THE LOGOPLEX AS A PARADIGM FOR UNDERSTANDING SPIRITUAL TRANSCENDENCE

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ABSTRACT

Spiritual transcendence represents a trait-based motivational construct hypothesized to underlie individuals' efforts at creating a personal sense of meaning. Although a significant predictor of spiritual behaviors and aspirations, spiritual transcendence alone cannot be considered a complete explanation for all types of personal meaning. Working out of the writings of Victor Frankl, the Logoplex is presented as a theoretical framework for better understanding spiritual orientations within a broader framework of personal meaning creation. *Transpersonalism vs. Materialism* and *Relationalism vs. Intentionalism* are the orthogonal dimensions proposed to define the Logoplex. In order to test this model, a sample of 185 undergraduate volunteers completed several measures deemed to be appropriate markers of these two underlying dimensions. A factor analysis provided empirical support for the proposed model. The practical implications of the Logoplex for understanding people were discussed.

Over the past several years I have been involved in basic taxonometric research on the construct of spirituality. The basic goal was to determine whether spirituality represented some unique, individual-differences variable or was merely the blend of several existing dimensions. This is a crucial question for religious researchers because of the conceptual ramifications of the answer. If spirituality is a unique dimension of psychological functioning, then constructs which tap into this domain represent new psychological phenomena that hold the potential for expanding our understanding of people and the goals they pursue. Empirically, spirituality could then improve our ability to predict important psychosocial outcomes. If, instead,

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spirituality merely represented the admixture of one or more exist-
ing constructs, then spirituality would simply reflect an interesting
way individuals molded internal motivations toward particular types
of goals.

In order to accomplish this task, a motivational/trait approach to
spirituality was taken. Such an approach views spirituality as a
nonspecific affective force that drives, directs, and selects behaviors.
As an intrinsic source of motivation, spirituality would be a rela-
tively stable construct over time and would impel individuals toward
identifiable goals (Emmons, 1999). Spirituality would operate in ways
consistent with other motivational traits, such as extraversion, power,
affiliation, and conscientiousness. This approach is certainly different
from how spirituality is usually viewed, such as a cognitive schema
(Beit-Hallahmi, 1989; Worthington, Kurusu, McCullough, & Sandage,
1996), a way of being (Elkins, 1988), or way of understanding (Wong,
1998). It is certainly very different from theological understandings,
in some of which spirituality is construed as an end product of spir-
itual maturity, in others as living under a relationship or commit-
ment to God, and in still others as a process of spiritual growth and
development (e.g., Conn, 1985; Downey, 1997).

The advantages of taking a trait approach were fourfold. First, it
made available a comprehensive taxonomy of individual difference
variables, the Five-Factor Model of Personality (FFM), as a con-
ceptual and empirical reference point for evaluating the spiritual con-
structs. Second, the psychometrics for creating trait measures are
well developed, as are criteria for determining reliability and valid-
ity. Third, the use of a trait model enabled a more ready integra-
tion of the resulting spiritual constructs into the broader research
agenda of the social sciences. Finally, the trait approach necessitated
the development of a construct that would be nondenominational.
Many current spirituality scales reflect primarily a mainline Protestant
theological orientation which compromises their generalizability to
non-Christian groups.

With these advantages in mind, spirituality was defined as an indi-
vidual's efforts to construe a broad sense of personal meaning within
the light of his/her own mortality. Knowing that we are going to
die, each of us needs to construct some sense of purpose and mean-
ing for the life being led. Why am I here? What purpose does my
life serve? Why should I do the things I do? These are important
questions that each of us needs to answer and our responses to them

set the tempo, tone, and direction for our lives. Managing our sense of mortality is an innate task for our species (e.g., Greenberg, Solomon, & Pyszczynski, 1997), and ideally, these answers help to pull together the many disparate threads of existence into a more meaningful coherence that gives us the will to live productively. However, there are many different types of answers to these existential questions, with some responses providing more emotional support and psychological resilience than others. One way of categorizing responses to these existential questions is along the time frame people use to understand their lives which I refer to as their "event horizon." For example, some may perceive their lives within the immediate context they inhabit, responding to the specific needs and demands of the here and now, a relatively short event horizon. Others may view their lives as part of a specific generation or cohort, and personal meaning develops in relation to how these people view their commitments to others in their generation and those that follow them a more moderate event horizon. Finally, still others may view their lives as part of some eternal ontological pathway that involves responsibilities toward others in both the "here and now" and in the "next life," a long event horizon. The broader the event horizon one uses to create meaning, the more stability, resilience, and personal satisfaction that is experienced.

