Natural spirituality and personality

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Both theoretical and methodological difficulties seem to have led to a lack of clarity in understanding the relationship between religiosity or religious commitment on the one hand, and psychopathology and/or mental health on the other. A strategy for circumventing these difficulties is offered through consideration of the construct of Natural Spirituality, distinguishable from religious or denominationally based spirituality. Current views on a psychology of spirituality are reviewed, and this study attempts to move from theoretical consideration to empirical evaluation of spirituality through demonstrating an association between Natural Spirituality and personality (rather than psychopathology and/or mental health). Participants were 110 undergraduates who completed the Spiritual Orientation Inventory, the Spiritual Well-Being Scale, a demographic questionnaire, and the NEO Personality Inventory. Significant associations were demonstrated between performance on measures of Natural Spirituality, based on indices from the Spiritual Orientation Inventory and the Spiritual Well-Being Scale, and selected aspects of a personality profile as determined by the NEO Personality
Inventory. Specifically: Compared to a group of individuals scoring relatively low on measures of Natural Spirituality, a group of high scoring individuals demonstrated significantly lower Neuroticism domain scores, significantly higher Extraversion facet scores on Positive Emotions, and significantly higher Openness to Experience facet scores on the mean of Aesthetics, Feelings, and Actions. Moreover, significant correlations were found between the two measures of Natural Spirituality. The empirical findings are consistent with Benner's (1988, 1989) non-reductionistic framework, which views spirituality as an integral and integrated part of our psychological being. Clinical implications of a psychology of spirituality are addressed.
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CHAPTER I
INTRODUCTION

Religious experience has long been a topic of interest in the field of psychology, ranging from clinical consideration of religious ideation, to investigation of cult involvement as a social psychological phenomenon. One underlying theme frequently associated with the psychology of religion is a concern over whether religious experience is healthy or unhealthy, adaptive or maladaptive, or linked to psychopathology or mental health.

In a recent review of the literature, Gartner, Larson, and Allen (1991) attempted to clarify the relationship between mental health and religious commitment. The authors noted that a positive association generally exists between these two constructs when overt behavioral indices serve as dependent variables, while a negative association is typically found when paper-and-pencil tests are featured. Gartner et al. concluded that an empirical psychology of religion has no place for paper-and-pencil tests.

Gartner et al. (1991) have clearly highlighted the inconsistencies in the religious commitment literature, and have further attempted to explain the observed inconsistencies through appealing to methodological considerations. What seems to have been underemphasized in the Gartner et al.
review, as well as many of the studies upon which this review is based, is the conceptual and theoretical issues involved in the study of religiosity or religious commitment. It is not the methodology involving paper-and-pencil tests, per se, that has resulted in the observed confusion, but this methodology in conjunction with current theoretical conceptualizations of the relevant constructs.

After reviewing the religiosity--psychopathology debate, Gartner et al.'s (1991) methodological concerns are addressed and countered. The constructs of personality and spirituality are introduced and developed as alternatives to mental health and religious commitment, respectively. Psychological views on spirituality are considered, and Benner's tripartite model of spirituality (1988, 1989) is outlined and modified to serve as a conceptual framework for understanding an empirical association between one manifestation of spirituality, Natural Spirituality, and adult personality as viewed within the five-factor model of Costa and McCrae (1985).

Participants completed a demographic questionnaire, the NEO-Personality Inventory (Costa & McCrae, 1985), the Existential Well-Being subscale of the Spiritual Well-Being Scale (Ellison, 1983; Paloutzian & Ellison, 1982), and the Spiritual Orientation Inventory (Elkins, Hedstrom, Hughes, Leaf, & Saunders, 1988). The latter two instruments served as measures of Natural Spirituality. Differential response patterns on the NEO-Personality Inventory were associated with
variation on the measures of Natural Spirituality, thereby lending support to the theoretical notion of spirituality as an integral and integrated part of our psychological being. The paper concludes with a discussion of the empirical findings along with some clinical considerations of a psychology of spirituality.
CHAPTER II
REVIEW OF THE LITERATURE

A statement made by Albert Ellis (1980) appears to have rekindled the flame in the smoldering debate concerning the role of religion in psychopathology. In essence, Ellis contended that an individual's degree of religiosity will be inversely related to that person's level of emotional health. This statement seems to have led to a host of empirical studies evaluating the relationship between religiosity and psychopathology (e.g., Caird, 1987; Choudhary, 1989; Francis & Pearson, 1985; Gartner, Larson, & Allen, 1991; McClure & Loden, 1982; Pollner, 1989).

Bergin (1983) conducted a meta-analysis of the studies on religiosity and psychopathology. The majority of the investigations he reviewed explored the correlation between measures of religiosity and objective indices of emotional distress (e.g., scales from the Minnesota Multiphasic Personality Inventory or the Manifest Anxiety Scale). Bergin found that 77% of the studies included in his analysis originally obtained results contrary to Ellis' hypothesis, demonstrating either no relationship or a negative relationship between religiosity and psychopathology. Bergin acknowledged, however, that there was only marginal support
for the alternative notion that religiosity may be positively related to mental health.

In a recent attempt to elucidate the relationship between mental health and religious commitment, Gartner et al. (1991) conducted an extensive review of the empirical literature on this topic. The authors view religious commitment as a global construct incorporating several approaches to measuring religious experience. One component approach consists of paper-and-pencil tests of religiosity, but religiosity itself is more narrowly defined as "attitudes concerning the importance or salience of religious experience" (p. 7).

The authors concluded that some of the ambiguity in this area can be attributed to the heterogeneous operationalization of both mental health and religious commitment. More specifically, the definitional inconsistencies across studies appear to have contributed to stronger positive correlations between religious commitment and mental health when either construct was defined in terms of observable behaviors (e.g., church attendance or suicide, respectively). Negative correlations, however, were more often obtained when paper-and-pencil tests were used to measure these constructs.

The discovery by Gartner et al. (1991) that positive or negative correlational trends seem to be a function of construct operationalization underscores the difficulty in comparing studies which do not share a common index of mental health and/or religious commitment—not to mention the threat
this poses to the validity of one's conclusions. If religious commitment is indeed positively associated with mental health, for instance, this relationship should ideally be found given any valid operationalization of the constructs, be it in the form of observable behavior or paper-and-pencil tests. Such considerations appear to have led Gartner et al. to question the usefulness of paper-and-pencil tests, and ultimately to advocate that researchers in this field abandon such approaches and concentrate entirely on observable behavior: "Behavior predicts behavior. If we wish to see advances in the psychology of religion, we must give up our love affair with paper-and-pencil instruments and get back to reality" (p. 16).

In support of Gartner et al.'s (1991) position, it remains unclear whether several of the existing religiosity or religious commitment questionnaires are indeed measuring the same construct. Time spent reading the Bible and one's attitude about reading the Bible, for example, are not necessarily related variables. In addition, Gartner et al. point out that some personality tests include items concerning religious behavior, which when endorsed contribute to an individual's index of psychopathology. The authors suggest that the positive correlation between psychopathology and religious commitment established with such tests might therefore be attributable to a measurement artifact. A deficit in congruent and/or internal validity of any
questionnaire(s) would certainly make sound data interpretation problematic.

Admittedly, researchers must continue to question and test the validity of their measures, paper-and-pencil or otherwise. Yet it may be premature to abandon such tests completely. Although Gartner et al. (1991) highlight several legitimate difficulties with paper-and-pencil tests, they seem to believe that behavioral indices necessarily lead to more valid conclusions. However, it is possible that subjects can appear similar on a given behavioral index, yet their experience of religious commitment might be qualitatively different. A married couple, for instance, might regularly attend religious services or events; one partner out of a sense of love, faith, devotion, and a desire to worship, and the other partner in an effort to avoid family conflict. Such a distinction could remain hidden if frequency of church attendance were the sole criterion of religious commitment, yet it might emerge more readily if a paper-and-pencil test of religiosity were administered in conjunction with the behavioral index. Religiosity is an overdetermined and multidimensional construct (Bergin, 1983), and the assessment of either religiosity or global religious commitment, even if a measure is agreed upon, is fraught with confounds.

At this point, Gartner et al. (1991) have clearly highlighted the inconsistencies in the religious commitment literature. They have also expressed reasonable concerns
which should not be overlooked regarding the plethora of equivocal findings. The authors have attempted to explain the observed inconsistencies through appealing to methodological considerations, or "the means or manner of determining whether a theoretical construct or statement is true or false" (Rychlak, 1981b, p. 508). Unfortunately, Gartner et al.'s methodological solution (i.e., exclusively focusing on behavior) does not address certain theoretical concerns.

In addition to addressing the methodological issues involved in investigating mental health and religious commitment, it is also important to explore some of the assumptions surrounding the theoretical conceptualization of these constructs. In other words, the discrepant findings may not be grounded entirely in methodological difficulties, but perhaps reflect certain theoretical considerations (even if the theory is implicit) regarding mental health and/or religious commitment. Both of these constructs will be explored and modified in the following sections.

**Personality: Broadening the Scope of Mental Health and Psychopathology**

In the review by Gartner et al. (1991), the theoretical construct of mental health seems to be generally presented as the absence of psychopathology, with mental health and psychopathology implicitly assumed to be two sides of the same coin. Even though the authors include a section suggesting that religious commitment might be positively associated with
well-being and mental health outcome, it is unclear whether the original investigators construed these constructs as something above and beyond the absence of psychopathology. Perhaps religious commitment could lead to an enhancement of life experience, or even serve as an agent of growth or cure. Before such issues can be fully addressed, it might be beneficial to simply explore how religious commitment varies in the general population in relation to a more comprehensive construct such as personality; in other words, to identify personality traits or dimensions that are associated with the experience of religious commitment.

The strategy of investigating religious commitment and mental health, as opposed to a more comprehensive construct such as personality, might result in an unnecessary narrowing of focus. The principle question being addressed by the bulk of the existing research is whether religious commitment is healthy or unhealthy. The answer to such a question may very well be, "It depends." For example, as Maloney (1976) has stated:

Dependence on God and the Christian church can range from infantile escapism to healthy acceptance of the limitation of our creatureliness. Acknowledgment of our personal defects can range from a stifling pessimism and fixated immaturity to sound safeguards against the illusions of our self-sufficiency....And attempts to follow Christ can range from an intensified sense of failure to a standfast affirmation of the divine-human possibilities. (cited in Butman, 1990, p. 16)

Religious commitment, in and of itself, may be neither healthy nor unhealthy. Attempts to globally categorize religious
commitment as such, or even to differentiate intrinsic and extrinsic forms of religious commitment (Allport, 1950)—yet still label such subtypes as healthy or unhealthy—clearly reflects the value system and biases of the investigators. Furthermore, the potential incompatibility of an investigator's value system with one or more particular religious viewpoints may systematically propagate confounds in this entire line of research (see Bergin, 1983, for a discussion of this issue).

