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Spiritual Development through the Chakra Progression

An Explorative Study of Empirically-Derived Profiles of Spiritual Connection

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Abstract: This pilot study investigates spiritual development as progressing in accordance with chakra theory. Chakra theory posits that spirituality emerges in a developmental monotonic fashion with increasing degrees of connection and spiritual awareness. People further into the progression generally show greater mental health and stronger character virtues, while individuals in earlier stages of development show greater pathology and lower levels of character virtues. Latent Class Analysis (LCA) was used in a sample of 1633 adults from the United States to empirically derive five profiles of spiritual connection, which reflected the monotonic progression predicted by the chakra theory. Participants who were low on all five variables of spiritual connection (3% of participants) were labeled the “Disconnected” class, and participants who were high on all five variables were labeled the “Highly Connected” class (16% of participants). The Disconnected class showed the greatest psychopathology (depressive and anxious symptoms) and lowest levels of positive psychology traits (gratitude, grit, satisfaction with life, self-compassion, and flourishing), while the Highly Connected class showed the lowest psychopathology and highest levels of positive psychology traits. The other three classes, which fell between the Disconnected class and the Highly Connected class, carried intermediate levels of psychopathology and character strengths. Findings support future investigation on a universal progression of spiritual development based upon chakra theory.

Keywords: Chakra; Spiritual Development; Character Strength; Psychopathology; Depression; Anxiety

Introduction

From Western neuroscience to Eastern philosophy, scientists and theologians have identified certain facets of the human experience that appear to lift the human spirit and feed the soul: loving relationships, meaningful work, communion with nature, a sense of oneness with the Universe, and contemplative practice. For the purposes of this article, we shall focus on these facets as “elements of spiritual connection.” Although different scholars have emphasized the relative importance of different elements of spiritual connection, these elements appear again and again throughout classical and scientific literature, from Freud’s writings on love and work¹ to the Buddha’s teachings on mindfulness.²

1 Freud, *Civilization and its Discontents*.

2 Rāhula, *What the Buddha Taught*.

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Chakra theory is a system of spiritual anatomy originating in India that holds spirituality emerges in a developmental fashion.³ What in the West might be called psycho-spiritual capacity is expression of energetic flow through the chakras, which are located in specific regions of the body, from physically lower regions (bottom of torso) to higher regions (the head). The cultivation of freely flowing energy through the chakras enables spiritual connection. The progression in psycho-spiritual terms is through loving relationships, sense of purpose, and communion with nature, and then later through a sense of oneness with the Universe and contemplative practice.⁴ Individuals who more fully spiritually developed enjoy greater mental health, while individuals who are in an earlier stage of development experience greater pathology.⁵ This explorative study is the first to our knowledge that empirically investigates using quantitative methodology to determine whether spiritual connection may deepen and progress in accordance with chakra theory.

The paper shall first classify individuals by the elements of spiritual connection that they identify with, using a sample of 1,633 adults from the United States. After establishing these classifications, this paper shall explore how the different classes of spiritual connection correlate to depression, anxiety, and positive psychology variables.

Chakra Theory: An Overview

The chakra system, which originated in India more than 4,000 years ago, is a seven-leveled philosophical system that maps physical, emotional, and spiritual concepts onto the mind-body. Great theoretical richness is reflected over thousands of years, in teachers, books and millions of practitioners. Our very brief description for purposes of this paper is necessarily cursory and focused to speak to the Western theories of psycho-spiritual development.

Western chakra theorist Andrea Judith defines a chakra as “a center of organization that receives, assimilates, and expresses life-force energy.”⁶ There are seven major chakras, running along the spinal column from the tailbone to the crown of the head, illustrated in Figure 1. Each chakra is associated with different aspects of psychological and physiological functioning, described in Table 1. The lower chakras are associated with the more practical elements of daily life, such as survival, work, and familial love, while the upper chakras are associated with the more abstract qualities and activities, such as social responsibility, communication, meditation, and consciousness.⁷ According to Judith’s theory of chakra development, the skills and qualities associated with each chakra develop sequentially, from bottom to top, with “each complete stage supporting the healthy awakening of the next.”⁸

The first chakra is centered around the base of the spine, and it is associated with the developmental stage of the gestation through the first year of life and the qualities of stability, grounding, physical health, prosperity, and trust.⁹ During this stage of life, the infant is focused on its basic survival needs, which includes eating, sleeping, and the bonding with the infant’s caretaker.¹⁰ For this reason, the first chakra is often associated with attachment style and the need for love as an element of survival.¹¹

The second chakra is centered around the lower abdomen, including the organs of sexual reproduction, and the qualities of the second chakra include healthy sexuality, pleasure, and sensuality.¹² Its development

³ Bruyere, *Wheels of Light*, 51-101; Fondin, *The Wheel of Healing with Ayurveda*, 131-151; Johari, *Chakras: Energy Centers of Transformation*, 71-152; Judith, *Eastern Body, Western Mind*, 1-50.

⁴ Judith, *Eastern Body, Western Mind*, 1-50.

⁵ Ibid.

⁶ Ibid., 4.

⁷ Bruyere, *Wheels of Light*, 51-101; Fondin, *The Wheel of Healing with Ayurveda*, 131-151; Johari, *Chakras: Energy Centers of Transformation*, 71-152; Judith, *Eastern Body, Western Mind*, 1-50.

⁸ Judith, *Eastern Body, Western Mind*, 37.

⁹ Johari, *Chakras: Energy Centers of Transformation*, 85-94; Judith, *Eastern Body, Western Mind*, 51-102; Weintraub, *Yoga Skills for Therapists*, 100-103.

¹⁰ Judith, *Eastern Body, Western Mind*, 51-102.

¹¹ Weintraub, *Yoga Skills for Therapists*, 100-103.

¹² Johari, *Chakras: Energy Centers of Transformation*, 95-204; Judith, *Eastern Body, Western Mind*, 103-164; Weintraub, *Yoga Skills for Therapists*, 100-103.