I believe that constructing meaning is a basic motivational aspect of personality; we all need to find some sense of purpose for our lives. According to Frankl (1997), without meaning our lives deteriorate into despair and emotional maladjustment; with it, especially a long range or ultimate meaning, our lives receive depth and emotional fulfillment. Because spirituality is one way in which ultimate meaning is created, it is not surprising that some see it as a central organizing aspect of personality (Allport, 1950; Batson, Schoenrade, & Vensu, 1992). For me, underlying people's efforts at addressing and answering the existential questions of meaning, purpose, and relevance is a motivation I have labeled "spiritual transcendence." Spiritual transcendence represents a universal human capacity to stand outside of one's own immediate existence and to view life from a broader, more integrative whole. To varying degrees, we begin to realize that there is a larger meaning and purpose to life. We are single threads in a larger tapestry of existence; although small and limited, each thread makes a unique contribution to the overall texture and imprint of the woven piece.

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In developing the Spiritual Transcendence Scale (STS), a consortium of theological experts from diverse faith traditions, including Buddhism, Hinduism, Quakerism, Lutheranism, Catholicism, and Judaism was assembled. This focus group was used to identify qualities of spirituality that were common to all of these faiths. The resulting items were then analyzed within the context of the FFM and it was determined that spirituality represented a unique, distinct individual-differences construct (see Piedmont, 1999a). Initial validation of the instrument showed: (1) that its factor structure (a single overall domain with three correlated facets, labeled connectedness, prayer fulfillment, and universality) was replicable over several samples; (2) that scores on the STS converged over both self and observer ratings; and, (3) that scores on the STS predicted important psychosocial outcomes (e.g., prosocial behavior, stress experience, interpersonal style, meaning in life) even *after* the predictive effects of the five major personality domains were removed (Piedmont, 1999a; 2001). Thus, the STS has good incremental validity over established personality constructs. Research has also shown that the dimensions of the STS were reliable and valid across both cultural and religious contexts, including Catholics in the Philippines (Piedmont, 2004) and Hindus, Muslims, and Christians in India (Piedmont & Leach, 2002). This series of studies provided initial support for the belief that spirituality can be construed as a broad source of intrinsic motivation that is independent of existing personality constructs. It also supports the contention that spiritual transcendence represents a universal aspect of human experience.

The next question to emerge from this research was how to fit spiritual transcendence (ST) into a broader conceptual framework. As an independent construct, ST represents a motivational impetus to seek spiritual experiences, but it certainly should not be seen as capturing all that is involved in the process of creating personal meaning. ST provides a motivational foundation to our efforts to self-transcend (Frankl, 1997), but the form, content, and direction of these strivings is no doubt moderated by other aspects of our personality. Thus one needs to consider these other qualities if a full understanding of the meaning-making experience is to be garnered. To this end, the Logoplex (literally, *meaning network*) has been developed. The term was selected to acknowledge its conceptual indebtedness to Frankl's logotherapeutic model. The Logoplex is a circumplex model that provides a framework for understanding the different

types of meanings that individuals develop for construing their lives. The model also outlines the role ST plays in the formation of these orientations. In addition, the model appreciates the inherent multi-dimensionality of meaning formation, including not only ST but aspects of the personality dimensions of agreeableness and extraversion. This model, which is presented below, identifies two broad domains that appear to this author to underlie the different meaning orientations individuals can develop: *Transpersonalism versus Materialism* and *Relationalism versus Intentionalism*.

THE LOGOPLEX

A circumplex represents a circular ordering of traits around two independent dimensions. These traits represent varying amounts of the two defining constructs. Scales that are closer together in space on the circumplex are more related than scales that are farther apart. Scales that are 90 degrees apart are independent of one another, while those 180 degrees apart are negatively related. What the model illustrates is that there are multiple ways in which individuals create meaning, and that there exists certain relationships among these various outcomes. As will be seen, the most salient aspect of meaning will be the event horizon upon which it is constructed. It is the assumption of this model that the broader the frame of reference, the richer and more durable the resulting meaning (i.e., a sense of self that remains stable and satisfied in the face of existential challenges or hardships). Spirituality per se represents one way an individual can create meaning. Because spirituality involves some relationship with an ultimate, usually eternal, being or reality, its event horizon is the broadest and therefore is considered to provide the highest level of meaning organization.

The first major dimension of the Logoplex is *Transpersonalism versus Materialism*. Transpersonalism represents Frankl's (1959) motivational construct of a "will to meaning." It is the effort to create a personal sense of meaning and purpose. There are two components to creating meaning. First, there is the recognition that ". . . life is a time gestalt, and as such becomes something whole only after the life has been completed" (Frankl, 1966, pp. 99–100). This perspective enables a view of one's life as an emerging entity that fills a need in nature. Second, as Frankl (1966) stated, ". . . being human

is directed to something other than itself" (p. 102). Thus, Transpersonalism allows an individual to construct meaning that transcends his or her immediate sense of time and self. In contrast, Materialism maintains a focus on the immediate and the concrete. The materialist is primarily concerned with that which can be possessed and/or consumed in the here and now. Meaning is found only in terms of mechanical, tangible operations that follow prescribed paths; there are limits in vision, purpose, and meaning. The materialist maintains a very strong self focus.