This is not to suggest that researchers in this area need compromise or disregard their personal values. By focusing on the relationship between religious commitment and personality, however, at least for the time being, researchers could avoid having to make judgements of healthy and/or unhealthy (judgments which are grounded in the realm of theory—not method), and thereby help to diminish at least one type of confound affecting this body of empirical literature.

Natural Spirituality: The Evolution of Religious Commitment

Many investigators appear to be operating on the unstated theoretical assumption that valid inter-religious or even inter-denominational comparisons of religious commitment can be made. Perhaps this assumption has endured by virtue of the religious commitment literature having an almost exclusive foundation in the western Judeo-Christian culture (Van Wicklin, 1990). In any event, this assumption regarding inter-religious comparisons should be examined, for the
construct of religious commitment may not be amenable to such a methodology.

Schmemann (1967) points out that various religious traditions rely on discrepant "thought forms and 'terms of reference'...[as well as] theological presuppositions and antecedents" (p. 11). It is possible, therefore, that the content of religious commitment (i.e., the essence or phenomenology of a given religious or denominational experience) might make group comparisons invalid, especially without a thorough awareness of the salient differences between religious groups. What is being emphasized, however, is that the theoretical conceptualization of religious commitment is questionable (due to phenomenological inter-religious and inter-denominational differences), and not the method of comparing groups of subjects, per se, for this is a reasonable approach to validating some theories.

When investigating the construct of religious commitment, generalization is limited to those individuals affiliated with traditional western religions, at best. Yet even if the conclusions drawn from religious commitment research are limited to American Christianity, for example, validity problems are still unresolved since religious commitment is inevitably confounded with denominational affiliation. Frequency of church attendance, for instance, will be affected by what is offered or suggested by one's religious community. Fortunately, it may be possible to circumvent the confound of
religious or denominational participation and to even include those individuals not affiliated with any traditional religion.

Distinct from religious commitment, yet possibly a formative element, is the construct of spirituality, which for the present can be very generally defined as a fluid capacity (or process) involved in an individual's ability to experience religious or religious-like phenomena. Unlike religious commitment which is unique to those individuals identifying themselves with a religious culture, spirituality is a dimension theoretically endogenous to all humans, an intrinsic part of our very existence. Through consideration of the construct of spirituality, it may be possible to make comparisons of relatively greater abstraction, yet still capture at least some of the essence of religious commitment. Confounds of religious and denominational affiliation might also be avoided, and conclusions may generalize to a larger population. As such, the proposed methodology of comparing groups of subjects on some index of spirituality is compatible with the theoretical conceptualization of the construct. The notion of spirituality as a fluid capacity, or process, will be elaborated in the section below on "Spirituality: Relationship to Psychology and Personality."

In conclusion, at this point the research community is still far from understanding the equivocal relationship between psychopathology and/or mental health on the one hand,
and religiosity or religious commitment on the other. Although this line of research should not be abandoned, perhaps the relationship will become clearer through theoretical development of these constructs. The purpose of this study is to broaden the scope of inquiry above and beyond the constructs of 1) mental health/psychopathology--by investigating selected personality dimensions, and 2) religious commitment--by tapping into spirituality, a construct which might enable one to circumvent some of the seemingly unavoidable methodological confounds and theoretical difficulties associated with religious commitment.

**Spirituality: Emphasis and General Definition**

Many social science researchers and theorists may believe that the academic consideration of spirituality is exclusively the subject matter of theologians. However, since spirituality, and the exploration and development thereof, is a basic human quality, any person can be justified in investigating their own spirituality as well as the spirituality of others. Researchers and theorists have thus been encouraged to pursue this line of inquiry, and fortunately, the construct of spirituality appears to be receiving increased attention in the social science literature (Benner, 1991).

In order to achieve a common understanding and to facilitate communication between interested parties, arriving at a functional definition is one of the initial steps in the
consideration of any construct. Defining spirituality at a level independent of any specific religious belief system, however, is particularly challenging due to its ambiguity, inherently vague nature, and the mystical quality frequently associated with the construct. Numerous authors throughout the social science literature have struggled with this very issue.

Writing from a nurse's perspective, Murray (1980; cited in Peterson & Nelson, 1987) suggests that spirituality is concerned with "The transcendental relationship between the person and a Higher Being, a quality that goes beyond a specific religious affiliation, that strives for reverence, awe, and inspiration, and that gives answers about the infinite" (p. 35). The hospice care movement has also generated much consideration of the construct of spirituality. Ley and Corless (1988), for example, state that spirituality:

Manifets itself as a state of "connectedness" to God, to one's neighbor, to one's inner self. It has variously been described as man's relation to the infinite, as the capacity to be energized from beyond ourselves, and as the basic quality of a person's nature--what the person is and what the person does. Inherent in all these definitions is a sense of dynamism, of movement, of reaching out. (p. 101)

Another example of an attempt to define spirituality is seen in the work of Mauritzen (1988), a pastoral counselor who suggests that "Spirituality is not only concerned with the transcendental, inspirational or existential way to live one's
life, but also with the fundamental integration of a person as a being" (p. 118). Mauritzen goes on to conclude:

Spirituality is the human dimension that transcends the biological, psychological and social aspects of living. It is the "agent" for integration towards a person's identity and integrity. In very general terms the spiritual dimension is the "agent" for an individual's existence as a person. (p. 118)

Even in the psychological literature, a salient feature of which is hopefully definitional precision, one is again struck by the ambiguity and mystical quality surrounding the construct of spirituality. The following is from Benner (1991):

Consider, for example, Tart (1975), who used the word spirituality to refer to "that vast realm of human potential dealing with ultimate purposes, with higher entities, with God, with life, with compassion, [and] with purpose" (p. 4) or Shafranske and Gorsuch (1984) who described spirituality as "the 'courage to look within and to trust.' What is seen and what is trusted appears to be a deep sense of belonging, of wholeness, of connectedness, and of openness to the infinite" (p. 233). (p. 3)

Benner himself acknowledges that some individuals find the construct of spirituality too vague to be worthy of scientific consideration. Nevertheless, spirituality is being explored, and a general impression can be formulated regarding the construct. There are four main themes common to much of the social science literature on spirituality:

1. A sense of meaning and purpose in life;
2. Transcendence as a means of connecting the person with a higher being;
3. The unification or integration of the person as a holistic being;

4. The essence of spirituality is primarily that of a process rather than a content.

In one sense, the existence of such common themes can be taken as support for the soundness of a construct, since the consistency of independent observations is one criterion of scientific validity (Chrysostomos & Brecht, 1990). In terms of the construct of spirituality, it appears that converging observations are being offered from various sources throughout the literature (e.g., nurses, pastoral counselors, psychologists, etc.). Hence, there is increased support for the validity of spirituality and its worthiness as a topic of scientific investigation.

**Spirituality: Relationship to Psychology and Personality**

Along with a growing general interest in the construct of spirituality, there have also been recent attempts to consider spirituality from a psychological perspective, or to even develop a psychology of spirituality (e.g., Benner, 1989; Chrysostomos, 1989), not to mention the plethora of writings on religion and spirituality produced by renowned psychologists throughout this century (e.g., Allport, 1950; Freud, 1952; James, 1958; Jung, 1958). Indeed, an entire issue of the *Journal of Psychology and Theology* has been devoted to "Spirituality: Perspectives in Theory and Research" (Hunter, 1991).
A fine example of the emergence, or perhaps re-emergence, of a psychology of spirituality stems from several contemporary authors who have drawn upon Jungian personality theory as a means of further understanding spirituality. According to Coward (1989), Jung believed that a certain amount of psychological development is a necessary precursor to spiritual development, in that the unconscious must be psychologically accessible in order for the God archetype to emerge or individuate. Hence, the suggestion is made that spiritual growth is necessarily related to psychological growth.

Bunker (1991) has explored the relationship between Christian spirituality and Jungian personality functions (i.e., sensation, intuition, thinking, and feeling). She contends that a Christian's experience of his or her spiritual life may be colored by their style of personality functioning. For example, a Christian who is more feeling oriented might be drawn to opportunities for fellowship with other believers. In a similar fashion, a Christian relying primarily on sensation might be moved by hearing religious music or seeing religious imagery, in and of themselves, whereas an intuitive oriented Christian might benefit from music or imagery because it serves to underscore more profound spiritual experiences. Quite basically, Bunker is theorizing that there are individual differences in the experience of Christian spirituality as a function of personality.
In a similar vein, yet independent of Jungian personality theory, Meadow (1986) also contends that personality factors may influence how an individual approaches his or her spirituality. As such, there has been theoretical recognition of the role and importance of personality variables in a psychology of spirituality.

There have also been limited empirical attempts to explore the relationship between spirituality and personality. For example, by administering subjects the MMPI, a paper-and-pencil religiosity test, and a measure of Christian maturity, Elzerman and Boivin (1987) failed to find support for "congruence between psychological and religious maturity" (p. 50). This study, however, suffers from the same limitations often found in the religiosity literature. In this case, the authors relied on measures designed to address Christian spirituality, which of course utilized a definition of spirituality based on a particular religious belief system. The authors also employed the MMPI, which is designed to assess maladaptive aspects of personality, but is limited in its usefulness as a measure of psychological strengths above and beyond the absence of psychopathology. Resulting problems include a restriction of external validity and the inexorable confound of denominational affiliation (i.e., all Christian denominations are not the same). Fortunately, an approach to spirituality exists which may allow one to circumvent such problems.
Drawing a distinction between reductionistic psychological models of spirituality, which eliminate the "mystery" of spirituality by reducing it to some biological or psychological mechanism, and dualistic models of spirituality which situate spirituality in an adjacent nonpsychological or independent sphere of personality, Benner (1988, 1989) has proposed a non-reductionistic framework in which spirituality is viewed as an integral and integrated part of our psychological being. In addition to setting the theoretical stage for a proposed methodological relationship between personality and spirituality, Benner's framework offers a strategy for approaching spirituality from a common human perspective, a perspective which may apply to both religious and nonreligious orientations.

Before this strategy is developed, however, it is important to note that other psychologists also avoid presenting a false dichotomy between personality and spirituality. Ellison (1983), for example, advocates a holistic and non-reductionistic approach to the study of human behavior. He suggests that the various aspects of the individual, including "biological, cognitive, interpersonal, emotional and spiritual" (p. 336) aspects, interactively function to comprise the total person, while any given aspect cannot be entirely reduced to another. In a more recent work, Ellison and Smith (1991) conclude: "Spirit, then, does not exist as an elementalistic entity on its own, but is
integratively interwoven with the body and soul of the individual, comprising the person" (p. 37).

Benner (1988, 1989) differentiates three domains of spirituality. The most abstract domain and focus of this study is Natural Spirituality, which, according to Benner, refers to the fundamental human capacity for "self-transcendence and surrender" (1989, p. 22). The remaining two domains of spirituality in Benner's triad include Religious Spirituality, which as the name implies involves a specific god and perhaps elements of "prayer, meditation, and worship" (1989, p. 22), and, imbedded within religious spirituality is the more distinctive Christian Spirituality.