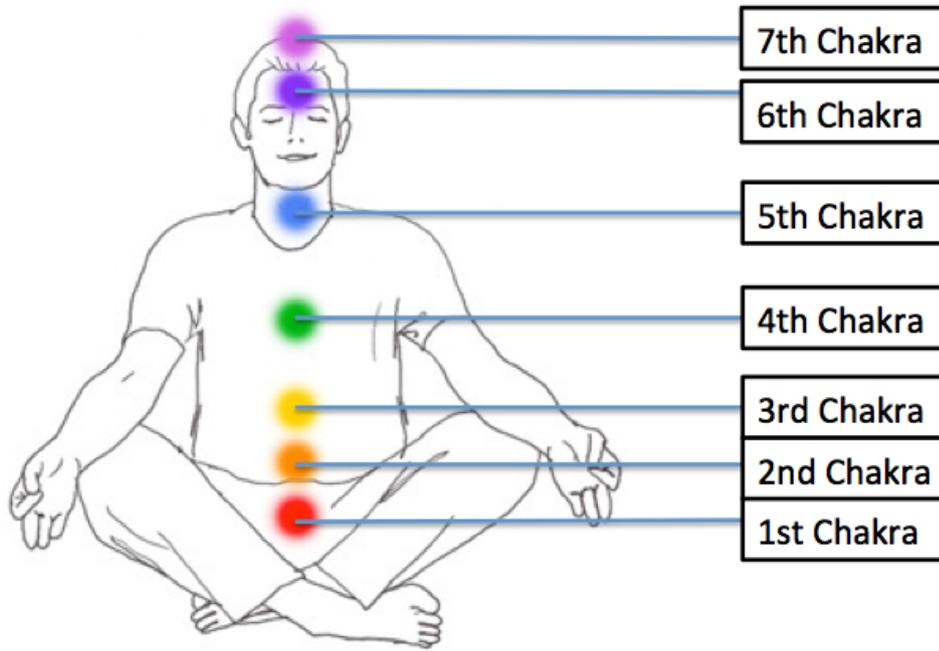


Figure 1. Diagram of the Chakras

Table 1. The Qualities and Characteristics of the Chakras

	Location	Central Issue	Goals	Developmental Stage	Identity	Relational Level
Chakra One	Base of spine,	Survival, attachment, love	Stability, grounding, physical health, prosperity trust	Womb to 12 months	Physical Identity	Parents
Chakra Two	Genitals, low back, hips	Sexuality, emotions	Fluidity, pleasure, healthy sexuality	6 months to 2 years	Emotional Identity	Family
Chakra Three	Solar plexus	Power, will	Vitality, spontaneity, strength of will, purpose, self-esteem	18 months to 4 years	Ego Identity	Family
Chakra Four	Heart area	Social responsibility, brotherly Love	Balance, compassion, self-acceptance, community	4 to 7 years	Social Identity	Community
Chakra Five	Throat	Communication	Clear expression, creativity, resonance	7 to 12 years	Creative Identity	World
Chakra Six	Forehead	Intuition, imagination	Psychic perception, imagination, clear seeing	Adolescence	Archetypal Identity	Universe
Chakra Seven	Top of head, cerebral cortex	Awareness, enlightenment	Wisdom, knowledge, consciousness, spiritual connection	Throughout life	Universal Identity	Universe, Higher Consciousness

is associated with ages 6 months to 2 years, when the infant begins to explore the world, using the organs of perception to feel and experience reality.¹³ The development of healthy first and second chakras lays down the foundation for mature, sexual relationships and emotional stability later in life.¹⁴

The third chakra, which is centered around the solar plexus, is associated with willpower, vitality, spontaneity, sense of purpose, and self-esteem, and its maturation corresponds to ages 18 months to 4 years, when the child begins to form its individual identity, sense of autonomy, and ego strength.¹⁵ Healthy third chakra maturation is essential for the development of a sense of purpose in adulthood, which leads to the ability to engage in meaningful, productive work.¹⁶

The fourth chakra is located at the center of the heart, and its development is associated with ages 4 to 7 and the qualities of compassion, self-acceptance, social responsibility, and social identity.¹⁷ In this stage, the child understands his or her role within the immediate family and begins to see him or herself as part of a larger community.¹⁸ In adulthood, the healthy development of the fourth chakra leads to a balanced sense of personal responsibility towards humanity and nature, depending on the underlying ego strength from the third chakra.¹⁹

The fifth chakra, which is centered around the throat, is associated with communication, creativity, and sense of harmony with the larger world, and its maturation takes place between the ages of 7 to 12, when the child develops the skills necessary to contribute to the greater system.²⁰ Associated with art, authentic self-expression, and the great works of civilization, the development of a healthy fifth chakra lays down the foundation for personal transcendence and an understanding of higher consciousness.²¹

The sixth chakra is located in the center of the forehead, also known as the third eye, and its maturation is associated with adolescence and the development of insight, intuition, imagination, and higher reasoning.²² In this stage, the adolescent learns to contemplate universal truths, see themselves in terms of his or her place in the cosmos, and understand their archetypal identity.²³

Like the sixth chakra, the seventh chakra is also concerned with universality.²⁴ Located at the crown of the head, its development is ongoing throughout adulthood, and it is associated with the goals of wisdom, enlightenment, and the formation of a direct connection to higher forms of consciousness, and for this reason, the seventh chakra is often associated with the practices of prayer and meditation.²⁵

According to chakra theory, physical and emotional functioning is dependent upon the healthy development of the chakras throughout childhood, adolescence, and adulthood. Individuals who are allowed to fully develop enjoy the greatest health, happiness, and sense of well-being, whereas individuals whose development is stifled are prone to illness and psychopathology.²⁶

¹³ Judith, *Eastern Body, Western Mind*, 103-164.

¹⁴ Ibid.; Weintraub, *Yoga Skills for Therapists*, 100-103.

¹⁵ Johari, *Chakras: Energy Centers of Transformation*, 105-112; Judith, *Eastern Body, Western Mind*, 165-220; Weintraub, *Yoga Skills for Therapists*, 100-103.

¹⁶ Judith, *Eastern Body, Western Mind*, 165-220.

¹⁷ Johari, *Chakras: Energy Centers of Transformation*, 113-132; Judith, *Eastern Body, Western Mind*, 221-284; Weintraub, *Yoga Skills for Therapists*, 100-103.

¹⁸ Judith, *Eastern Body, Western Mind*, 165-220.

¹⁹ Ibid.

²⁰ Johari, *Chakras: Energy Centers of Transformation*, 133-140; Judith, *Eastern Body, Western Mind*, 285-336; Weintraub, *Yoga Skills for Therapists*, 100-103.

²¹ Judith, *Eastern Body, Western Mind*, 285-336.

²² Johari, *Chakras: Energy Centers of Transformation*, 141-159; Judith, *Eastern Body, Western Mind*, 337-388; Weintraub, *Yoga Skills for Therapists*, 100-103.

²³ Judith, *Eastern Body, Western Mind*, 337-388.

²⁴ Ibid., 389-436.

²⁵ Johari, *Chakras: Energy Centers of Transformation*, 147-151; Judith, *Eastern Body, Western Mind*, 389-436; Weintraub, *Yoga Skills for Therapists*, 100-103.

²⁶ Bruyere, *Wheels of Light*, 51-101; Fondin, *The Wheel of Healing with Ayurveda*, 131-151; Johari, *Chakras: Energy Centers of Transformation*, 71-152; Judith, *Eastern Body, Western Mind*, 1-50.