The second major dimension of the Logoplex is the *Relationalism versus Intentionalism* dimension. The Relational orientation reflects a desire for involvement in, communion with, and connection to larger social groups. It is a personal response to care for larger organizations or institutions and to see that they are affirmed. What Adler referred to as *Gemeinschaftsgefühl*, or social interest, very much embodies this orientation. In contrast, the Intentional orientation reflects a much more self-centered, interpersonally cynical position. Intentionalism reflects a desire to put the interests of the self above any other considerations; one's own personal needs are seen as being paramount. Another way to conceive of this domain is as an individual versus group focus.

These two domains comprise the Logoplex, which is presented in Figure 1. The circumplex marks off four distinct quadrants that represent the various combinations of the two defining constructs. The *solipsism* quadrant reflects the Material-Intentional combination. Individuals in this quadrant are hypothesized to be very much self-focused and self-involved. Their worlds are comprised of their range of immediate experiences. Everything is about themselves. They tend to focus only on their own needs, feelings, desires, and aspirations, a very self-contained perspective. They distrust the motivations of others and tend to avoid getting involved with people. Because the event horizon for creating meaning is the most restricted, individuals in this category are prone to experience high levels of mental distress because they are easily cut off from the nurturing experiences of both other people and institutions. Their lives lack broad perspective and therefore stressful events can easily upset their lives.

Secular humanism represents the Material-Relational orientation. Individuals in this quadrant are hypothesized to be very much concerned with their own immediate needs and concentrate on realities that are experienced through their senses; however, they do have a

Optimal Levels of Human Functioning
TRANSPERSONALISM

Spiritual Transcendence Scale

Prayer Fulfillment   Universality   Connectedness

Asceticism   *Spiritualism*

INTENTIONALISM   RELATIONALISM

Solipsism   *Secular Humanism*
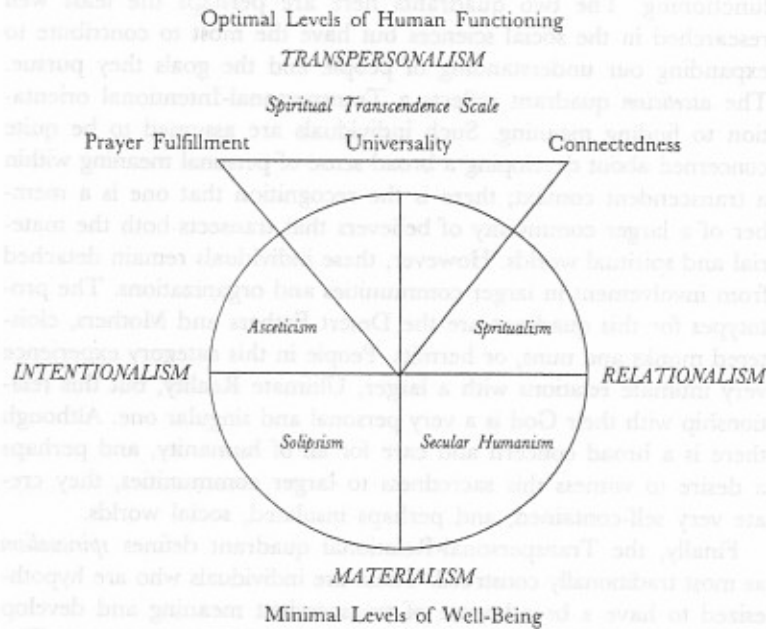
MATERIALISM

Minimal Levels of Well-Being

Figure 1. *Proposed Logoplex Model.*

broader orientation that includes larger social organizations. Individuals who are committed to social institutions or to the larger social good fall into this category. They have found a place for themselves in a larger group or society and are able to find personal satisfaction in these groups. However, as far as personal meaning goes, these people do not find value beyond their social institutions. They carry with them a sense of civic-mindedness and social responsibility; their service to these organizations helps to maintain a sense of purpose and contributes to their on-going survival. Individuals in this quadrant may have a highly developed social ethic, and may recognize their responsibilities to not only those in their own life cohort, but to those who come after them. Their experiences represent mental health as traditionally defined, the absence of any debilitating symptoms. In fact, this lower half of the circumplex represents minimum levels of well-being, and marks out the area traditionally studied by psychology.

The upper half of the circumplex contains qualities of the individual that are at the center of more optimal levels of human

functioning. The two quadrants here are perhaps the least well researched in the social sciences but have the most to contribute to expanding our understanding of people and the goals they pursue. The *asceticism* quadrant reflects a Transpersonal-Intentional orientation to finding meaning. Such individuals are assumed to be quite concerned about developing a broad sense of personal meaning within a transcendent context; there is the recognition that one is a member of a larger community of believers that transects both the material and spiritual worlds. However, these individuals remain detached from involvement in larger communities and organizations. The prototypes for this quadrant are the Desert Fathers and Mothers, cloistered monks and nuns, or hermits. People in this category experience very intimate relations with a larger, Ultimate Reality, but this relationship with their God is a very personal and singular one. Although there is a broad concern and care for all of humanity, and perhaps a desire to witness this sacredness to larger communities, they create very self-contained, and perhaps insulated, social worlds.