This model of spirituality can now be extended for purposes of the present study. These three domains are not viewed as mutually exclusive, but integratively combine to reflect the range of human spiritual experience. Although there is a certain degree of commonality or overlap between domains, this extension of Benner's model also suggests that spiritual experience might heuristically be conceptualized as emphasizing a particular combination of these domains. Figure 1 presents the proposed relationship between Natural, Religious, and Christian Spirituality (although Benner does not employ this particular graphic representation).

The relative size of each domain in Figure 1 speaks to the theoretical representation of that domain in the general population. Quite simply, more people will have Natural
Figure 1  Adaptation of Benner's Tripartite Model of Spirituality.
Spirituality experiences than Christian Spirituality experiences, for instance. Moreover, the inter-domain overlap suggests, for example, that individuals who experience a Christian manifestation of spirituality may also experience Natural Spirituality.

It might be argued that spirituality is nevertheless being reduced or robbed of its significance by being explored at this Natural level. Admittedly, Natural Spirituality is not the same as Christian Spirituality, or for that matter any other specific religious/denominational type. But the substance, complexity, and mystery of the most "sophisticated" spirituality would still theoretically retain some of its pure or genetic essence. Natural Spirituality should somewhat underlie genuine Religious or Christian Spirituality.

Earlier, spirituality was very generally defined as a naturally endowed fluid capacity (or process) involved in an individual's ability to experience religious or religious-like phenomena. This conceptualization is consistent with the common view of spirituality as portrayed in the social science literature. Furthermore, this conceptualization might also be elaborated by considering spirituality as a top-down process in which an individual invests a part of him or herself, or predicates meaning, into given religious or religious-like content areas (see Rychlak, 1981a, for a thorough discussion of such top-down or "Kantian" models of human functioning). The content of religious commitment, therefore, would be the
specific manifestation of the spirituality process. Once again, spirituality is a naturally endowed capacity, existing in the form of a process, while religious commitment is possibly but one manifestation of this process. Everyone is therefore a spiritual being, yet not all are religious followers.

It should be pointed out, however, that even if Natural Spirituality is the topic of investigation, one is merely targeting a different content area, albeit relatively more abstract (and applicable to more people) than a specific religious commitment experience, but not the spirituality process, per se. Nevertheless, the dilemma in making inter-religious or inter-denominational comparisons might perhaps be avoided if individuals or groups were compared on the more abstract and encompassing content area of Natural Spirituality, as opposed to more restrictive contents reflecting a given religious orientation (i.e., religious commitment).

The focus on Natural Spirituality by no means eliminates all of the difficulties in this field of research. It may be possible, for instance, that any content area, regardless of level of abstraction, might also be demonstrated without any spiritual investment on the part of a given individual (recall the example of one marriage partner attending church services for the sake of avoiding family conflict, and possibly lacking in any meaningful experience of the religious phenomena).
Also, the confound of individual religious or denominational differences may still be present if subjects follow such beliefs, yet focusing on spirituality at the Natural level has the potential to account for a larger portion of the variance.

Furthermore, there is of course a trade off in opting to investigate the construct of spirituality as opposed to that of religious commitment. By forgoing religious commitment, an investigator sacrifices the immediate opportunity (although this ideal is often not achieved) for a precise operational definition with observable behavioral referents. Although Boivin, Donkin, and Darling (1990) contend that the New Testament's "fruits of the spirit" may suggest a behavioral index of spirituality, such an operationalization would be limited to Christianity.

In time, behavioral referents of Natural Spirituality may be discovered. For purposes of investigation, however, an operational definition of the construct can be the score on a given paper-and-pencil test of Natural Spirituality. The primary challenge in studying Natural Spirituality will be to establish the construct validity of the measure. As such, a preliminary step toward establishing the construct validity of Natural Spirituality will be one goal of this study, through demonstrating converging validity on two independent measures of Natural Spirituality.

In conclusion, by both conceptualizing and assessing spirituality at the Natural level, one is able to avoid some
of the methodological pitfalls associated with religiously based spirituality (i.e., religious commitment), and the compatibility is restored between construct theory and the method of group comparisons. Furthermore, since Natural Spirituality theoretically applies to all of humankind and is part of our very essence, one is able to pose questions of greater generalizability and relevance to the human equation. In the interest of parsimony, as we move from theoretical to empirical consideration of Benner's model (1988, 1989), Natural Spirituality is a domain quite worthy of exploration, as it will likely pose the fewest methodological threats and yield many applications.

Measurement of Spirituality

It is true that investigating spirituality poses some unique difficulties for researchers since the construct is not readily amenable to direct empirical examination. Nevertheless, there are several existing measures or techniques, often but not entirely in the form of paper-and-pencil tests, designed to tap into the construct of spirituality. Butman (1990) has reviewed several popular methods developed to assess "spiritual maturity and faith development" (p. 14).

The first method examined by Butman is Fowler's "Faith Development Interview Guide," based on Fowler's own model of religious development. Although a detailed examination of Fowler's work is beyond the scope of this paper, his model
describes an individual's "quest for meaning" as a progression through stages of religious growth. A second qualitative method explored by Butman is Malony's "Religious Status Interview," designed to measure eight dimensions of religious maturity from a Christian perspective. In terms of a more objective measure, Butman reviewed the "Shepherd Scale" by Bassett. Based on the Christian religion, the Shepherd Scale is designed to differentiate "orthodox Christians from non-Christians;" (p. 22) and according to Butman can thereby yield a measure of Christian spiritual maturity.

What is common to these three techniques is an approach to spirituality that is exclusively based on either a general religious or specifically Christian perspective. It is possible, however, to assess spirituality from a more abstract or Natural level as defined by Benner, independent of any religious or denominational framework.

Butman points out, for example, that Moberg's Spiritual Well-Being Questionnaire (SWBQ), obviously designed to measure spiritual well-being, is fundamentally based on the Christian religion. His two dimensional framework, however, includes an horizontal dimension dealing with purpose and satisfaction in life, independent of any specific religion, along with a vertical dimension of well-being dealing with one's relationship with God. Although the horizontal dimension of the SWBQ appears to tap into Natural Spirituality, this index was not selected for inclusion in the present study. Instead,
a similar component of the Spiritual Well-Being Scale (Ellison, 1983; Paloutzian & Ellison, 1982) will be included since it is more generally used and the subject of greater empirical investigation.

Cartwright and Mori (1988) have developed the Feelings, Reactions, and Beliefs Survey based on the work of Carl Rogers and other "person-centered theorists" (p. 176). This measure includes a Spiritual Essence scale, in which high scorers have a sense of purpose in life. Unfortunately, this scale may not be suitable as a measure of Natural Spirituality, since the items comprising the Spiritual Essence scale are too few and quite general, rendering the scale with questionable sensitivity. For example, paraphrased items include "Do you have spiritual needs?", and "Participate in social or religious activities?" (p. 188). Finally, it is not a pure measure of Natural Spirituality, as one of the four items comprising the scale directly addresses the importance of religion.

The spirituality measure which appears to have received the greatest contemporary attention (Ellison & Smith, 1991) is Paloutzian and Ellison's Spiritual Well-Being Scale (SWBS) (Ellison, 1983; Paloutzian & Ellison, 1982). Not unlike Moberg's SWBQ, the SWBS also consists of an horizontal dimension of Existential Well-Being (EWB) dealing with purpose and satisfaction in life, independent of any specific religion, along with a vertical dimension of Religious Well-
Being (RWB) based on one's relationship with God. As would be expected, the SWBS has been associated with a variety of religiosity, religious commitment, and Religious Spirituality indices (Ellison & Smith, 1991).

At least on the surface, the Existential Well-Being subscale (EWB) of the SWBS appears to be in many ways a measure of Natural Spirituality. Furthermore, although the Religious Well-Being subscale (RWB) is theoretically grounded in the domain of Religious Spirituality, items loading on this subscale merely include the term, "God." According to Ellison (1991), the RWB may be subjectively construed by subjects in a manner consistent with Benner's (1988, 1989) notion of Natural Spirituality involving the fundamental human capacity for "self-transcendence and surrender" (1989, p. 22).

Spiritual well-being (SWB) as measured by the SWBS seems to be associated with a variety of other well-being indices (Ellison & Smith, 1991). These authors extensively review seven years of research involving the SWBS, conducted by numerous investigators (specific citations are provided in Ellison & Smith). Significant correlations are reported in areas such as "physical well-being" and "adjustment to physical illness," "psychological well-being," and "relational well-being." Selective findings from this work will be outlined for the purpose of construct development, but the reader is referred to Ellison and Smith's paper for a thorough evaluation of the SWBS and its well-being correlates.
In terms of physical well-being and adjustment to physical illness, SWB has frequently been connected with adaptive functioning. For example, subjective experiences of health as well as ideal body weight have been positively associated with SWB, whereas SWB has been negatively associated with blood pressure. Moreover, SWB has been positively related to adaptive experiences of hemodialysis, and negatively related to discomfort in individuals suffering from cancer. From the perspective of health care providers, nurses scoring high in SWB were more attentive to their patients' spirituality.

In regard to psychological and relational well-being, SWB has been positively associated with internal locus of control as well as self-esteem, and both SWB and EWB have been negatively related to depression. In addition, assertiveness, self-confidence, and occasionally marital adjustment have been positively associated with SWB.

It has recently been suggested that the SWBS may suffer from a ceiling effect when used with mainstream religious, or more appropriately, Evangelical Christian samples (e.g., Ledbetter, Smith, Vosler-Hunter, & Fischer, 1991; Bufford et al., 1991). Additional research, however, is needed to substantiate this claim, for the questionable ceiling effect (questionable because one might expect higher scores in religious samples) has not been readily observed across the board in all religious samples, particularly in regard to the
EWB subscale. Regardless, even if this criticism is substantiated, it is not applicable to the present study since an Evangelical Christian sample is not the focus of investigation. In addition, a criticism of the original factor structure of the SWBS is also in limbo pending additional empirical consideration, for the critics based their conclusion on a factor analysis using data corrected for the aforementioned questionable ceiling effect (Ledbetter, Smith, Fischer, Vosler-Hunter, & Chew, 1991).

Incidentally, the term "well-being" need not concern us, as this nomenclature merely underscores the authors' assumption that higher scores reflect a relatively greater amount of spirituality, which in turn reflects a healthier person. To the extent that the EWB subscale is a valid measure of Natural Spirituality, we also have a quantitative measure of a respondent's experience and awareness of their own Natural Spirituality—without the assumption that more experience and awareness is necessarily healthier or better.