Spirituality, Depression, and Anxiety

Research has consistently identified an inverse relationship between spirituality or religiosity and depression.²⁷ In a meta-analysis of 147 studies (N=98,975), Smith et al. found a significant inverse association between religiosity and depression.²⁸ Furthermore, research indicates that spirituality may have a protective effect against depression; in a study using a 10-year prospective longitudinal design, Miller and colleagues found that a high self-report rating of the importance of religion or spirituality may have a protective effect against recurrence of depression in high-risk adults.²⁹ A meta-analysis of 76 independent studies by Yonker et al. that examined 66,000 adolescents and emerging adults between 1990 and 2010 found a significant main effect of $-.11$ (CI $-.16, -.05$) between spirituality and depression.³⁰

Research has also consistently identified an inverse relationship between spirituality or religiosity and symptoms of anxiety, though the effect sizes are smaller and less conclusive than for the relationship between spirituality or religiosity and symptoms of depression.³¹ In terms of treatment for anxiety disorders, in a comprehensive review of the literature on the relationship between spirituality and psychopathology, Koenig examined seven clinical trials that studied the effects of religious interventions on anxiety disorders and reported that six of the seven clinical trials found that religious interventions in religious patients reduced anxiety levels more quickly than secular interventions or controls.³² Similarly, a meta-analysis of 39 studies (N=1,140) on the treatment of depression and anxiety with mindfulness-based therapies, which are based on Buddhist teachings, found that mindfulness-based therapy was moderately effective for improving anxiety and mood symptoms.³³

These broad and consistent findings might be interpreted and predictions made in light of chakra theory. Namely, the greater the reach and strength of one's connection, the further along in the progression of the seven chakras, the lower the symptoms of anxiety and depression.

Spirituality and Positive Psychology

Though the body of research is limited, many studies point to a positive association between spirituality and positive psychology constructs, such as psychological wellbeing, thriving, life satisfaction, gratitude, forgiveness, empathy, and happiness.³⁴ In a study of 3966 adolescents and emerging adults and 2014 older adults, Barton and Miller found that an individual's level of personal spirituality and positive psychology traits were found to coincide in 83% of adolescents and emerging adults and 71% of older adults, suggesting that for the majority of people, positive psychology traits and spirituality are connected.³⁵ In a review of 850 studies on the religion-mental health relationship, Moreira-Almeida et al. found that higher levels of religious involvement were positively associated with psychological well-being, including life satisfaction, happiness, positive affect, and high morale.³⁶ The researchers also found that the positive impact of

²⁷ Koenig, "Research on religion, spirituality, and mental health," 283-291; McCullough and Larson, "Religion and depression," Miller and Thoresen, "Spirituality, religion, and health," 24-35; Pargament and Saunders, "Introduction to the special issue," 903-907; Smith et al., "Religiousness and depression," 614-636; Young et al., "The moderating relationship," 49-57.

²⁸ Smith et al., "Religiousness and depression," 614-636.

²⁹ Miller et al., "Religiosity and major depression in adults," 89-94.

³⁰ Yonker et al., "The relationship between spirituality and religiosity," 299-314.

³¹ Amjad and Bokhary, "Comparison of Spiritual Well-Being and Coping Strategies," 524-539; Koenig, "Research on religion, spirituality, and mental health," 283-291; Young et al., "The moderating relationship," 49-57.

³² Koenig, "Research on religion, spirituality, and mental health," 283-291.

³³ Hofmann et al., "The effect of mindfulness-based therapy," 169.

³⁴ Cowlshaw et al., "Older adults' spirituality and life satisfaction," 1243-1262; Fabricatore et al., "Personal spirituality as a moderator," 221-228; Falb and Pargament, "Religion, spirituality, and positive psychology," 143-157; Hardy et al., "Daily religious involvement, spirituality, and moral emotions," 338; Lee et al., "Stress, spiritual, and support coping," 328-347; Marques et al., "The role of hope, spirituality and religious practice," 251-261; Piedmont, "Spiritual transcendence and the scientific study of spirituality," 4.

³⁵ Barton and Miller, "Spirituality and Positive Psychology," 829-843.

³⁶ Moreira-Almeida et al., "Religiousness and mental health," 242-250.

religious involvement is usually more robust for people under stressful circumstances, such as the elderly and those with disabilities or medical illnesses.³⁷ To return to chakra theory, it would seem reasonable that the degree of character strengths and virtues would monotonically increase with the step-wise progression of the seven chakras.

Method

Participants

The data from this study was collected as part of an ongoing, international study of adults, the “Universal Spirituality” data set, derived from a web-based survey conducted at Teachers College, Columbia University (N= 6,213 participants) (Lisa Miller, principle investigator). The participants entered the study from summer 2014 to spring 2015. This study focused only on the subjects from the United States (n = 1633), who were all recruited using the crowdsourcing website Mturk.com. The population was 49% male and 51% female, and their ages ranged from 18 to 75, with a mean age of 34.9.

Procedure

The study employed a cross-sectional design, collecting data online at a single time point. This online format was chosen because of its cost and efficiency, the ability to employ skip logic procedures, and minimization of variation in survey procedures across countries. The institutional review board of Teachers College, Columbia University, approved the study. Between July and December 2014, participants completed a questionnaire online through crowd-sourcing websites and were given a payment of \$10 upon completion.

While many completed the questionnaire in a single sitting, participants were allowed up to five days to complete it. The usage of crowd-sourcing websites to recruit participants yielded an aggregate sample biased toward more educated, affluent, and urban individuals. Nevertheless, we believed the tradeoff with efficiency and feasibility procured more advantages than disadvantages.

Four attention check questions were distributed throughout the questionnaire. For example, one such question described the concept of “hobbies” in a few sentences, followed by a list of hobbies like “fishing” and “gardening.” Embedded in the description was the explicit instruction to select the option “Do not enjoy hobbies,” even if this statement did not accurately describe the participant. Thus, selecting this option indicated that the participant performed a careful reading of the item before responding. Cases that did not successfully pass three of the four attention checks were considered “low attention” cases and were not included in the analysis.

Measures

Previously validated measures were used to capture various aspects of spiritual connection, depression and positive psychology variables.

To measure connection through love, the Psychological Love Subscale from The Sorokin Multidimensional Inventory of Love Experience was used.³⁸ The Psychological Love Subscale is designed to measure “love experienced emotionally through giving or receiving empathy, sympathy, kindness, and benevolence.”³⁹ The subscale is a four-item Likert scale, with items such as “As long as I can remember, I have always been loved” and “Feeling loved takes away all my fear.”⁴⁰

³⁷ Ibid.

³⁸ Levin and Kaplan, “The Sorokin multidimensional inventory,” 380-401.

³⁹ Ibid.

⁴⁰ Ibid.

To measure connection through sense of purpose, the 10-item Meaning in Life Questionnaire (MLQ) was used.⁴¹ The 7-item Likert scale assesses the extent to which a person has purpose and meaning in their daily life. It includes items such as “My life has a clear sense of purpose” and “I understand my life’s meaning.”⁴²

To measure connection through Nature, Spirituality in Nature Scale was used. The scale is a 7-item Likert scale designed to measure spiritual connection to the natural world. The scale includes items such as “Spending time in nature helps me to feel more connected spiritually” and “Experiences in nature have fostered my spiritual growth.”