Finally, the Transpersonal-Relational quadrant defines *spiritualism* as most traditionally construed. These are individuals who are hypothesized to have a broad sense of transcendent meaning and develop and/or express this understanding within a defined community. The community *is* part of their larger meaning. Unlike the ascetics, connections with others, groups, or institutions, become salient aspects of how they construe the value of their lives. Unlike the secular humanist, there is a realization that their involvement with others arises from strong teleological convictions. Individuals such as Mother Theresa of Calcutta or Mahatma Gandhi ideally represent this category. Like the ascetic, these individuals bear witness to larger, transcendent realities, but unlike the ascetic they are enmeshed in a ministry that directly bonded themselves daily to the larger secular world. I hypothesize this quadrant as representing the most durable level of personal fulfillment and meaning.

The triangle shown in Figure 1 represents that substantive aspect of the circumplical "pie" that is captured by my STS facet scales, their conceptual range of convenience. Clearly, ST does not represent the totality of one's spiritual orientation. Certainly other variables are needed in order to better nuance how one's efforts at finding meaning are going to be expressed (other such factors may include personality dimensions, such as agreeableness and extraversion, and religion-specific beliefs). Although the general scores on the

STS can give a sense of how a person may be oriented toward developing a sense of meaning in his or her life, without consideration of the other dimension (Relational versus Intentional), one cannot determine the specific form this transcendent motivation will take.

This model provides a framework for understanding a person's orientation to the world and speculates on the potential difficulties he or she is likely to experience. For example, the solipsist is believed to have a proclivity toward high levels of psychological distress. Secular humanists may risk becoming cynics, seeing that social institutions do not provide the needed solutions, or perhaps that people may not be worthy of the civic structures they have created. The ascetic may experience crises of meaning in which his or her sense of purpose may melt in the heat of personal examination. Those in the spiritual quadrant may face crises of relevancy; such individuals may question whether they as single agents can really have the impact they intend. These individuals may never lose sight of their purpose and its value, but they may become disheartened with their own abilities to bring about desired ends.

TESTING THE MODEL

Although there is heuristic value to this model (e.g., it is simple and direct), there is a need to determine whether this proposed structure can hold up empirically. Do these dimensions emerge in the form articulated here? In order to address this question, a study was conducted to determine whether marker scales of these dimensions, when factor analyzed, would produce this two-dimensional circular ordering.

In order to accomplish this, measures were selected that putatively reflected various aspects of these relevant dimensions. Given that there are no scales explicitly designed to capture the dimensions of Transpersonalism and Relationalism, markers needed to be identified. The STS scales served as markers of the Transpersonal dimension. It was hypothesized that the three facets of connectedness, prayer fulfillment, and universality would align in the circumplex as predicted by the model. The gregariousness scale from the NEO Personality Inventory-Revised (NEO PI-R; Costa & McCrae, 1992) was used to reflect the Relational orientation because high scores on these scales reflect a desire to seek many social contacts and tend to

readily establish interpersonal relationships. The modesty scale of the NEO PI-R was selected as an indicator of the Intentional aspect of this domain; low scores on modesty reflect a narcissistic, self-centered, and interpersonally distant orientation toward others. As of yet, no scale has been identified to capture the material aspect.

Several additional scales were also included. First were measures of self-actualization and personal meaning in life. These scales were hypothesized to load in the spiritual quadrant because they reflect active attempts on the part of an individual to find personal relevance within a cooperative, relational framework. A measure of meaning that captured more secular interests was also included. This scale (Just World Scale), like the earlier ones, evaluated the degree to which individuals find a certain meaning and regularity in life. Unlike the other scales, this one centered on a more pragmatic, secular orientation (e.g., people get what they deserve in life). The Just World Scale was hypothesized to fall in the secular humanist quadrant. Finally, a peer rating of overall affective well-being was also included in order to avoid a singular reliance on self-reports. It was believed those with poor well-being (higher negative affect) should fall in the solipsistic quadrant. Support for the proposed circumplex model would be found if a factor analysis of these scales yielded a two factor solution which, when plotted, would position the scales in the sectors anticipated.

Method

Participants

Participants consisted of 141 women and 44 men who were undergraduate students at a Midwestern university. All volunteered to participate and received course credit for their involvement. The average age was 19 (range 17 to 37) and 43% were Catholic, 56% were Christian, and 1% were Jewish. These participants were requested to ask two individuals who had known them for at least three months to rate them on several scales. One hundred and seventy-three returned two peer-evaluations and 12 returned one. Of the 358 raters, 128 were men and 220 were women and 10 did not indicate a gender. Overall, raters knew their targets quite well, with an average length of acquaintance of eight years (range: 3 months to 23 years). Raters also were asked to indicate how well they knew the partici-

pants on a 1 (*Not really that well; casual acquaintance*) to 7 (*Know each other very well, close friends*) Likert scale. A mean rating of 6.2 (*SD* = .77) was obtained, indicating that the peer raters believed themselves to be very well acquainted with the participants.