Perhaps the most comprehensive measure of Natural Spirituality available is the Spiritual Orientation Inventory (SOI) developed by Elkins, Hedstrom, Hughes, Leaf, and Saunders (1988). This humanistically based measure is designed to tap into spirituality, independent of a particular religious viewpoint (i.e., Natural Spirituality). A multidimensional conceptualization of spirituality was agreed upon by the authors as well as five "highly spiritual"
individuals representing the Buddhist, Catholic, Protestant, and Jewish perspectives. The resulting SOI consists of the following nine subscales, each including a description that characterizes individuals scoring high on that subscale (adapted from Elkins et al., 1988):

(1) **Transcendent dimension.** The spiritual person has an experientially based belief that there is a transcendent dimension to life. The actual content of this belief may range from the traditional view of a personal God to a psychological view that the "transcendent dimension" is simply a natural extension of the conscious self into the regions of the unconscious or Greater Self. But whatever the content, typology, metaphors, or models used to describe the transcendent dimension, the spiritual person believes in the "more"—that what is "seen" is not all there is. He or she believes in an "unseen world" and that harmonious contact with, and adjustment to, this unseen dimension is beneficial. The spiritual person is one who has experienced the transcendent dimension, often through what Maslow referred to as "peak experiences," and he or she draws personal power through contact with this dimension....

(2) **Meaning and purpose in life.** The spiritual person has known the quest for meaning and purpose and has emerged from this quest with confidence that life is deeply meaningful and that one's own existence has purpose. The actual ground and content of this meaning vary from person to person, but the common factor is that each person has filled the "existential vacuum" with an authentic sense that life has meaning and purpose.

(3) **Mission in life.** The spiritual person has a sense of "vocation." He or she feels a sense of responsibility to life, a calling to answer, a mission to accomplish, or in some cases, even a destiny to fulfill. The spiritual person is "metamotivated" and understands that it is in "losing one's life" that one "finds it."

(4) **Sacredness of life.** The spiritual person believes life is infused with sacredness and often experiences a sense of awe, reverence, and wonder even in "nonreligious" settings. He or she does not dichotomize life into sacred and secular, holy and profane, but believes all of life is "holy" and that the sacred is in
the ordinary. The spiritual person is able to "sacralize" or "religionize" all of life.

(5) Material values. The spiritual person can appreciate material goods such as money and possessions but does not seek ultimate satisfaction from them nor attempt to use them as a substitute for frustrated spiritual needs. The spiritual person knows that "ontological thirst" can only be quenched by the spiritual and that ultimate satisfaction is found not in material, but spiritual things.

(6) Altruism. The spiritual person believes we are our "brother's keeper" and is touched by the pain and suffering of others. He or she has a strong sense of social justice and is committed to altruistic love and action. The spiritual person knows that "no man is an island" and that we are all "part of the continent" of common humanity.

(7) Idealism. The spiritual person is a visionary committed to the betterment of the world. He or she loves things for what they are yet also for what they can become. The spiritual person is committed to high ideals and to the actualization of positive potential in all aspects of life.

(8) Awareness of the tragic. The spiritual person is solemnly conscious of the tragic realities of human existence. He or she is deeply aware of human pain, suffering, and death. This awareness gives depth to the spiritual person and provides him or her with an existential seriousness toward life. Somewhat paradoxically, however, awareness of the tragic enhances the spiritual person's joy, appreciation, and valuing of life.

(9) Fruits of spirituality. The spiritual person is one whose spirituality has borne fruit in his or her life. True spirituality has a discernible effect upon one's relationship to self, others, nature, life, and whatever one considers to be the Ultimate. (Elkins et al., pp 10-12)

Both the SOI and the EWB subscale of the SWBS were selected for inclusion in the present study as measures of Natural Spirituality. The decision to utilize both tests was
made on the basis of the potential complimentary relationship between these two instruments.

First of all, although the SOI appears to be the most thorough measure of Natural Spirituality, the lack of psychometric data available for this instrument compromises its research value pending additional empirical support. Indeed, one subgoal of this overall research project will be to evaluate the psychometric integrity of the SOI (to be reported elsewhere). On the other hand, the SWBS boasts reasonable psychometric characteristics and has been utilized in empirical studies for almost a decade. It is believed that concurrent validity will be demonstrated between the SOI and the EWB subscale as measures of Natural Spirituality.

Secondly, although the authors stress that the humanistic approach underlying the SOI is not anti-religious, humanism in and of itself has traditionally been construed as a secular philosophy (Young, 1989). Alternatively, even though the EWB subscale reflects no specific religious philosophy, the authors approach the spiritual well-being construct in general from a western Christian perspective. The inclusion of measures generated by separate authors, each of whom typify either an humanistic or religious perspective, may help serve to combat any bias and resulting error inadvertently stemming from the authors' personal philosophies (although no such bias is readily apparent).
Finally, Ellison and Smith (1991) point out that the relationship between SWBS and personality measures has yet to be explored, and additional research is warranted utilizing samples other than conservative Christians. As an added benefit of the present study, these two areas were explored, at least in regard to EWB.

**Measurement of Personality**

In a very general sense, the construct of personality can be thought of as "the style a course of behavior takes on" (Rychlak, 1981a, p. 823). There have been numerous attempts to explain these "styles" of personality (e.g., Greenberg & Mitchell, 1983; Maddi, 1980; Rychlak, 1981a), but psychologists in the tradition of studying individual differences have uniquely conceptualized the construct through formulating objective techniques for measuring personality.

One extensively used objective technique is that of self-report inventories. Such inventories include items that have been conceptually selected and statistically determined to differentiate individuals in a reliable and meaningful manner. Through factor analytic approaches, which attempt to uncover underlying factors or determinants of personality "style," it is possible to parsimoniously account for the collective variance in a particular inventory (Anastasi, 1988). The discovery and delineation of such factors can result in theoretical models which describe the fundamental structure of personality.
Perhaps the most widely known factor analytic model is that of Eysenck (1970; Eysenck & Eysenck, 1975), who endorsed the two personality factors or dimensions of Neuroticism (N) and Extraversion (E) (these dimensions will be described shortly). Each of these dimensions of personality are generally understood to reflect an approximately equal combination of constitutional and environmental determinants, somehow interacting to comprise this enduring and discernable personality factor (Meyer, 1987). Moreover, there is support for cross-cultural convergence of N and E, as well as within-subject consistency of these dimensions over time periods of "one to 50 years" (Meyer, 1987, p. 52).

These dimensions appear to reflect a pervasive and generalized underlying personality "style" or trait, as opposed to a state or situationally based response phenomenon. Such dimensions reveal basic and enduring qualities of both perception and affect modulation, constitutionally evident, and exerting a life-long influence on one's experience of the world. Corresponding dimensions of N and E have consistently emerged as the two primary factors in a variety of personality and mood inventories (Meyer & Shack, 1989), thereby lending support to the ability of these inventories to measure the very structural and universal components of personality.

This emphasis on measuring core personality structure is particularly relevant to the present study. The holistic and non-reductionistic approach to understanding human behavior
maintains that all aspects of the individual (e.g., biological, social, spiritual, etc.) interactively function to comprise the total person, while any given aspect cannot be entirely reduced to another. As such, the integration of spirituality and personality would occur at a very basic or fundamental level, and not merely reflect a transient state such as being momentarilry exhilarated during a spiritual experience. What is being assessed is a life-long pattern of personality/spirituality integration. Finally, such an approach to measuring the structure or skeletal frame of personality is consistent with a top-down or "Kantian" perspective on human behavior.

Heuristically speaking, such models of personality take the form of two or more axes (depending on the number of factors) on which an individual's score can be plotted. These factors are theoretically independent, so any combination of loadings on the factors is possible (e.g., on a generic two-factor model, one might observe High Factor 1 - High Factor 2, or perhaps High Factor 1 - Low Factor 2, etc.). Figure 2 represents a generic version of a two-factor model, with asterisks indicating where individual subjects might fall on the personality axes.

Costa and McCrae (1985) have developed the NEO Personality Inventory (NEO-PI) based on a five-factor model of personality. This model continues to receive empirical support in the literature (McCrae & Costa, 1987), particularly
Figure 2. Generic Two-Factor Model of Personality Structure.
in terms of its ability to serve as "a framework for interpreting...other personality systems" (McCrae & Costa, 1989, p. 451) including the Eysenck scales.

The NEO-PI is able to account for a very large percentage of variance in regard to personality difference, thereby offering an extensive approach to the assessment of normal adult personality. The five global domains of personality measured by this inventory include Neuroticism (N), Extraversion (E), Openness to Experience (O), Agreeableness (A), and Conscientiousness (C). In addition, 18 facet scales (six per domain) have been demonstrated to comprise the domains of N, E, and O, making intradimensional comparisons between subjects possible. An extensive description of these domains and facets is provided in Costa and McCrae (1985), but following is a description of the three domains involved in the present study (adapted from Costa & McCrae, 1985):

**Neuroticism.** Assesses adjustment vs. emotional instability. Identifies individuals prone to psychological distress, unrealistic ideas, excessive cravings or urges, and maladaptive coping responses.

- Low Scorers: calm, secure, hardy
- High Scorers: nervous, insecure, inadequate

**Extraversion.** Assesses quantity and intensity of interpersonal interaction; activity level; need for stimulation; and capacity for joy.

- Low Scorers: reserved, task-oriented, quiet
- High Scorers: sociable, person-oriented, affectionate
Openness. Assesses proactive seeking and appreciation of experience for its own sake; toleration for and exploration of the unfamiliar.

Low Scorers  
- conventional  
- down-to-earth  
- narrow interests

High Scorers  
- curious  
- creative  
- broad interests

(Costa & McCrae, 1985, p. 2)

The NEO-PI was selected for inclusion in the present study as a measure of adult personality. In addition to the comprehensiveness of the five-factor model as a tool for understanding the skeletal structure of personality, the authors clearly emphasize a nonjudgmental approach in explicating these personality dimensions. For example, when clarifying the Openness factor, Costa and McCrae (1985) stress that individuals scoring at both the high and low ends of this dimension can make valuable contributions in society. This nonjudgmental approach is consistent with the decision to moderate value-laden interpretations regarding Natural Spirituality (i.e., related to mental health or psychopathology), but to simply explore how Natural Spirituality varies in regard to specific dimensions of personality.

Natural Spirituality and Personality

Four common themes seem to characterize the social science literature on spirituality. Taking these themes into consideration, it is possible to generate several predictions concerning the proposed relationship between Natural
Spirituality and personality, with the latter being measured by the NEO-PI.

First of all, spirituality seems to be related to the unification or integration of the person as a holistic being, as in Benner's framework, for instance. Other theoreticians may be considering this integrative function when they emphasize the importance of psychological growth (i.e., personality integration) as involved in spiritual experience. It is therefore predicted that, on average, there will be a significant positive correlation between the experience of Natural Spirituality and personality integration. The NEO-PI domain of Neuroticism, which measures "adjustment vs. emotional instability" (Costa & McCrae, 1985, p. 2) as evidenced by low scores and high scores, respectively, can serve as a measure of personality integration.

Secondly, spirituality seems to be concerned with a sense of meaning and purpose in life. With aimlessness and despair often being identified with depression, it is therefore predicted that a sense of life purpose and meaning might be a source of great personal joy. The NEO-PI domain of Extraversion measures "quantity and intensity of interpersonal interaction; activity level; need for stimulation; and capacity for joy" (Costa & McCrae, 1985, p. 2). Although there is no indication that spirituality necessarily involves sociability (consider the desert monastics, for example), it is possible to break down the domain of Extraversion and
consider the facet scale of Positive Emotions, which assesses the capacity for joy.