To measure connection through contemplative practice, the nine-item Prayer Fulfillment subscale of the Spiritual Transcendence Scale was used.⁴³ The subscale is designed to measure “An experienced feeling of joy and contentment that results from prayer,” though the items within the measure consistently reference “prayers or meditations” as opposed to prayer alone.⁴⁴ The scale includes items such as “I find inner strength and/or peace from my prayers or meditations” and “I have experienced deep fulfillment and bliss through my prayers or meditations.”⁴⁵

To measure the sense of being connected to the Oneness of the universe, the Universality subscale of the Spiritual Transcendence Scale was used.⁴⁶ The nine-item subscale is designed to measure “A belief in the unity and purpose of life; a feeling that all life is interconnected and a sense of a shared responsibility of one creature to another.”⁴⁷ The scale included items such as “All life is interconnected” and “I believe that on some level my life is intimately tied to all of humankind.”⁴⁸

Psychopathology was assessed using two scales, one measuring anxiety and the other depression. Anxiety symptomatology was measured using the Generalized Anxiety Disorder Scale (GAD-7), a 7-item scale that asks participants to rate how frequently in the last two weeks they have experienced anxious symptoms, such as “Not being able to stop or control worrying” and “Feeling nervous, anxious, or on edge.”⁴⁹

Depressive symptomatology was measured using Patient Health Questionnaire (PHQ-9), which has been shown to be a reliable and valid measure of severity of depression.⁵⁰ Participants rate on a four-point Likert scale how often over the past two weeks they have experienced depressive symptoms, such as “feeling down, depressed, or hopeless” or “little interest or pleasure in doing things.”⁵¹

Measures of positive psychology were assessed using five scales: gratitude, grit, self-compassion, and flourishing. Gratitude was measured using the six-item Gratitude Questionnaire (QQ-6), which asks participants to rate the extent they agree or disagree to items on a seven-point Likert scale.⁵² The scale includes items such as “I have so much in life to be thankful for” and “If I had to list everything that I felt grateful for, it would be a very long list.”⁵³

Grit, or “perseverance to life’s challenges,” was measured using the eight-item Grit Scale (GRIT-S), which asks participants to describe their personal characteristics using a five-point Likert scale.⁵⁴ The scale includes items such as “Setbacks don’t discourage me” and “I finish whatever I begin.”⁵⁵

41 Steger et al., “The meaning in life questionnaire,” 80.

42 Ibid.

43 Piedmont, “Spiritual transcendence,” 4-14.

44 Ibid.

45 Ibid.

46 Ibid.

47 Ibid.

48 Ibid.

49 Spitzer et al. “A brief measure for assessing generalized anxiety disorder,” 1092-1097.

50 Kroenke et al., “Journal of general internal medicine,” 606-613.

51 Ibid.

52 McCullough et al., “The gratitude questionnaire-six item form.”

53 Ibid.

54 Duckworth and Quinn, “Development and validation of the Short Grit Scale,” 166-174.

55 Ibid.

Satisfaction with life was measured using the Satisfaction With Life Scale, which is a five-item, seven-point Likert scale designed to assess satisfaction with one's life as a whole.⁵⁶ It includes items such as "I am satisfied with my life" and "So far I have gotten the important things I want in life."⁵⁷

Self-compassion was measured using the 12-item Self-Compassion Scale–Short Form (SCS–SF), which is designed to measure self-compassion, or "the ability to hold one's feelings of suffering with a sense of warmth, connection and concern."⁵⁸ The scale uses a five-point Likert scale and includes items such as "I try to see my failings as part of the human condition" and "When I'm going through a very hard time, I give myself the caring and tenderness I need."⁵⁹

Flourishing was measured with the eight-item Flourishing Scale, which uses a seven-point Likert scale, designed to measure "the respondent's self-perceived success in important areas such as relationships, self-esteem, purpose, and optimism."⁶⁰ It includes items such as "My social relationships are supportive and rewarding" and "I am engaged and interested in my daily activities."⁶¹

Data Analyses

Latent class analyses (LCA) will be used to produce a multiclass model of spiritual connection for the United States sample. To compare measures, all measures will be rescaled from 0 to 1 before beginning the LCA analysis. In the LCA model produced, the classes will be identified and evaluated using Mplus version 7.1 in unconditional models.⁶² The relative fit of each model will be evaluated based on Bayesian information criterion (BIC), sample size-adjusted BIC, and Akaike information criterion (AIC). The Lo-Mendell-Rubin test adjusted likelihood ratio test will be used to assess whether the degree of model fit is significantly better than that of a model with one fewer classes. Goodness of model fit will also be determined based on entropy, parsimony, and a consideration of theoretical interpretability.

Once best-fitting models for the classes have been obtained, a series of one-way ANOVA tests will be used to examine whether the variables measuring psychopathology and positive psychology are significantly different across classes.

Results

Latent class analyses (LCA) was used to produce a multiclass model of spiritual connection for the United States sample. The LCA procedure starts with the most parsimonious one-class (unconditional) model, and the number of classes increases until there is no additional improvement to the model fit, which in this case was five classes. Table 2 shows the goodness-of-fit statistics used to select the optimal model and to evaluate the standard assumption of local independence between the observed variables. The mean normed variable scores of the five classes are illustrated in Fig. 2. The pattern of findings in each class was interpreted in tandem with Chakra theory to generate five conceptually distinct classes: Disconnected; Connected to the Secular World; Connected to the Secular World; Connected to the Natural World; Connected to Transcendent Reality; and Highly Connected.

The Disconnected class was low in all five elements of spiritual connection. In terms of chakra theory, the Disconnected class represents those whose chakra development was at the earliest stages of life.

The next class Connected to the Secular World was moderate in Love and Sense of Purpose, but low in Nature, Contemplative Practice and Oneness. This class identifies with the elements of spiritual connection that are part of our day-to-day reality, which includes secular love and purposeful work. In terms of chakra

⁵⁶ Diener et al., "The satisfaction with life scale," 71-75.

⁵⁷ Ibid.

⁵⁸ Neff, "The development and validation," 223-250.

⁵⁹ Ibid.

⁶⁰ Diener et al., "New well-being measures," 143-156.

⁶¹ Ibid.

⁶² Muthén and Muthén, *MPlus User's Guide*.

Table 2. Fit indices for latent class analysis models with 1-8 classes in adult US sample

Number of Classes	1	2	3	4	5	6	7	8
Akaike (AIC)	564.75	1771.14	-2319.74	-2587.13	-2709.92	-2824.90	-2935.27	-3019.57
Bayesian (BIC)	617.70	1686.42	-2203.25	-2438.87	-2529.89	-2613.11	-2709.67	-2744.22
Sample-Size Adjusted BIC	585.93	1737.25	-2273.14	-2527.82	-2637.89	-2740.17	-2855.82	-2909.41
Entropy	--	.86	.81	.80	.81	.82	.83	.83
Lo-Mendell-Rubin adjusted LRT	--	<i>p</i> <.001	<i>p</i> <.001	<i>p</i> <.001	<i>p</i> <.001	<i>p</i> =.085	<i>p</i> <.001	<i>p</i> <.05

Note. Selected model is bold-faced. Latent class analyses procedure starts with the most parsimonious one-class (unconditional) model, and the number of classes increases until there is no additional improvement to the model fit. Akaike Information Criterion, Bayesian Information Criterion, and sample-size adjusted BIC were examined, and the model that produces the smallest values on these indices is considered to have the best fit. Entropy was also compared across models. Entropy is not a fitness statistic but a measure of the quality of classification; entropy levels approaching one indicate clear delineation of classes. Lastly, the Lo-Mendell-Rubin adjusted LRT test was also examined for statistical significance. Finally, models were examined for theoretical interpretability and parsimony. A five-class solution was decided upon.