Measures

Spiritual Transcendence Scale (STS)
Developed by Piedmont (1999a), this 24-item scale is responded to on a 1 (*Strongly Disagree*) to 5 (*Strongly Agree*) Likert-type scale. There are three subscales: universality, a belief in the unitive nature of life; prayer fulfillment, feelings of joy and contentment that result from personal encounters with a transcendent reality; and connectedness, a belief that one is part of a larger human orchestra in which one's contribution is indispensable in creating life's continuing harmony. Six of the items are reverse scored in order to control for acquiescence effects. Alpha reliabilities for these facets are .83, .87, and .64 for universality, prayer fulfillment, and connectedness, respectively. These scales have shown significant cross-observer validity (Mean *r* = .43) as well as correlating with a range of important psychosocial criteria, such as attitudes toward sexuality, perceived social support, vulnerability to stress, and prosocial behavior (Piedmont, 1999a; 2001). These scales have also been shown to be independent of personality as measured by the FFM and to demonstrate incremental validity in predicting outcomes over these established personality domains (see Piedmont, 1999a). Finally, these scales have been shown to capture aspects of spirituality that are cross-culturally relevant. Piedmont and Leach (2002) found the STS scales to be reliable and valid in a sample of Indian Hindus, Muslims, and Christians.

Bradburn Affect Balance Scale
Developed by Bradburn (1969), this 20-item true-false scale captures the dimensions of positive and negative affect (PAS and NAS, respectively). Studies have shown the PAS and NAS scales to represent independent dimensions (Bradburn, 1969; Costa & McCrae, 1980). Scores on these scales have been shown to correlate with ratings of global happiness (Lowenthal, Thurner, & Chiriboga, 1975) and well-being (Costas & McCrae, 1984). This scale was completed by the peer evaluators. An overall measure of affect balance was computed by subtracting the Positive Affect Scale from the Negative

Affect Scale. Thus, high scores on this dimension indicate an overall level of negative affect. The inter-rater correlation for scores on this scale was r (187) = .27, p < .01.

NEO Personality Inventory-Revised (NEO PI-R)

Developed by Costa and McCrae (1992), this 240-item questionnaire was developed through rational and factor analytic methods to measure the domains of the FFM. For each factor, there are six facet scales that are designed to capture more specific traits. Items are answered on a five-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*), and scales are balanced to control for the effects of acquiescence. Normative internal consistency estimates for the self-report version for adults range from .59 to .92 (Costa & McCrae, 1992). Scales have shown evidence of convergent and discriminant validity across instruments, methods, and observers and have been related to a number of life outcomes, including frequency of somatic complaints, ability to cope with stress, burnout, and occupational success (Costa & McCrae, 1989; Piedmont, 1993). Only the facet scales of modesty and gregariousness were used in these analyses. The modesty scale was negatively reflected for the analyses reported here.

The Purpose in Life Test

Developed by Crumbaugh (1968) this 20-item scale measures a person's "will to meaning" as construed by Victor Frankl. Responses are given on a 7-point Likert-type scale, the poles of which vary according to the question. Guttmann (1996) reviews the research literature on this scale which provides basic validity data, documenting the scale's ability to capture the degree to which an individual has developed a personal sense of meaning in life.

Self-Actualization Scale

Created by Jones and Crandall (1986), this scale provides a measure of Maslow's highest level of development. The 15 items are responded to on a 1 (*disagree*) to 4 (*agree*) Likert-type scale. Jones and Crandall (1986) have found that high scores on this scale were associated with individuals being extraverted, rational in their thoughts and behaviors, and inner directed.

Just World Scale. Developed by Rubin and Peplau (1975) this 20-item scale is based on the "Just World Theory" that individuals get what they deserve in life and consequently deserve what they get. This philosophical orientation to life takes a more utilitarian view of justice, one with little sympathy and compassion for the ill-fate of others. Items are responded to on a 0 (*Strongly Disagree*) to 5 (*Strongly Agree*) Likert-type scale. Scores on this scale correlated positively with authoritarianism, belief in an active God, and an internal locus of control.

Procedure

Participants completed all of the self-report materials in groups of 10 to 35. The order of scales was randomized to control for any order effects. Raters completed their materials independently. When completed, raters placed their materials in an envelope provided by the experimenter, sealed and mailed them back to the experimenter. Scores on the rater version were obtained by averaging scores across the two raters. These aggregated scores were used in all analyses.

Results

The intercorrelation matrix of the 9 variables used in the factor analysis is presented in Table 1 along with descriptive statistics and alpha reliabilities. Means and SDs are comparable to those found in other student samples. As can be seen, there are numerous significant associations among the variables. It should be noted that the NEO PI-R scale modesty was negatively reflected so that high scores would represent the low end of this dimension (e.g., narcissism and self-centeredness). Scores were then subjected to a principal components analysis and two factors were extracted (a scree plot indicated that only two factors should be extracted). These factors accounted for 41% of the total variance. These factors were orthogonally rotated and the factor plot of scales around the two dimensions is presented in Figure 2. All items had loadings of .30 or above on at least one of the extracted factors (with the exception of the observer rating of negative affect, which loaded −.21 on the Materialism/Transpersonal dimension).