Thirdly, spirituality seems to be concerned with transcendence as a means of connecting the person with a higher being. Such a transcendent experience is often perceived as novel or somehow different from the familiar everyday experiences of ordinary life. The NEO-PI domain of Openness to Experience measures "proactive seeking and appreciation of experience for its own sake; toleration for and exploration of the unfamiliar" (Costa & McCrae, 1985, p. 2). However, Fantasy, Ideas, and Values, three of the six facets comprising the domain of Openness to Experience, seem to bear no surface relationship to Spirituality. On the other hand, the remaining facets of Aesthetics ("Values aesthetic experience, moved by art and beauty"), Feelings ("Emotionally responsive, sensitive, empathic, values own feelings"), and Actions ("Seeks novelty and variety, tries new activities") (ibid.) may all be related to spirituality.

Summary and Hypotheses

Both theoretical and methodological difficulties seem to have led to a lack of clarity in understanding the relationship between psychopathology and/or mental health on the one hand, and religiosity or religious commitment on the other. By focusing on the constructs of personality and spirituality, however, it may be possible to circumvent many of the problems found in this body of literature.
Benner's model of spirituality has been extended to represent the theoretical functioning of spirituality as a naturally endowed, top-down or "Kantian" process. It has been suggested that specific denominational, religious, or religious-like experiences are the phenomenological content manifestations of the spirituality process. Natural Spirituality is a relatively abstract content manifestation of the spirituality process, independent of a particular religious or denominational viewpoint, and a content quite worthy of investigation as it will likely pose the fewest methodological threats and yield many applications. Moreover, as we move from theoretical consideration to empirical evaluation of spirituality, an association between Natural Spirituality and personality would lend empirical support to Benner's non-reductionistic framework, which views spirituality as an integral and integrated part of our psychological being.

The NEO-PI provides a comprehensive assessment of the enduring structure of personality "style," based on a five-factor model of personality. As such, the NEO-PI provides a useful framework for exploring the fundamental relationship between Natural Spirituality and personality.

Through consideration of common themes characterizing the social science literature on spirituality, three hypotheses have been generated concerning the proposed relationship between Natural Spirituality, as measured by the EWB and TOTAL
SOI indices (TOTAL SOI is a composite index based on the sum of all nine SOI subscales), and personality, as measured by the NEO-PI: Hypothesis 1) Compared to a group of individuals scoring relatively low on measures of Natural Spirituality, a group of high scoring individuals should demonstrate significantly lower Neuroticism domain scores. Hypothesis 2) Compared to a group of individuals scoring relatively low on measures of Natural Spirituality, a group of high scoring individuals should demonstrate a significantly higher Extraversion facet score on Positive Emotions. Hypothesis 3) Compared to a group of individuals scoring relatively low on measures of Natural Spirituality, a group of high scoring individuals should demonstrate significantly higher Openness to Experience facet scores on Aesthetics, Feelings, and Actions.

Finally, it is anticipated that preliminary support will be found for the construct validity of Natural Spirituality through demonstrating a significant correlation between two independent measures of Natural Spirituality. Hypothesis 4) The Spiritual Orientation Inventory should be significantly correlated to the Existential Well-Being subscale of the Spiritual Well-Being Scale.
CHAPTER III

METHOD

Subjects

One hundred and ten undergraduates from Loyola University's subject pool received course credit for their participation in this study. Females comprised 71% of the sample ($n=78$) while males represented 29% ($n=32$). The mean age of all participants was 18.64 ($SD=1.12$) with a range from 17 to 25. The majority of participants identified themselves as Caucasian (68%) with the next largest identified group being Asian (16%). The remainder of participants classified themselves as Hispanic (10%), African American (4%), and Filipino (2%).

In responding to questions with a religious or spiritual emphasis, 70% of the sample identified their religious affiliation as Catholic, 10% Protestant, 5% None, 5% Orthodox, 3% Hindu, 3% Undecided, 2% Jewish, 2% Moslem, and 1% Buddhist. In addition, 86% of all participants reported that they had maintained their stated religious affiliation for their entire life, and on a seven point likert scale, the average rating for the extent to which participants followed the beliefs and practices of their religious affiliation was 4.16 ($SD=1.61$).
Finally, 36% of the sample responded affirmatively to having had a personally meaningful spiritual experience.

Measures

Neo Personality Inventory. The NEO Personality Inventory (NEO-PI) by Costa and McCrae (1985) consists of 181 items presented in a Likert type format with five response alternatives ranging from Strongly Disagree to Strongly Agree, yielding item scores of zero to four. All items scored for use in this study independently load onto 18 facets, and facet scores are then totaled for the respective domain scores of Neuroticism, Extraversion, and Openness to Experience (six facets per domain). Two additional domains of Agreeableness and Conscientiousness were not utilized in the present study. T-score conversions are easily computed with the aid of a profile sheet, and normative information is provided for several samples. Both a self-report and an observer rating format of the NEO-PI currently exist.

The majority of the development and validity research was conducted on two samples, the first of which consisted of over 2,000 men volunteering to participate in the "Veterans Administration's Normative Aging Study in Boston" (Costa & McCrae, 1985, p. 27), while the second sample was comprised of roughly 400 male and 300 female participants in the "Augmented Baltimore Longitudinal Study of Aging" (ibid.). Internal consistency correlations range from .60 to .86 for the 18 individual facets comprising the N, E, and O domains.
However, the alpha correlations for the overall N, E, and O domains are expectedly higher with a range of .85 to .93. Test-retest reliability following a six month interval ranged from .66 to .92 for the individual facets, and .86 to .91 for the three domains. Unfortunately, reliability information is limited for the A and C domains, pending additional study, but the internal consistency of the A and C scales in the self-report format are estimated to be .56 and .84, respectively.

In terms of validity, the authors report evidence of concurrent validity with the Eysenck Personality Inventory and the Guilford-Zimmerman Temperament Survey, among other measures. There is also support for the construct validity of this measure in that the NEO-PI has demonstrated predictable correlations with several variables other than personality. Form S of the NEO-PI (a self-report format) was included in the present study as a comprehensive measure of adult personality.

Three scores were derived from the NEO-PI and treated as dependent variables for assessing the personality difference between a group of individuals scoring relatively low and a group of individuals scoring relatively high on measures of Natural Spirituality. The three dependent variable scores were: 1) the Neuroticism domain raw score 2) the Positive Emotions facet raw score of the Extraversion domain 3) the mean of three raw facet scores of the Openness to Experience domain; Aesthetics, Feelings, and Actions.
Spiritual Well-Being Scale. The Existential Well-Being subscale (EWB) of the Spiritual Well-Being Scale (SWBS) (Ellison, 1983; Paloutzian & Ellison, 1982) was also included in this study as an index of Natural Spirituality. The SWBS consists of two subscales, EWB and Religious Well-Being (RWB), as well as the overall SWBS. This instrument is comprised of 20 items (10 items per dimension or subscale) presented in a Likert type format with six response alternatives ranging from Strongly Disagree to Strongly Agree, yielding respective item scores of one to six. Some of the items are negatively worded and adjustment of item scores is necessary. Subscale scores range from 10 to 60 and overall SWBS scores range from 20 to 120.

According to Bufford et al. (1991), the SWBS has demonstrated reasonable validity and reliability. Utilizing 206 students attending three colleges with a religious orientation, a factor analysis with varimax rotation yielded three main factors (Ellison, 1983). All of the RWB items loaded on the first factor, and the EWB items clustered on two additional factors related to "life direction" and "life satisfaction" (p. 333). Correlations between the subscales ranged from .32 to .62. In three samples, test-retest reliability for the EWB subscale is greater than .85 after intervals of 7, 28, and 70 days, and .73 after an interval of 42 days (Bufford et al.). In seven samples, internal consistency of the EWB subscale using coefficient alpha ranged
from .78 to .86. Furthermore, limited normative data are now available for various samples (Bufford et al.). The EWB score was treated as an independent variable reflecting the construct of Natural Spirituality.

**Spiritual Orientation Inventory.** The aforementioned Spiritual Orientation Inventory (SOI) (Elkins et al., 1988) was included in this study in order to provide an index of Natural Spirituality. The final form of the SOI consists of 85 items statistically selected from an original group of 157 items, all of which were generally endorsed by authorities in psychology and spirituality. Items are presented in a Likert type format with seven response alternatives ranging from Intensely Disagree to Intensely Agree, yielding respective item scores of one to seven. Some of the items are negatively worded and adjustment of item scores is necessary. Independent items cluster onto nine subscales, yet the subscales are comprised of various numbers of items. As such, there is no uniform scoring range across subscales.

For the original SOI consisting of 157 items, the authors report internal reliability ranging from .75 to .94, and alpha reliability ranging from .81 to .98 for all scales. Alpha reliability ranged from .75 to .95 for the final 85 item version of the SOI. Finally, the overall SOI and all but one subscale were able to discriminate between a group of psychology graduate students and a group of 'highly spiritual' individuals (p. 15). Although limited psychometric
information is available for the SOI, this test appears to be the most comprehensive instrument to date designed to measure Natural Spirituality. The TOTAL SOI score (a composite score based on the sum of all nine SOI subscales) was treated as an independent variable reflecting the construct of Natural Spirituality.

Demographic Questionnaire. A demographic questionnaire with a particular emphasis on spiritual aspects of the subject's life was also included in this study. This questionnaire provided subjects with the opportunity to respond more idiographically in regard to their spiritual experiences, through describing their religious or spiritual development along with a personally meaningful spiritual experience. This demographic questionnaire is included in Appendix A.

Procedure

Subjects arrived at a pre-arranged time and location in order to receive course credit for participating in an undisclosed "psychology experiment." A classroom setting was utilized, and subjects entered the room at various times throughout the day, participating as part of a group ranging in size from 3 to 20.

After signing a consent form indicating that the subject understood both the policy of confidentiality and the right to discontinue involvement without penalty, the subjects were presented with guidelines concerning accurate responding and
the importance of completing questionnaires in the specified order. Subjects were then given the NEO Personality Inventory, Spiritual Orientation Inventory, and the Spiritual Well-Being Scale, along with the demographic questionnaire. The former three instruments were administered in random order to each individual subject, followed by the demographic questionnaire. All subjects were able to complete the questionnaires in one hour or less.
CHAPTER IV

RESULTS

The first three hypotheses predicted differential response patterns on the NEO-PI corresponding to variation on measures of Natural Spirituality. In order to test these hypotheses, a median split was conducted on the EWB subscale of the SWBS as well as the TOTAL SOI index (a composite index based on the sum of all nine of the SOI subscales), thereby creating separate groups of relatively high and relatively low scoring individuals on the two specified Natural Spirituality indices. The mean NEO-PI dependent variable scores of these two groups were then compared using a t-test analysis (any spirituality or personality index with missing data for a given subject was excluded from this procedure).