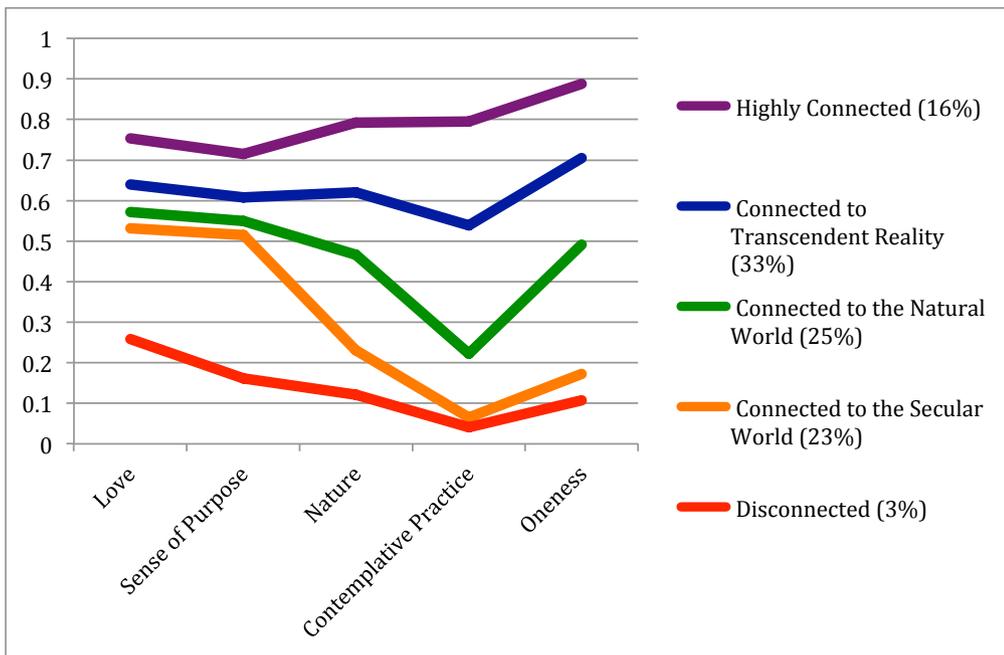


Figure 2. Five Class Unconditional Model of Connection in Adults in the United States by Latent Class Analysis (N=1473)

theory, this class corresponds to individuals who have developed through the first, second, and third chakras, indicating that they enjoy secure styles of attachment, healthy sexual relationships, and ample ego strength.

The middle class Connected to the Natural World was moderate in Love, Sense of Purpose, Nature, and Oneness, but low in Contemplative Practice. This class identifies with the elements of spiritual connection that are associated with the natural world, which includes nature, secular love, meaningful work, and to moderate extent, a sense of oneness with the Universe. According to chakra theory, these individuals would be developed through the first, second, third, fourth, and fifth chakras, indicating that they not only experience the healthy qualities of the first three chakras but also a great sense of interconnectedness with the world around them, touching upon feelings of transcendence through their ability to commune with nature.

The class Connected to Transcendent Reality was moderately high in Love, Sense of Purpose, Nature, and Oneness, but low in Contemplative Practice. This class identifies with the elements of spiritual connection that exist in the natural world and transcend daily experiences. In terms of chakra theory, this class has developed through the first six chakras, indicating that they experience the positive qualities of the first five chakras plus the benefits of insight, intuition, and a feeling of being at one with the Universe.

The Highly Connected class was high in all five elements of spiritual connection. They are deeply connected through love, sense of purpose, nature, a sense of oneness with the Universe, and contemplative practice, connecting spiritually through prayer or meditation. They experience the positive qualities of all seven chakras, including the experience of being directly connected to a higher consciousness through the act of prayer or meditation.

A series of one-way ANOVA tests was used to examine whether the variables measuring psychopathology and positive psychology are significantly different across classes. As displayed in Table 3 and Fig. 3-9, ANOVA tests indicated that classes varied significantly across all variables. Post hoc analysis using least squared differences (LSD) were used to examine pairwise comparisons of all class pairs across all classes.

Across all variables, the Disconnected class and the Highly Connected class had mean scores that differed significantly on the measures of psychopathology—depression and anxiety—with the mean scores of the Disconnected class were significantly higher than the Highly Connected class. For the positive psychology variables—gratitude, grit, satisfaction with life, self-compassion, and flourishing—the mean scores of the Disconnected class were significantly lower than the Highly Connected class. For both psychopathology and the positive psychology variables, the classes Connected to the Secular World, Connected to the Natural World, and Connected to Transcendent Reality fell in between the Disconnected class and the Highly Connected class.

Table 3. One-way ANOVA of variable means across five classes of spiritual connection.

	Disconnected	Connected to the Secular World	Connected to the Natural World	Connected to Transcendent Reality	Highly Connected	F
Anxiety	5.88	4.59	4.80	5.16	3.98	2.64*
Depression	9.19	6.23	6.34	6.04	5.31	4.22*
Gratitude	22.75	30.73	32.41	33.85	36.17	47.5*
Grit	23.90	26.74	27.35	28.07	29.76	13.65*
Satisfaction with Life	13.67	19.46	19.53	22.27	25.56	35.59*
Self-Compassion	34.255	37.34	38.40	39.40	43.58	20.04*
Flourishing	12.63	18.26	19.88	18.55	23.72	57.50*

* $p < .01$.

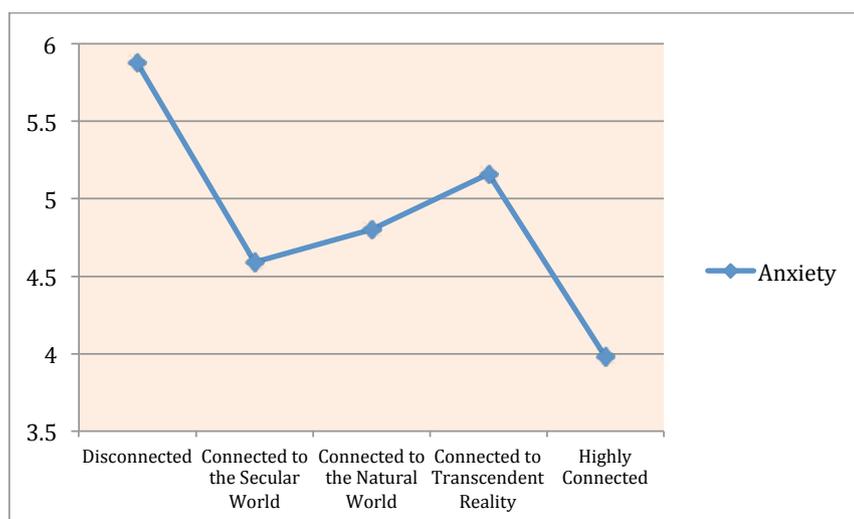


Figure 3. One-way ANOVA of mean anxiety across five classes of spiritual connection, $F=6.76^*$. * $p < .01$.