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Table 1. *Inter-correlation among scales used in factor analysis*

	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Gregariousness	1.0								
2. Modesty*	−.32	1.0							
3. Univers	.05	−.10	1.0						
4. Fulfill	.10	.01	.47	1.0					
5. Connected	.11	−.27	.45	.22	1.0				
6. Negative Affect	−.05	.14	−.16	−.06	−.07	1.0			
7. JWS	.17	−.17	−.14	.00	−.06	−.11	1.0		
8. Self-Act	.13	−.08	.13	.13	.03	−.06	−.05	1.0	
9. PILT	.32	−.25	.12	.23	−.01	−.23	.19	.37	1.0
Mean	51.33	50.18	33.91	28.01	21.90	2.44	50.88	103.59	43.86
SD	10.62	12.87	5.03	5.89	3.46	1.23	8.38	12.30	4.67
Alpha	.71	.67	.82	.82	.58	.60	.52	.54	.84

$N = 185$. r's $\geq |.14|$ are significant at the $p < .05$ level, two-tailed and r's $\geq |.18|$ are significant at the $p < .01$ level, two-tailed.
* This scale was negatively reflected.
Note. Univers—Universality; Fulfill—Prayer Fulfillment; Connected—Connectedness; Negative affect is based on peer ratings; JWS—Just World Scale; Self-Act—Self Actualization Scale; PILT—Purpose in Life Test.

As can be seen in Figure 2, the STS scales clearly define the transpersonal pole, although prayer fulfillment and connectedness fell in the quadrants opposite to those predicted, and universality appears to define the transpersonalism pole. The NEO PI-R gregariousness scale defines the positive pole and the (low) modesty scale defines the negative pole of the Relational versus Intentional dimension, respectively. The Purpose in Life Test and the Self-Actualization Scale both fall in the spiritualism quadrant, as predicted. These scales capture efforts of individuals to find a sense of connection, fulfillment, and purpose in their lives that draws on a larger sense of community and involvement. This is in contrast to the Just World Scale which loads in the secular humanist quadrant. High scores on this scale reflect a sense of meaning that stresses more of an individualistic, self-focused perspective. High scores here do not reflect connections with larger realities. Rather, high scores indicate a coming to terms with life as it is encountered. Finally, ratings on the Negative Affect Balance Scale fall in the solipsistic quadrant, supporting the hypothesis that individuals who maintain a very self-oriented focus are not able to construct a personal sense of meaning that can withstand the fragmenting forces of reality. As a result, individuals in
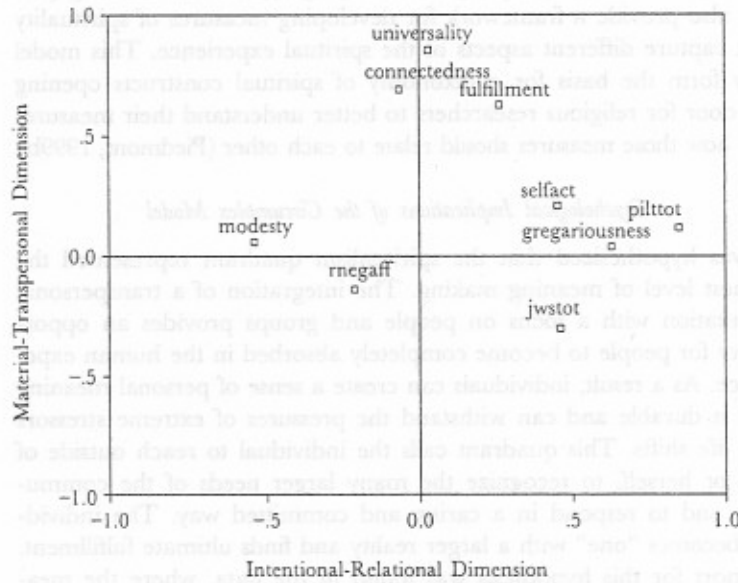
Figure 2. *Plotted factor analysis results for Logoplex.*
Note. gregariousness-NEO PI-R Gregariousness facet; jwstot-Just World Scale; rnegaff-rating of negative affect balance; selfact-Self Actualization Score; pilttot-Purpose in Life Test score; universality-STS Universality facet; connectedness-STS Connectedness facet; fulfillment-STS Prayer Fulfillment facet scale; modesty-NEO PI-R Modesty scale, negatively reflected.

this sector are easily overwhelmed and lose their own sense of direction, purpose, and well-being.

Although these loadings do not show a perfect circular ordering (which is a result of their lack of precision in capturing the putative latent domains of the circumplex), in general they do load in the quadrants anticipated.

Discussion

Overall, these findings provide some initial support for the Logoplex. Despite only using scales designed as markers of the underlying dimensions of the model, the proposed two-factor structure was obtained. Future research now has a point of departure for further

refining the model and testing its underlying hypotheses. The Logoplex can also provide a framework for developing measures of spirituality that capture different aspects of the spiritual experience. This model may form the basis for a taxonomy of spiritual constructs opening the door for religious researchers to better understand their measures and how those measures should relate to each other (Piedmont, 1999b).