The same approach was also used in subsequent analyses involving the individual SOI subscales and the remaining SWBS scales in an effort to clarify the underlying nature of any significant findings. This information will be briefly presented following an outcome review of each hypothesis test.

Regarding the hypothesis involving Natural Spirituality and Neuroticism, it was predicted that, compared to a group of individuals scoring relatively low on measures of Natural Spirituality (EWB and TOTAL SOI), a group of high scoring
individuals should demonstrate significantly lower Neuroticism domain scores. As can be seen in Table 1, this hypothesis was supported with both the EWB and TOTAL SOI indices.

Subsequent analyses demonstrated a general trend supporting a negative relationship between other indices of Spirituality and Neuroticism (see Table 1). However, only RWB, SWBS, Idealism, and Fruits of Spirituality evidenced a statistically significant effect.

Regarding the hypothesis involving Natural Spirituality and Positive Emotions, it was predicted that, compared to a group of individuals scoring relatively low on measures of Natural Spirituality (EWB and TOTAL SOI), a group of high scoring individuals should demonstrate significantly higher Extraversion facet scores on Positive Emotions. As can be seen in Table 2, this hypothesis was supported with both the EWB and TOTAL SOI indices.

In addition, a generalized positive relationship between other indices of Spirituality and Positive Emotions was also evidenced (see Table 2). Statistically significant effects were observed for all available spirituality indices save Awareness of the Tragic and Fruits of Spirituality.

Regarding the hypothesis involving Natural Spirituality and the Openness to Experience facet scores on Aesthetics, Feelings, and Actions, it was predicted that, compared to a group of individuals scoring relatively low on measures of Natural Spirituality (EWB and TOTAL SOI), a group of high
Table 1. Differences in NEO-PI Neuroticism Based on Relatively High Versus Relatively Low Spirituality Scores.

<table>
<thead>
<tr>
<th>SPIRITUALITY INDEX</th>
<th># OF CASES</th>
<th>GROUP MEANS</th>
<th>STANDARD DEVIATIONS</th>
<th>T-VALUE &amp; (1-TAIL PROB.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EWB 46.50</td>
<td>H=51</td>
<td>H=96.65</td>
<td>H=18.51</td>
<td>-3.02 (.002)</td>
</tr>
<tr>
<td></td>
<td>L=50</td>
<td>L=107.08</td>
<td>L=16.11</td>
<td></td>
</tr>
<tr>
<td>RWB 43.00</td>
<td>59</td>
<td>96.31</td>
<td>18.64</td>
<td>-3.02 (.002)</td>
</tr>
<tr>
<td></td>
<td>45</td>
<td>107.64</td>
<td>19.35</td>
<td></td>
</tr>
<tr>
<td>SWBS 89.00</td>
<td>52</td>
<td>96.87</td>
<td>17.53</td>
<td>-3.02 (.002)</td>
</tr>
<tr>
<td></td>
<td>48</td>
<td>107.40</td>
<td>17.28</td>
<td></td>
</tr>
<tr>
<td>TOTAL SOI 392.50</td>
<td>46</td>
<td>96.37</td>
<td>21.60</td>
<td>-2.30 (.012)</td>
</tr>
<tr>
<td></td>
<td>45</td>
<td>105.69</td>
<td>16.78</td>
<td></td>
</tr>
<tr>
<td>TRANSCENDENT</td>
<td>56</td>
<td>98.95</td>
<td>21.97</td>
<td>-1.25 (.107)</td>
</tr>
<tr>
<td>DIMENSION 52.00</td>
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<td>103.69</td>
<td>16.56</td>
<td></td>
</tr>
<tr>
<td>MEANING AND</td>
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<td>98.98</td>
<td>21.03</td>
<td>-1.13 (.130)</td>
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<td>PURPOSE IN LIFE</td>
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<td>44.50</td>
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<td></td>
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</tr>
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<td>MISSION IN LIFE</td>
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<td>100.77</td>
<td>20.74</td>
<td>-0.19 (.424)</td>
</tr>
<tr>
<td>45.00</td>
<td>48</td>
<td>101.52</td>
<td>18.40</td>
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</tr>
<tr>
<td>SACREDNESS OF LIFE</td>
<td>52</td>
<td>99.62</td>
<td>22.50</td>
<td>-0.87 (.194)</td>
</tr>
<tr>
<td>73.00</td>
<td>50</td>
<td>103.00</td>
<td>16.46</td>
<td></td>
</tr>
<tr>
<td>MATERIAL VALUES</td>
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<td>98.68</td>
<td>22.15</td>
<td>-1.31 (.098)</td>
</tr>
<tr>
<td>26.00</td>
<td>51</td>
<td>103.69</td>
<td>16.64</td>
<td></td>
</tr>
<tr>
<td>ALTRUISM 36.00</td>
<td>54</td>
<td>101.02</td>
<td>21.99</td>
<td>-0.08 (.467)</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>101.34</td>
<td>17.11</td>
<td></td>
</tr>
<tr>
<td>IDEALISM 54.00</td>
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<td>97.37</td>
<td>19.19</td>
<td>-1.97 (.026)</td>
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<td>104.96</td>
<td>19.52</td>
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<tr>
<td>AWARENESS OF THE</td>
<td>58</td>
<td>98.90</td>
<td>21.60</td>
<td>-1.33 (.094)</td>
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<tr>
<td>TRAGIC 25.00</td>
<td>47</td>
<td>103.85</td>
<td>16.67</td>
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</tr>
<tr>
<td>FRUITS OF SPIRITUALITY 39.00</td>
<td>53</td>
<td>96.51</td>
<td>21.06</td>
<td>-2.36 (.010)</td>
</tr>
<tr>
<td></td>
<td>49</td>
<td>105.27</td>
<td>16.19</td>
<td></td>
</tr>
</tbody>
</table>

Note: Column one lists the Spirituality indices followed by the corresponding median value used to divide each index into two groups of relatively high (H) and low (L) scorers. Shaded cells indicate $p < .05$. 
Table 2. Differences in NEO-PI Positive Emotions Based on Relatively High Versus Relatively Low Spirituality Scores.

<table>
<thead>
<tr>
<th>SPIRITUALITY INDEX</th>
<th># OF CASES</th>
<th>GROUP MEANS</th>
<th>STANDARD DEVIATIONS</th>
<th>T-VALUE &amp; (1-TAIL PROB.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>H=51</td>
<td>H=24.04 L=18.84</td>
<td>H=4.43 L=4.32</td>
<td>5.97 (.000)</td>
</tr>
<tr>
<td>EWB 46.50</td>
<td>59</td>
<td>22.66</td>
<td>5.06</td>
<td>2.66 (.005)</td>
</tr>
<tr>
<td>RWB 43.00</td>
<td>45</td>
<td>20.09</td>
<td>4.65</td>
<td>5.75 (.000)</td>
</tr>
<tr>
<td>SWBS 89.00</td>
<td>52</td>
<td>23.94</td>
<td>4.54</td>
<td>2.56 (.006)</td>
</tr>
<tr>
<td>TOTAL SOI 392.50</td>
<td>45</td>
<td>20.27</td>
<td>5.02</td>
<td>1.90 (.031)</td>
</tr>
<tr>
<td>TRANSCENDENT DIMENSION 52.00</td>
<td>56</td>
<td>22.41</td>
<td>4.82</td>
<td>1.94 (.028)</td>
</tr>
<tr>
<td>MEANING AND PURPOSE IN LIFE 44.50</td>
<td>50</td>
<td>22.46</td>
<td>5.16</td>
<td>3.08 (.002)</td>
</tr>
<tr>
<td>MISSION IN LIFE 45.00</td>
<td>57</td>
<td>22.84</td>
<td>4.59</td>
<td>3.39 (.001)</td>
</tr>
<tr>
<td>SACREDNESS OF LIFE 73.00</td>
<td>52</td>
<td>23.19</td>
<td>5.21</td>
<td>4.94 (.000)</td>
</tr>
<tr>
<td>MATERIAL VALUES 26.00</td>
<td>53</td>
<td>22.32</td>
<td>5.37</td>
<td>5.16 (.004)</td>
</tr>
<tr>
<td>ALTRUISM 36.00</td>
<td>54</td>
<td>22.78</td>
<td>4.62</td>
<td>2.75 (.004)</td>
</tr>
<tr>
<td>IDEALISM 54.00</td>
<td>52</td>
<td>23.69</td>
<td>4.32</td>
<td>4.94 (.000)</td>
</tr>
<tr>
<td>AWARENESS OF THE TRAGIC 25.00</td>
<td>58</td>
<td>21.90</td>
<td>4.92</td>
<td>0.87 (.194)</td>
</tr>
<tr>
<td>FRUITS OF SPIRITUALITY 39.00</td>
<td>53</td>
<td>22.13</td>
<td>5.13</td>
<td>1.33 (.094)</td>
</tr>
</tbody>
</table>

Note: Column one lists the Spirituality indices followed by the corresponding median value used to divide each index into two groups of relatively high (H) and low (L) scorers. Shaded cells indicate $p < .05$. 
scoring individuals should demonstrate significantly higher scores on the mean of these three Openness to Experience facets. For this portion of the analysis, the mean of Aesthetics, Feelings, and Actions was treated as a single variable. As can be seen in Table 3, this hypothesis was supported with both the EWB and TOTAL SOI indices.

In addition, a generalized positive relationship between spirituality and the mean of Aesthetics, Feelings, and Actions was demonstrated during subsequent analyses (see Table 3). Statistically significant effects were observed for all available spirituality indices save RWB and SWBS.

The fourth hypothesis predicted that the Spiritual Orientation Inventory would be significantly correlated to the Existential Well-Being subscale of the Spiritual Well-Being Scale. As Table 4 reveals, TOTAL SOI was indeed significantly correlated with EWB.

Subsequent analyses (see Table 4) demonstrated that all individual SOI subscales were also significantly correlated with EWB. In addition, both TOTAL SOI and all individual SOI subscales were also significantly correlated with RWB and overall SWBS.
Table 3. Differences in NEO-PI Mean of Aesthetics, Feelings, and Actions Based on Relatively High Versus Relatively Low Spirituality Scores.

