map factors qualify.
- Do the factors explain at least 50% of the item variance? The five extracted factors explain 52% of the variance.
- Are the eigen values  $\geq 1.0$ ? In this case the eigen values for five factors are all 1.45 or greater.
- Parallel analysis. This analysis is based on the eigen values present in a random matrix the same size as our data set, i.e., one with 625 rows and 44 columns. The parallel analysis suggests a factor solution of five or possibly six factors.

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

David Brooks in a recent NYT column (“The Moral Bucket List”, April 11, 2015 and in his most recent book *The Path to Character* ) 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-like 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 identified by Spirit Map can help close the “...humiliating gap (that) opens between your actual self and your desired self...” that Brooks mentions at the end of this quote from the above cited NYT article :

*“But if you live for external achievement, years pass and the deepest parts of you go unexplored and unstructured. You lack a moral vocabulary. It is easy to slip into a self-satisfied moral mediocrity. You grade yourself on a forgiving curve. You figure as long as you are not obviously hurting anybody and people seem to like you, you must be O.K. But you live with an unconscious boredom, separated from the deepest meaning of life*

*and the highest moral joys. Gradually, a humiliating gap opens between your actual self and your desired self, between you and those incandescent souls you sometimes meet”.*

### Strategic Guidance at the Congregation Level

When dealing with congregational level results we can draw potentially important parallels with results from consumer satisfaction studies. As stated above our primary deliverables are: Signature Strengths, Key Opportunities, and the quadrant map where each of the 44 items is plotted in the two-dimensional self-assessment/importance space. These deliverables are similar to those often provided from satisfaction research in the consumer area where rating data is averaged across study participants to deliver: product/service strengths, opportunities, and a quadrant map of attributes.

In the commercial world these deliverables are often used to guide strategic product/service improvement initiatives and/or communication initiatives. In the same way, congregations can use the deliverables from Spirit Map to guide the development of programs, activities and initiatives that best leverage the congregation’s spiritual strengths to work on the congregation’s opportunities.

Congregational communications and outreach to potential members can also focus on promoting the congregation’s signature strengths, its “spiritual brand.”

### Continuing and Future Research and Development Opportunities

Spirit Map offers a rich set of data. Below we mention four opportunities for continuing and future research and development.

First, as we add more cases to our database it will make sense to run a confirmatory factor analysis (CFA) to confirm our underlying five/dimension model of spiritual well-being. We see these underlying dimensions offering the opportunity to help in developing higher-level themes for key opportunities and signature strengths. We discuss this in more detail as the fourth area below for development.

Second, 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

If we 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, what would this tree look like, i.e., which of the 44 items would be involved in predicting membership in a given category and how would the items differ category-to-

category?

Third, at the point in time when we have collected self-explicated importance ratings for each of the 44 items as described in the first section above from approximately 400 – 500 individual respondents, we will be in a position to perform a statistical procedure called cluster analysis to see if we can identify, say, four to six meaningful segments or “Spirituality Types” (we say 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 unimportant) to them. For example one segment or type may indicate that items like “*seeking 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. 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 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.

A fourth area to study is the extent to which the underlying dimensions 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’d explore the degree to which people find it useful to have their SS and KO characterized in terms of higher-level themes represented by our underlying dimensions of spiritual well-being.