Psychological Implications of the Circumplex Model

It was hypothesized that the spiritualism quadrant represented the highest level of meaning making. The integration of a transpersonal orientation with a focus on people and groups provides an opportunity for people to become completely absorbed in the human experience. As a result, individuals can create a sense of personal meaning that is durable and can withstand the pressures of extreme stressors and life shifts. This quadrant calls the individual to reach outside of him or herself, to recognize the many larger needs of the community, and to respond in a caring and committed way. The individual becomes "one" with a larger reality and finds ultimate fulfillment. Support for this hypothesis was found in the data, where the measures of psychological maturity and meaning were found to load in this quadrant, along with the prayer fulfillment and universality facets from the Spiritual Transcendence Scale.

However, the liability for the Spiritualist is the "crisis of relevancy." Those high on spiritualism may come to believe that they do not have the necessary skills, abilities, or talents to meet the social needs they encounter. As a result, they may question their own sense of meaning and mission. They may develop what Maslow (1971) has referred to as meta-pathologies, which include feelings of senselessness, nihilism, cessation of striving, and a loss of feeling needed.

If the spiritualism quadrant represents the optimal orientation, then its opposite quadrant, solipsistic, represents the least effective orientation. Individuals in this condition experience high levels of psychological distress, mostly due to their inability to construct a useful, reassuring sense of personal meaning that can endure the many contradictory and fragmenting forces endemic to society (Allport, 1950). Unlike the self-enhancing virtues of the meaningful and purposeful life characteristic of those in the spiritualism quadrant, the Solipsists experience "existential disappointment" (Tillich, 1951) or "noögenic neurosis" (Frankl, 1959) as a result of their efforts to extol their own

egoistic impulses. Their glass house of meaning easily shatters and results in despair and inertia. As Emmons (1999) noted in his analysis of personal strivings, ". . . individualistic, self-oriented spiritual strivings outside of faith-based communities may not be associated with adaptive psychological, physical and interpersonal outcomes" (p. 111). That the Negative Affect Scale loaded in this quadrant provides some support for this conceptualization.

In short, the solipsistic quadrant represents psycho-spiritual immaturity so movement out of this quadrant, in either direction, results in higher levels of development. There are several forces which may operate to keep an individual in the solipsistic quadrant. First, Frankl (1966) has noted that a continual focus on reductionistic thinking fosters an empty existentialism. According to Frankl, a strong life is built upon strong ideas. Without such large, overarching values life collapses into the atomistic world of basic impulses and immediate gratification. I hypothesized that another factor is narcissistic injury experienced at the hands of important emotional care takers, such as parents. Individuals hurt by life at a young age will tend to retreat into themselves and find recourse in their own efforts and strivings. An emotional rebuff from a powerful transferential object will sever the person's emotional links to others as he or she matures. Thus, the outer world of people and groups becomes too threatening and is perceived as being unable to provide the consistent positive regard and validation the child and subsequent adult requires.

The secular humanism quadrant reflects individuals who are able to make reasonably robust emotional connections with their environments. Involvements with civic and social organizations makes these individuals vibrant, involved citizens committed to bringing about specific social ends. That the Just World Scale loaded in this dimension supported these descriptions. However, because these individuals do not have a teleological vision of the world that both celebrates their own humanity and affirms their own dignity and worth, the social ends pursued can be quite varied and chillingly pragmatic. What separates this quadrant from spiritualism above it, is the immediacy of focus. The practical realities of tangible, social structures are the center of attention, possibly resulting in the development of very parochial attitudes and allegiances. Yet, individuals in this quadrant can also express a deep sense of nobility and selfless dedication. Patriots who, as Abraham Lincoln described in his Gettysburg Address, gave their last full measure of devotion to their country

certainly represent the best of this category. Individuals in this category can have an event horizon for construing meaning that spans generations. As such, they may aspire to create a personal legacy to reach that distance through time. Then there are the political ideologues and fanatics who work to sculpt people to fit their ideal civic organization. The Fascists and Communists are those who ruthlessly pursue the creation of a durable social order.

Asceticism is the opposite pole of secular humanism and is distinguished from the latter by its belief in the wholeness of nature and its movement toward ultimate realities that transcend ordinary material existence. These groups are similar in that both may have ideologies that give a direction and purpose to existence. But what separates the ascetic is the larger event horizon that defines his or her ideological agenda. The cosmology of the aesthetic concerns itself with a reality that emerges once the material experience passes away. Meaning for the ascetic begins where secular humanism ends. Another important difference between these two groups is the more solitary or detached existence of the ascetic. He or she does not share the same absorption in larger social groups that characterizes both the secular humanist and the spiritualist. The ascetic feels him or herself in the world but not of it. Further, the prototypical ascetic evidences a single minded effort to find an individual connection with the divine or ultimate reality. Nonetheless, the transcendent, eschatological nature of the ascetic imbues him or her with a broader, more integrated and durable sense of self.