<table>
<thead>
<tr>
<th>SPIRITUALITY INDEX</th>
<th># OF CASES</th>
<th>GROUP MEANS</th>
<th>STANDARD DEVIATIONS</th>
<th>T-VALUE &amp; (1-TAIL PROB.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EWB 46.50</td>
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<td>H=20.50</td>
<td>H=2.94</td>
<td>1.84 (.035)</td>
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<td>L=50</td>
<td>L=19.41</td>
<td>L=3.06</td>
<td></td>
</tr>
<tr>
<td>RWB 43.00</td>
<td>59</td>
<td>20.27</td>
<td>2.73</td>
<td>0.91 (.183)</td>
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<tr>
<td></td>
<td>45</td>
<td>19.72</td>
<td>3.40</td>
<td></td>
</tr>
<tr>
<td>SWBS 89.00</td>
<td>52</td>
<td>20.46</td>
<td>2.76</td>
<td>1.50 (.069)</td>
</tr>
<tr>
<td></td>
<td>48</td>
<td>19.57</td>
<td>3.14</td>
<td></td>
</tr>
<tr>
<td>TOTAL SOI 392.50</td>
<td>46</td>
<td>21.38</td>
<td>2.26</td>
<td>4.29 (.000)</td>
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<tr>
<td></td>
<td>45</td>
<td>18.89</td>
<td>3.19</td>
<td></td>
</tr>
<tr>
<td>TRANSCENDENT DIMENSION 52.00</td>
<td>56</td>
<td>20.87</td>
<td>3.01</td>
<td>3.49 (.001)</td>
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<tr>
<td></td>
<td>48</td>
<td>18.85</td>
<td>2.87</td>
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<tr>
<td>MEANING AND PURPOSE IN LIFE 44.50</td>
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<td>20.61</td>
<td>2.69</td>
<td>2.10 (.019)</td>
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<td>19.35</td>
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<td>MISSION IN LIFE 45.00</td>
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<td>20.71</td>
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<td>2.77 (.004)</td>
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<td>48</td>
<td>19.08</td>
<td>3.24</td>
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</tr>
<tr>
<td>SACREDNESS OF LIFE 73.00</td>
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<td>21.38</td>
<td>2.37</td>
<td>5.05 (.000)</td>
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<tr>
<td></td>
<td>50</td>
<td>18.57</td>
<td>3.17</td>
<td></td>
</tr>
<tr>
<td>MATERIAL VALUES 26.00</td>
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<td>21.53</td>
<td>2.77</td>
<td>5.93 (.000)</td>
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<tr>
<td></td>
<td>51</td>
<td>18.48</td>
<td>2.45</td>
<td></td>
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<td>ALTRUISM 36.00</td>
<td>54</td>
<td>21.17</td>
<td>2.61</td>
<td>4.39 (.000)</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>18.71</td>
<td>3.11</td>
<td></td>
</tr>
<tr>
<td>IDEALISM 54.00</td>
<td>52</td>
<td>20.59</td>
<td>2.96</td>
<td>1.80 (.038)</td>
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<tr>
<td></td>
<td>49</td>
<td>19.50</td>
<td>3.11</td>
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</tr>
<tr>
<td>AWARENESS OF THE TRAGIC 25.00</td>
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<td>20.65</td>
<td>3.05</td>
<td>2.59 (.006)</td>
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<tr>
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<td>47</td>
<td>19.11</td>
<td>2.98</td>
<td></td>
</tr>
<tr>
<td>FRUITS OF SPIRITUALITY 39.00</td>
<td>53</td>
<td>20.62</td>
<td>2.83</td>
<td>2.32 (.011)</td>
</tr>
<tr>
<td></td>
<td>49</td>
<td>19.20</td>
<td>3.31</td>
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</table>

Note: Column one lists the Spirituality indices followed by the corresponding median value used to divide each index into two groups of relatively high (H) and low (L) scorers. Shaded cells indicate \( p < .05 \).
Table 4. Inter-relationships Between Measures of Spirituality.

<table>
<thead>
<tr>
<th></th>
<th>EWB</th>
<th>RWB</th>
<th>SWBS</th>
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<tr>
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<td>.4056</td>
<td>.6695</td>
<td>.6542</td>
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<tr>
<td>(94)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
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<td>.2490</td>
<td>.5777</td>
<td>.4990</td>
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<tr>
<td>(105)</td>
<td>.010</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td><strong>MEANING AND PURPOSE IN LIFE</strong></td>
<td>.3451</td>
<td>.5380</td>
<td>.5538</td>
</tr>
<tr>
<td>(104)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td><strong>MISSION IN LIFE</strong></td>
<td>.4532</td>
<td>.5962</td>
<td>.6345</td>
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<tr>
<td>(106)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td><strong>SACREDNESS OF LIFE</strong></td>
<td>.3655</td>
<td>.4915</td>
<td>.4924</td>
</tr>
<tr>
<td>(103)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
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<td>.3546</td>
<td>.3612</td>
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<td>(106)</td>
<td>.005</td>
<td>.000</td>
<td>.000</td>
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<tr>
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<td>.4229</td>
<td>.3333</td>
<td>.4402</td>
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<td>(105)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
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<tr>
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<td>.4652</td>
<td>.4060</td>
<td>.5210</td>
</tr>
<tr>
<td>(102)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td><strong>AWARENESS OF THE TRAGIC</strong></td>
<td>.2020</td>
<td>.3184</td>
<td>.3309</td>
</tr>
<tr>
<td>(106)</td>
<td>.038</td>
<td>.001</td>
<td>.001</td>
</tr>
<tr>
<td><strong>FRUITS OF SPIRITUALITY</strong></td>
<td>.2863</td>
<td>.7083</td>
<td>.6126</td>
</tr>
<tr>
<td>(104)</td>
<td>.003</td>
<td>.000</td>
<td>.000</td>
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</table>

Note: Individual cells contain correlation coefficients, number of valid cases, and 2-tailed significant levels, respectively. Shaded cells indicate p < .05.
CHAPTER V
DISCUSSION

Support was obtained for all four hypotheses, and a dismantling strategy is now in order so as to clarify the obtained results. Since the SOI employs a multi-dimensional operationalization of Natural Spirituality, the observed relationship between Natural Spirituality and personality, both in quantitative and qualitative terms, might be better understood through further consideration of individual scales. Although psychometric considerations can always be addressed in regard to given findings, such a focus would be purely speculative pending additional empirical investigation. For this reason, the following points are theoretically oriented and are offered with the assumption that the SOI and SWBS are psychometrically sound.

In terms of the proposed negative relationship between Natural Spirituality and Neuroticism, strong support was found with the Existential Well-Being subscale (EWB) of the Spiritual Well-Being Scale (SWBS), a designated measure of Natural Spirituality. Identical results were also obtained with all indices of the SWBS, including the Religious Well-Being subscale (RWB), an index targeting Religious Spirituality rather than Natural Spirituality.
The significant relationship between Neuroticism and TOTAL SOI [a composite score based on the sum of all nine subscales of the Spiritual Orientation Inventory (SOI)] indicates a generalized consistency in regard to the negative association between Natural Spirituality and Neuroticism. In addition, the robust findings involving Fruits of Spirituality and Idealism (two of the nine SOI subscales) may speak to the psychological resources needed to experience spirituality as addressed by these two indices. Both indices involve a certain amount of mobilization or actualization of spirituality, the capacity to extend one's spirituality outward. Consistent with the theoretical view of spirituality as an integral and integrated aspect of personhood, the mobilization of spirituality may at times depend upon other psychological factors such as locus of control or self-esteem, for instance.

Moreover, this pattern of findings may be influenced by the typical developmental tasks faced by these subjects. For example, no significant effect was found for Mission in Life. Although this aspect of spirituality may involve a similar mobilization factor, the sense of "vocation" experienced by individuals scoring high on this scale is precisely that which is often being cultivated during this time of college education. Perhaps Mission in Life would be negatively related to Neuroticism in a more developmentally mature sample. Fruits of Spirituality and Idealism, on the other
may be relatively less influenced by developmental level, or perhaps this is a time in which this aspect of spirituality is notably profound. It will be important to broaden the sample to include representatives of several developmental levels.

The proposed positive relationship between Natural Spirituality and Positive Emotions was borne out with all indices save Awareness of the Tragic and Fruits of Spirituality. In the former case, Awareness of the Tragic may not be able to discriminate between those individuals who spiritually and gravely recognize suffering in this world—in a manner that furthers spiritual awareness and/or mobilization, and those individuals who dwell on negative aspects of their existence in a manner that detracts from their enjoyment of life. In addition, reading items having to deal with the suffering of mankind might have moved certain individuals in a way that affected their performance on the Positive Emotions facet (i.e., sensitization to pain and suffering might have affected, at that moment, one's experience of joy, thereby creating a halo effect). The rationale underlying a relationship between Natural Spirituality and Positive Emotions does not imply that Spiritual experience is exclusively related to joy, for the phenomenological value of joy may be influenced by the oppositional recognition of pain and suffering, and it is this
recognition which might be influencing Positive Emotion scores.

The lack of support for a relationship between Fruits of Spirituality and Positive Emotions is puzzling. If this finding persists in replication studies, it might be possible that Fruits of Spirituality shares some notable qualities with Awareness of the Tragic. Namely, the dialectical recognition of both joy and pain as inseparably related to human spiritual experience.

The proposed positive relationship between Natural Spirituality and certain elements of Openness to Experience, as defined by the mean of Aesthetics, Feelings, and Actions, was supported across the board. Little can be said at this point in terms of differentiating indices, but one interesting finding is worth mentioning.

One reason the theoretical focus on Natural Spirituality was emphasized was so that methodological confounds associated with inter-religious or inter-denominational comparisons might be avoided. It is therefore of special note that the two indices clearly associated with Religious Spirituality (i.e., RWB and SWB) were not significantly associated with the Openness personality variables. This finding is consistent with the theoretical view of Natural Spirituality as a relatively abstract manifestation of the endogenous spirituality process, representing an area of human experience
that can be generalized to those individuals not affiliated with traditional religions.

The fourth hypothesis suggested that preliminary support would be found for the construct validity of Natural Spirituality through demonstrating a significant correlation between two independent measures of Natural Spirituality, the SOI and the EWB subscale of the SWBS. Although a significant positive correlation was found between TOTAL SOI and EWB, it is interesting to note that TOTAL SOI was more strongly associated with SWB and RWB. TOTAL SOI and EWB shared 17% of the variance in this sample, whereas TOTAL SOI and SWB shared 43% of the sample variance. Finally, TOTAL SOI and RWB shared 45% of the variance in this sample.

The extension of Benner's model of spirituality (1988, 1989) acknowledges the overlap between Religious and Natural Spirituality, which would explain a significant correlation between TOTAL SOI and RWB, but the relative strength of the correlations between TOTAL SOI and all three indices of the SWBS is puzzling. In this sample, TOTAL SOI, a measure of Natural Spirituality (the most abstract theoretical content of the spirituality process), was more strongly associated with RWB (a relatively less abstract theoretical content) than EWB--another independent measure of Natural Spirituality.

One possible explanation for this anomaly centers on the unique characteristics of this sample. The performance of subjects affiliated with this particular institution may not
be similar to that of undergraduates from other academic settings. Because this study was conducted at a Jesuit university, with the preponderance of subjects identifying themselves as Catholic, a distinct brand of Religious and/or Denominational Spirituality may have been associated with this sample. Since Natural and Religious Spirituality are not viewed as mutually exclusive domains, but rather somewhat inter-dependent, it is possible that subjects understood or interpreted abstract items reflecting Natural Spirituality within their existing religious framework, thereby contributing to an inflated correlation between TOTAL SOI and RWB.