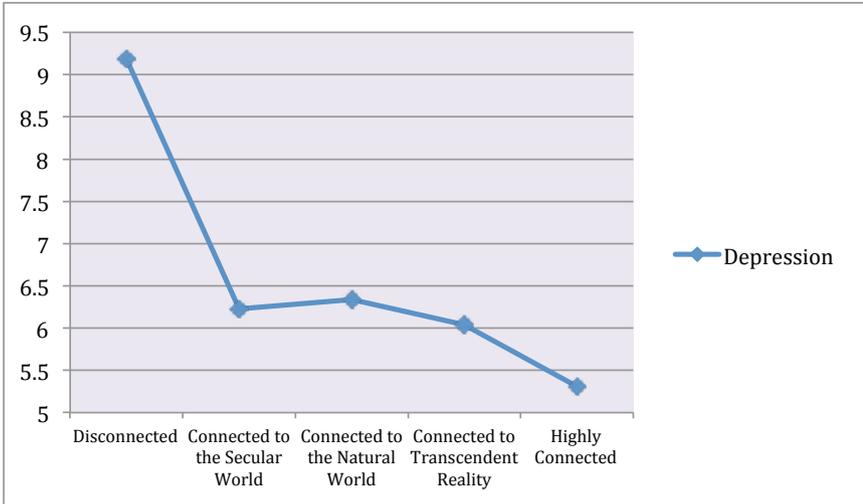


Figure 4. One-way ANOVA of mean depression across five classes of spiritual connection, $F=4.22^*$. $* p < .01$.

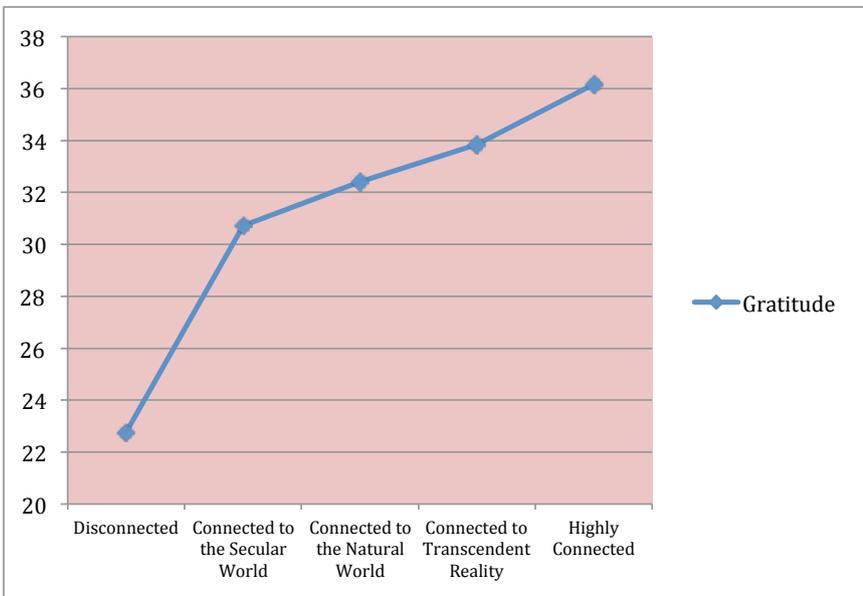


Figure 5. One-way ANOVA of mean gratitude across five classes of spiritual connection, $F=47.5^*$. $* p < .01$.

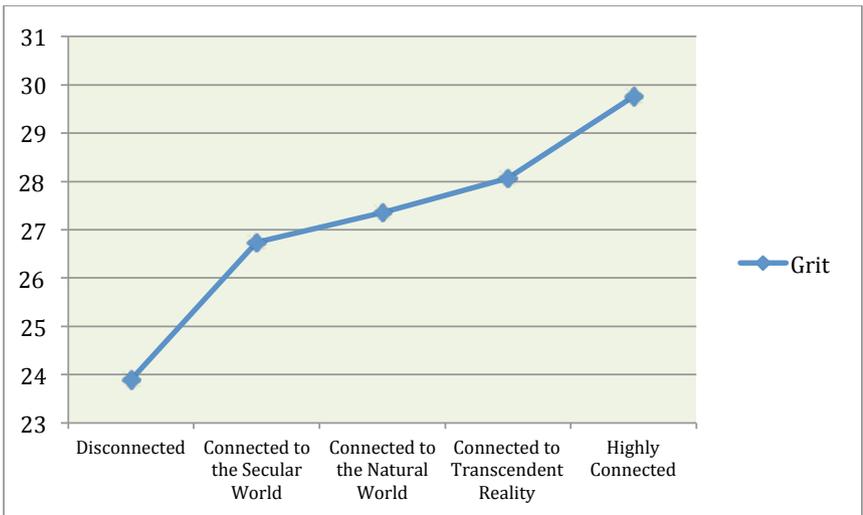


Figure 6. One-way ANOVA of mean grit across five classes of spiritual connection, $F=13.65^*$. $* p < .01$.

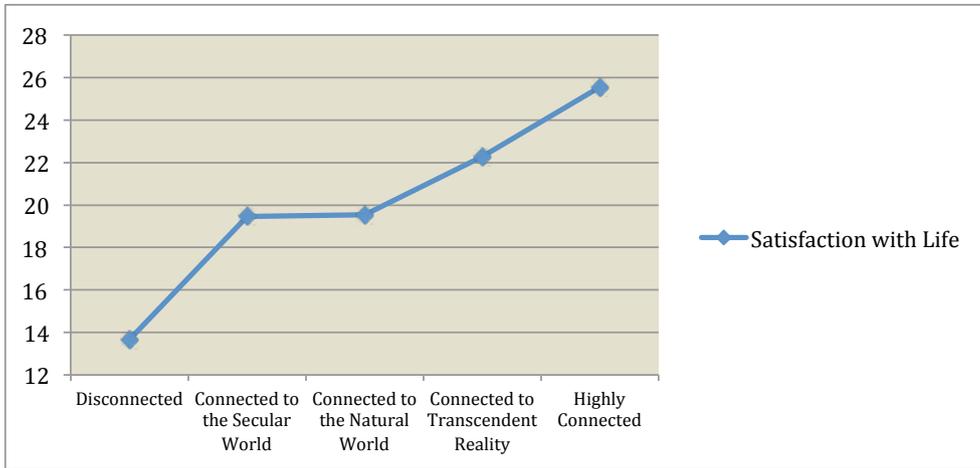


Figure 7. One-way ANOVA of mean satisfaction with life across five classes of spiritual connection, $F=35.59^*$. $p < .01$.