Spiritual transcendence is hypothesized to increase with age. Age brings with it the growing inevitability of death and thus the pressing need for the individual to construct a sense of meaning and purpose. This change is usually expressed in concerns about creating a legacy, mentoring, and finding personal closure. These tasks coincide with Erikson's (1950) notions of generativity and ego integrity, the final two psychosocial stages of life. Individuals can only come to see the inevitability of their own lives and their place in the greater scheme of life by adopting a transcendent orientation. Piedmont (1999a) demonstrated a significant age effect on his connectedness and universality facet scales. Therefore the natural movement of growth over time is away from the self-involved impulses of the secular humanist and solipsist toward the broader, transcendent goals of the spiritualist and ascetic. However, when growth is either delayed or preempted the Logoplex can provide a conceptual paradigm for

constructing intervention strategies. For example, techniques aimed at developing a sense of mindfulness, gratitude, and self-acceptance could be used to help individuals move toward understanding their lives from a spiritual perspective.

The dimensions of Transpersonalism and Relationalism are the guideposts for signaling directions for growth. From a clinical perspective, the Logoplex can help counselors identify the ways in which clients are constructing their sense of personal meaning. As the data from this study indicated, being solipsistic, ascetic, spiritual, or humanistic carries with it particular styles of interacting with the world, along with their own potential weaknesses. But more than just providing insight into clients, the Logoplex can also serve as a focus for making interventions aimed at promoting a more inclusive meaning-making style.

Limitations and Conclusions

This study provides some very encouraging results supporting the empirical utility of the Logoplex. However, there are some issues that need to be considered in both evaluating these data and in designing future studies. First, the scales that were included for analysis were not ideal markers for each pole of the circumplex. Instead, possible markers were selected. Although mostly useful, it needs to be pointed out that the included scales did not organize themselves in the type of circular arrangement that a circumplex demands. Perhaps if scales were used that better reflected the dynamics outlined by the circumplex, a better pattern of results may have been found. Second, for some scales rather low estimates of internal reliability may have also compromised the analyses. Third, only the connectedness facet scale loaded within the asceticism quadrant (and this was not theoretically expected), thus little is learned about the motivations that characterize individuals here. Similarly, the loading of negative affect in the solipsism quadrant was not extreme enough to really define individuals here as well. Thus, more information is needed for testing hypotheses relating to these two dimensions. Finally, undergraduates may not be an ideal sample for this type of study. Young adults may have had too few spiritual experiences to be representative of all four quadrants. Without the inclusion of a full age range of adults, there may be a real restriction of range in scores for several scales (e.g., self-actualization scale).

The next steps in this process would be to develop scales that specifically assess various aspects of the circumplex. There are specific statistical criteria that can be employed for developing and testing circumplex models (e.g., Browne, 1992). It should also be recognized that although spiritualism is considered to represent the most durable meaning structure, this does not mean one has to believe in "God" to get there. What is the most salient aspect of the Logoplex is the event horizon within which a person places his/her meaning. The broader the event horizon (e.g., moving from the immediacy of one's needs, to the recognition of others across generations, to seeing life as an eternal pathway), the more satisfying, genuine, and lasting the meaning one makes. However, not being in the spiritual or ascetic categories does not diminish the reality that such individuals can create a sense of personal meaning that is psychologically adaptive. Nor should this paper be construed as implying that satisfying and fulfilling lives cannot be found among those in the secular humanist, or even solipsist, quadrants. The purpose of the Logoplex is not to prescribe what meaning and values a person *should* have. Rather, its goal is to heighten our awareness of the kinds of meaning one *can* have. Ultimately, as Frankl (1997) noted, it is up to the individual him or herself to determine what is of value and what is not of value; of what is good and what is bad.

Nonetheless, the Logoplex provides a useful paradigm for understanding a wide variety of meaning orientations. The two dimensions of *Transpersonalism versus Materialism* and *Relationalism versus Intentionalism* define a conceptual space for appreciating the types of meaning individuals create for their lives and for understanding the goals people seek. The data reviewed here provided some empirical support for this conceptualization. This circumplex can serve as a beginning effort in the development of a comprehensive taxonomy of meaning-related constructs. The need for such a classificatory schema becomes critical given the plethora of psycho-theological constructs already in existence. The construct validity of many of these instruments is not well established (Gorsuch, 1988; Hall, Tisdale, & Brokaw, 1994). Locating these scales within the Logoplex can accomplish two goals. First, it can help identify the aspects of spirituality reflected in the content of these scales, and second it can identify areas of uniqueness and redundancy in measurement among the instruments (see Piedmont, 1999b). Developing spiritual concerns or growth entails a consideration of issues that are not traditionally entertained in main-

line psychotherapeutic circles and thus go beyond traditional notions of well-being and mental health. The Logoplex provides an outline of the relevant motivations that need to be considered in conceptualizing these types of issues.

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