Such an explanation is also consistent with the aforementioned finding in which both EWB and RWB had a statistically identical negative relationship with Neuroticism. If indeed subjects understood or interpreted abstract items reflecting Natural Spirituality within their existing religious framework, it remains to be seen how a more pure representation of Natural Spirituality would relate to the various personality dimensions. In actuality, it is theoretically likely that Natural Spirituality, in relatively pure form, was somewhat represented in this sample. This potential confound does, however, underscore the need for replication with more spiritually and religiously heterogeneous samples.
Several other aspects of this study warrant special consideration, particularly in terms of sample characteristics, for these subjects represent a relatively narrow range of the normal population in several ways. First of all, females outnumbered males more than two to one, and although gender differences were not hypothesized to have an effect on the outcome of this study, it would be reasonable to cross-validate these findings on a sample that was gender balanced.

Secondly, the focus on college undergraduates targets individuals exemplifying a given age group and developmental level. It is quite possible that the experience of spirituality may differ in any number of ways throughout the course of the lifespan. Replication studies involving a more developmentally heterogeneous population are clearly in order.

Thirdly, since a distinct brand of Religious and/or Denominational Spirituality may have been associated with this sample, it is unclear whether this subject characteristic may have influenced the outcome. Unfortunately, the limited number of subjects with non-Catholic religious backgrounds precluded any valid analysis based on varying religious affiliation. However, some empirical evidence supports the internal validity of this sample. That is, SWBS data obtained from this sample is consistent with normative information provided by the test developers (Bufford, et al., 1991), thereby lending empirical backing to some measure of
representativeness concerning this sample, at least in regard to the distinct brand of Religious and/or Denominational Spirituality.

The entire theoretical notion of Natural Spirituality is one that cuts across religious or denominational affiliation, for spirituality itself presumably exists as an endogenous process. Although the manifestation of spirituality might be colored by experience, Natural Spirituality, in principle, represents a relatively abstract, and therefore highly generalizable, manifestation of this fundamental human process.

Several characteristics of these subjects underscore the need for replication with other varied samples, yet in one sense these same limitations may serve to bolster confidence in the findings. There is no reason to suspect, for instance, that a college sample would be particularly spiritual, if anything, the contrary might apply. And although there are justifiable validity concerns when considering the Catholic background of most subjects, there was variability in the extent to which such subjects rated themselves as following the beliefs and practices of their religious affiliation. Such robust findings in conjunction with these sample restrictions clearly stresses the need for cross-validation, yet also begins to lay an encouraging empirical foundation for an integral relationship between spirituality and personality.
At this point, the definition of Natural Spirituality has been elaborated and extended somewhat, yet overall this construct is still relatively vague. In addition to the importance of replicating this research with other samples, it is also necessary to broaden the comprehensiveness of this approach, thereby continuing to refine the definition and expand the construct validity of Natural Spirituality. For example, performance on the SOI and SWBS can be more extensively compared to other aspects of personality, either with the NEO-PI or other validated measures. The three hypotheses addressed in this study represent but a few of the possible relationships between Natural Spirituality and personality. The quest for behavioral referents of Natural Spirituality would also aid in construct development and potentially lead to alternative methods of measurement beyond these paper-and-pencil instruments. Interviewing subjects scoring relatively high and low on these measures might serve as a reasonable starting point in order to uncover behavioral differences associated with the manner in which one experiences spirituality.

Finally, ongoing psychometric study of both the SWBS and the SOI is necessary. Most notably, a factor analysis of the SOI is lacking, and it would be interesting to learn whether or not the factor structure of the SOI in any way parallels that of the SWBS. The establishment of normative information concerning the SOI is also crucial so that empirical analysis
can proceed beyond sample comparisons of relatively high and low scorers.

In conclusion, these findings need to be cross-validated with other samples representing a broader spectrum of the normal population. Other variables, developmental level in particular, might also be found to influence the relationship pattern between Natural Spirituality and personality. Moreover, this preliminary study addresses three hypotheses, but a more extensive comparison involving other aspects of personality is clearly in order. Finally, the construct validity of Natural Spirituality has been strengthened through demonstrating a significant association between two independent measures, yet further development of this construct is necessary. Continuing psychometric analysis of these instruments (particularly, a factor analysis of the SOI), the search for behavioral correlates, and ongoing theoretical consideration are all vital in order to more fully develop the construct of Natural Spirituality.

All in all, these empirical findings are consistent with the theoretical view of spirituality as an integral and integrated part of our very existence, and suggest the importance of considering a psychology of spirituality. As such, there are several clinical implications of a psychology of spirituality which can begin to be addressed.
Clinical Implications of a Psychology of Spirituality

A psychology of spirituality may have implications for clinical practitioners. Mental health professionals often believe that constructive consideration of their clients' spirituality is a matter best suited for the clergy. If a mental health professional senses that a client wishes to explore a spiritual issue or needs help with a spiritual crisis, the professional may explain to the client that such matters are beyond his or her expertise and may even suggest that the client seek the aid of someone who specializes in addressing spiritual issues.

At other times, if a client demonstrates his or her spiritual concerns, the mental health professional may consider such concerns to be a function of the client's psychopathology. The theoretical distinction has been made, however, between neurotic religiosity on the one hand, and spirituality as an endogenous aspect of our very existence on the other.

The data from the current study suggest an holistic understanding of spirituality; that is, one in which spirituality is seen as intimately tied to the individual's personality functioning and psychological development. Moreover, the saliency of spirituality may quite possibly vary throughout lifespan development, and this is a question for further theoretical and empirical consideration.
Such an understanding of spirituality is not meant to imply that all mental health professionals should begin to foster their clients' spirituality. It does suggest, however, that mental health professionals begin to form a greater awareness of the role of spirituality in their clients' lives. Development of such awareness may come, at least in part, from studies (the present one included) which attempt to investigate the relationship between spirituality and other basic human qualities, such as personality. The proposed psychology of spirituality, complete with an appreciation of spirituality as an integral and integrated part of our psychological being, can contribute to the professional's ability to achieve a more integrated and meaningful understanding of the client.

Peterson and Nelson (1987) point out that it is not necessary for the professional to share the same spiritual beliefs with the client, for awareness does not require the professional to validate the client's spiritual beliefs. Even without professional validation (nor disconfirmation), the dignity of the client will be upheld if they are allowed to feel that their concerns are legitimate and worthy of exploration.

As Benner (1989) has aptly noted in the case of psychotherapy, a spiritual or theological debate should not invade the therapeutic context, but a client's experience of spiritual or theological beliefs and practices (just like a
client's experience of any component of his or her life) can be openly and beneficially explored within the context of treatment. For instance, interpretation of the Bible does not belong in the realm of psychotherapy, but one's motivations and feelings regarding the Bible, or what it is like for a client to encounter the Bible, can be greatly relevant to treatment. Furthermore, it can be therapeutic for the client to simply know that another individual cares and understands that he or she is a spiritual being engaged in a personal spiritual quest.

Undoubtedly, there are times when a client's spirituality is distorted, as inferred by their overt behavior, while he or she is suffering from a disturbed mental or emotional condition (e.g., a delusional belief that one is Jesus Christ). This is not to suggest that an individual's spirituality has become corrupt, but that the psychological mediation thereof is in err, for behavior is overdetermined by the integrative and holistic functioning of several life aspects (e.g., biological, social, spiritual, etc.). Regardless, a tragic and erroneous generalization occurs when the spirituality of mental health clients is automatically associated with psychopathology. Such a conclusion seems to suggest that the client's psychopathology resulted in spiritual distortion, yet is it not also possible that spiritual distortion may have contributed to the observed psychopathology?
According to Peterson and Nelson (1987), the client's spiritual concerns may in fact be quite reasonable, or may even be an asset worthy of consideration in treatment planning. For example, distorted spirituality, or the behavioral manifestation thereof, may actually be construed as evidence suggesting the client has an awareness of, or a capacity to respond to, his or her own spirituality. Moreover, it is possible that helping the client to work through this distortion may unleash a tremendously powerful curative force.

Resting on the assumption that spirituality may be an agent of therapeutic change, identifying someone with an awareness of, or a capacity to respond to, his or her spirituality may have important treatment implications. Knowledge of such a client's personality style might also suggest a viable method for accessing the curative potential of their own spirituality. For example, an individual who is relatively introverted (Low E), experiences low trait anxiety (Low N), and has relatively high awareness of spirituality (High TOTAL SOI), might benefit from an insight-oriented therapeutic approach which allows that person to explore their spirituality in an introspective manner. The ideal combinations of personality, spiritual awareness, and psychotherapeutic approach is in itself a topic of theoretical and empirical consideration, but the essential point is that
there will likely be clinical merit to the development of a psychology of spirituality.

A psychology of spirituality may also have heuristic value for nonpsychologists. Spiritual counselors, for example, might employ an assessment battery which yields information about the client's personality and style of spiritually. Similar to the practical benefits afforded to psychotherapists, such information could aid counselors in developing a personal and more efficient strategy of spiritual growth for their client; since the best approach to spiritual growth may depend on the individual (Meadow, 1986).

In sum, a psychology of spirituality has both theoretical and applied clinical implications. Along with mental health professionals developing a greater awareness of, and openness toward, spirituality in their client's lives, psychologists may learn to cultivate the potential curative power of human spirituality. Practical advantages also exist for nonpsychologists, such as the development of an assessment technique which will enable spiritual counselors to best service their clients.
APPENDIX A
Demographic Questionnaire

Gender: __ Male   __ Female

Age: ___

Race: __ Caucasian __ African American __ Hispanic
      __ Asian __ Native American __ Other (specify)

Marital Status: __ Single __ Married __ Divorced
                 __ Widowed __ Separated

Year in College: __ Freshman __ Sophomore
                 __ Junior __ Senior __ Graduate

Religious Affiliation: __ Catholic __ Protestant __ Jewish
                       __ Moslem __ Buddhist __ Hindu
                       __ Other (specify)
                       __ Undecided __ None

How would you rate the extent to which you follow the
beliefs and practices of your current religious affiliation
(if applicable)?

1  2  3  4  5  6  7
  Do Not   Very Strongly
Follow   Follow
Have you maintained your current religious affiliation for your entire life?

____Yes ______No

Have you ever had a personally meaningful spiritual experience?

____Yes ______No

If yes, please describe your most significant spiritual experience.

Please describe briefly the development of your present religious affiliation. In other words, what life events led you to your current religious position?
REFERENCES


VITA

Paul Yavornitzky, the son of John Yavornitzky and Olga (Cyb) Yavornitzky, was born May 2, 1966, in Lorain, Ohio.

His secondary education was completed in 1984 when he graduated from Southview High School, Lorain, Ohio. His college education began at Lorain County Community College, Elyria, Ohio, where he obtained an Associate of Arts degree in 1986. He then attended Cleveland State University, Cleveland, Ohio, where he obtained a Bachelor of Arts degree in Psychology in 1988.

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The final copies have been examined by the director of the thesis and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the thesis is now given final approval by the Committee with reference to content and form.

The thesis is therefore accepted in partial fulfillment of the requirements for the degree of Master of Arts.

Date: 8-10-92

Director's Signature