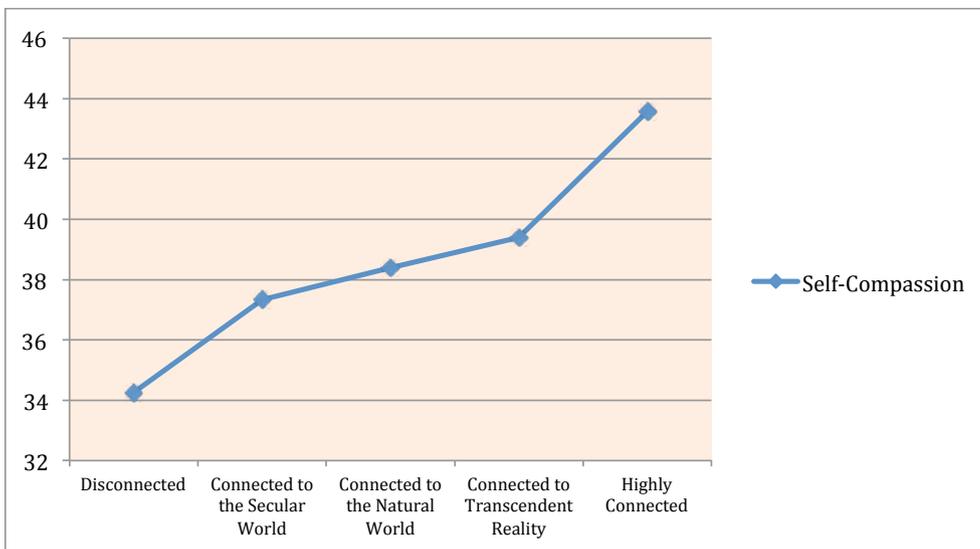


Figure 8. One-way ANOVA of mean self-compassion across five classes of spiritual connection, $F=20.04^*$. $p < .01$.

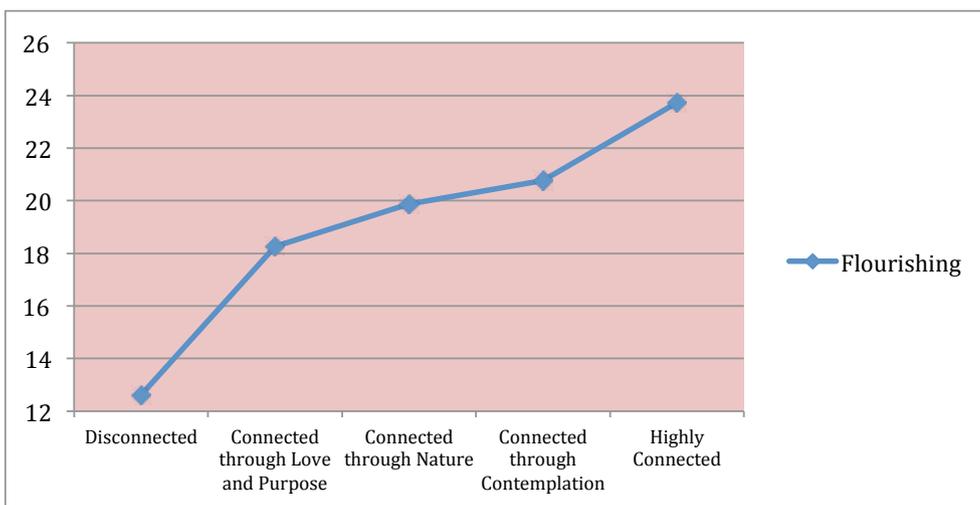


Figure 9. One-way ANOVA of mean flourishing across five classes of spiritual connection, $F=57.50^*$. $p < .01$.

For anxiety, post hoc analysis using LSD revealed that the mean score for the Disconnected Class ($M=5.87$, $SD=6.67$) was significantly higher than the Highly Connected Class ($M=3.99$, $SD=5.17$). The Class Connected to the Secular World ($M=4.60$, $SD=4.91$) did not differ significantly from any other class. The Class Connected to the Natural World ($M=4.91$, $SD=5.17$) and the Class Connected to Transcendent Reality ($M=5.17$, $SD=5.49$) differed significantly from Highly Connected Class ($M=3.98$, $SD=5.20$).

For depression, post hoc analysis using LSD revealed that the mean score for the Disconnected Class ($M=9.19$, $SD=7.74$) was significantly higher than the other four groups: The Class Connected to the Secular World ($M=6.24$, $SD=5.71$); Natural World ($M=6.16$, $SD=6.14$); the Class Connected to Transcendent Reality ($M=6.04$, $SD=6.16$); and Highly Connected Class ($M=5.31$, $SD=6.40$). The remaining classes did not differ significantly from each other, except that the Class Connected to the Natural World ($M=6.16$, $SD=6.14$) was significantly higher in depression than the Highly Connected Class ($M=5.31$, $SD=6.40$).

For gratitude, post hoc analysis using LSD revealed that all five classes differed significantly from each other in the order that would be predicted by chakra theory. The Disconnected Class ($M=22.75$, $SD=8.41$) was lower in gratitude than the Class Connected to the Secular World ($M=30.74$, $SD=7.18$), which was lower in gratitude than the Class Connected to the Natural World ($M=32.41$, $SD=7.38$), which was lower in gratitude than the Class Connected to Transcendent Reality ($M=33.85$, $SD=6.89$), which was lower in gratitude than the Highly Connected Class ($M=36.17$, $SD=5.62$).

For grit, the classes differed in the order that would be predicted by chakra theory, except that the Class Connected to the Natural World was not significantly different from the Class Connected to the Secular World or the Class Connected to Transcendent Reality. Post hoc analysis using LSD revealed that Disconnected Class ($M=23.09$, $SD=6.50$) was significantly lower in grit than the other four groups, and the Highly Connected Class ($M=29.76$, $SD=6.16$) was significantly higher in grit than the other four groups. The Class Connected to the Secular World ($M=26.74$, $SD=5.89$) was also significantly lower in grit than the Class Connected to Transcendent Reality ($M=28.07$, $SD=6.36$), though neither class differed significantly from the Class Connected to the Natural World ($M=27.34$, $SD=5.92$).

For satisfaction with life, post hoc analysis using LSD revealed that all five classes differed significantly from each other in the order that would be predicted by chakra theory, except that the Class Connected to the Secular World ($M=19.47$, $SD=8.63$) was not significantly different from the Class Connected to the Natural World ($M=19.53$, $SD=8.33$). In other words, the Disconnected Class ($M=13.67$, $SD=8.27$) was significantly lower in satisfaction in life than the Class Connected to the Secular World ($M=19.47$, $SD=8.63$) and the Class Connected to the Natural World ($M=19.53$, $SD=8.33$), which were significantly lower in satisfaction with life than the Class Connected to Transcendent Reality ($M=22.27$, $SD=8.22$), which was significantly lower in satisfaction with life than the Highly Connected Class ($M=25.57$, $SD=7.17$).

For self-compassion, the classes differed in the order that would be predicted by chakra theory, except that the Class Connected to the Natural World was not significantly different from the Class Connected to the Secular World or the Class Connected to Transcendent Reality. Post hoc analysis using LSD revealed that Disconnected Class ($M=34.26$, $SD=11.84$) was significantly lower in self-compassion than the other four groups, and the Highly Connected Class ($M=43.58$, $SD=8.45$) was significantly higher in self-compassion than the other four groups. The Class Connected to the Secular World ($M=37.34$, $SD=9.15$) was also significantly lower in self-compassion than the Class Connected to Transcendent Reality ($M=39.56$, $SD=9.37$), though neither class differed significantly from the Class Connected to the Natural World ($M=38.40$, $SD=9.72$).

For flourishing, post hoc analysis using LSD revealed that all five classes differed significantly from each other in the order that would be predicted by chakra theory, except that the Class Connected to the Secular World ($M=18.26$, $SD=6.31$) was not significantly different from the Class Connected to the Natural World ($M=18.55$, $SD=5.78$). In other words, the Disconnected Class ($M=12.64$, $SD=5.54$) was significantly lower in satisfaction in life than the Class Connected to the Secular World ($M=18.26$, $SD=6.31$) and the Class Connected to the Natural World ($M=18.55$, $SD=5.78$), which were significantly lower in flourishing than the Class Connected to Transcendent Reality ($M=20.76$, $SD=5.52$), which was significantly lower in flourishing than the Highly Connected Class ($M=23.73$, $SD=4.80$).

Discussion

Our explorative study empirically identified five classes of spiritual connection that were progressive and inclusive of increasing realms of spiritual connection: Disconnected; Connected to the Secular World; Connected to the Natural World; Connected to Transcendent Reality; and Highly Connected. Membership into each progressive class included all forms of spiritual connection found in the previous classes plus an additional form of connection. The monotonic progression of spiritual connection appears to be correlated with some dimensions of mental health and thriving. Specifically, the Disconnected class was the highest in depression and anxiety and the lowest in the positive psychology traits; the Highly Connected class was the lowest in depression and anxiety and the highest in positive psychology traits; the other three classes fell in between the Disconnected and Highly Connected class in terms of depression, anxiety, and positive psychology traits.

For the positive psychology variables, overall the progression was generally monotonic; the Disconnected Class was the lowest in all of the positive psychology variables, followed by the Class Connected to the Secular World, the Class Connected to the Natural World, the Class Connected to Transcendent Reality, and the Highly Connected Class. Statistically, for gratitude, the stepwise progression was statistically significant at all levels; the levels of grit and self-compassion associated with the upward step-wise progression was statistically significantly increasing, with the exception that the Class Connected to the Natural World was not significantly different from the Class Connected to the Secular World or the Class Connected to Transcendent Reality. Statistically, the level of satisfaction with life and flourishing associated with the upward step-wise progression was statistically significantly increasing, except that the Class Connected to the Secular World was not significantly different from the Class Connected to the Natural World.

Notably, the constitution and progression of the classes appear broadly consistent with chakra theory, which posits a near step-wise progression of spiritual connection: Individuals mature through sequentially forming loving relationships, a sense of purpose, communion with nature, a sense of Oneness, and connections to Universal Consciousness through prayer and meditation.⁶³

Judith's chakra theory links the capacity for energy through specific chakras to human development and experience.⁶⁴ According to this chakra theory, the Disconnected class, which was low in all five variables of spiritual connection and high in psychopathology, may reflect a deficit or trauma at a very early stage of development, during the formation of the first three chakras in the first four years of life.⁶⁵ The current authors have posited that in adulthood, the attenuated connection with these realms of spirit, nature and fellow people, etiologically and phenomenologically substantially contribute to symptoms of anxiety and depression. Findings from this study indeed showed that broad and pervasive disconnection was associated with the highest levels of symptomology.

Individuals in the second category—the class Connected to the Secular World—were connected Love and Sense of Purpose, indicating a strong foundation in the first three chakras, which theoretically is associated with strong familiar ties and a sense of self-agency.⁶⁶ Individuals in the third category—the class Connected to the Natural World—were connected to Nature as well as Love and Sense of Purpose, indicating a strong foundation in the first five chakras. These individuals not only have the strong familiar ties and a sense of self-agency associated with the first three chakras, but they also have a sense of connection with the natural world and the greater community, which are theoretically qualities of the fourth and fifth chakras.⁶⁷ Individuals in the fourth category—the class Connected to Transcendent Reality—were connected to a sense of Oneness as well as Love, Sense of Purpose, and Nature, theoretically

⁶³ Bruyere, *Wheels of Light*, 51-101; Fondin, *The Wheel of Healing with Ayurveda*, 131-151; Johari, *Chakras: Energy Centers of Transformation*, 71-152; Judith, *Eastern Body, Western Mind*, 1-50.

⁶⁴ Judith, *Eastern Body, Western Mind*, 1-50.

⁶⁵ Ibid., 1-220; Weintraub, *Yoga Skills for Therapists*, 100-103.

⁶⁶ Judith, *Eastern Body, Western Mind*, 51-220.

⁶⁷ Ibid., 221-336.

suggesting a strong foundation in the first six chakras.⁶⁸ These people connect to transcendent experience and see themselves in relation to the Universe, in addition to feeling connected to their families, work, and communities.

Individuals in the final category—the Highly Connected class—were connected through Prayer and Meditation in addition to a Love, Sense of Purpose, Nature, and a sense of Oneness, consistent with the theoretically indicated strength of the foundation in harnessing all seven chakras.⁶⁹ Highly Connected individuals experience higher levels of consciousness in addition to seeing their place in the Universe and experiencing a sense of connection to their families, work, and communities.⁷⁰ This broadly and strongly connected group show the lowest levels of depression and anxiety, offering support that broad connection is etiologically and phenomenologically protective against psychopathology.

Intriguingly, each of the connections showed stronger intensity as the individuals in each category identified with more elements of spiritual connection. For example, individuals in the class Connected to Transcendent Reality were more strongly connected to Love and Sense of Purpose than individuals in the class Connected to the Secular World. It appears that the more an individual is connected to, the stronger all of their connections become. Connectedness appears to be antithetical to symptoms of psychopathology. Future research might elaborate a system of progressive chakra informed spiritual development, as well as start to translate this progression into a wellness intervention model of spiritual growth and integration.

It should be noted that this study had several limitations. The survey utilized self-report measures, which have certain disadvantages. The responses may have been influenced by social desirability bias, the tendency of respondents to answer questions in a way that will allow them to be viewed favorably by others. Demand characteristics may have also influenced the results. Subjects may have suspected the purpose of the study and filled out their surveys to match the intent of the research. The subjects were also paid, which may have also led the results to be influenced by demand characteristics. Using Mturk.com to recruit subjects also has disadvantages. The respondents were limited to those who could find and fill out the survey online, which brings the generalizability of the study into question.

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⁶⁸ Ibid., 389-436.

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⁷⁰ Ibid.

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