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Abstract

Though psychologists' interest in the empirical study of spirituality has resurfaced, diverging opinions regarding the meaning of the construct among both researchers and the general public pose a serious challenge to research. To expand knowledge regarding how individuals implicitly define the term, an idiographic, experimental approach called *policy-capturing* was utilized to determine what factors college students take into consideration when making determinations about others' spirituality. Participants were exposed to a series of 50 profiles describing hypothetical people, each of which contained a unique combination of different levels of five factors believed to characterize spirituality by researchers. Participants rated each profile to indicate degree of perceived spirituality. Regression analyses were utilized to reveal if individuals used the factors in a consistent manner when rating the profiles, as well as the relative importance of each factor in their policies of spirituality. Results indicated that consistency of policies and the importance placed on individual factors varied widely. No differences were found between more religious and less religious college students with regard to ratings of spirituality assigned to the profiles, consistency of policies of spirituality, the relative importance of any of the five spirituality factors, or the number of factors that were important in the policies. Findings support the idiosyncratic nature of the meanings attributed to spirituality, but call into question whether college students are consistently using the same definitional models of the construct as used by researchers. The discussion highlights the conceptual challenges that researchers of spirituality face and encourages the use of varied methods for continued investigation in this area.

Exploring Policies of Spirituality among College Students

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DISSERTATION

Submitted in partial fulfillment of the requirements for the degree of
Doctor of Philosophy in Clinical Psychology
in the Graduate School of Syracuse University

August 2012

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Exploring Policies of Spirituality among College Students

Psychologists have become increasingly intrigued over the past few decades with the potential for research in spirituality to provide new dimensions to our understanding of human experience (Moberg, 2002; Rich & Cinamon, 2007; Zinnbauer et al., 1997). Initial research has fueled excitement by implicating that religion and spirituality may be indispensable avenues for advancement in core areas of psychological inquiry

For instance, though religion and spirituality are associated with traits comprising aspects of traditional theories of personality, (Hills, Francis, Argyle, & Jackson, 2004; Saroglou, 2002; Wink, Ciciolla, Dillon, & Tracy, 2007), they represent an aspect of personality that is not fully accounted for by these models (Hills et al., 2004; Latha & Yuvaraj, 2007; MacDonald, 2000; Mascaro, Rosen, & Morey, 2003; Piedmont, 1999; Saucier & Skrzypinska, 2006). Piedmont (1999) used hierarchical regression to reveal that spirituality's independent contribution to the prediction of some outcomes (e.g. perceived social support and sexual attitudes) was equivalent to and separate from that of qualities contained in the Five-Factor Model of Personality (i.e., openness, conscientiousness, agreeableness, extraversion, neuroticism). Additionally, the incorporation of spirituality into psychological interventions shows promise for promoting positive change in psychotherapy (Post & Wade, 2009), rates of cancer screening (Darnell, Change & Calhoun, 2006; Powell et al., 2005), and as a protective factor against suicide (Taliaferro, Rienzo, Pigg, Miller, & Dodd, 2009). Further, Hill et al. (2000) delineate several important ways in which spirituality and religion are critically relevant to psychology, including spirituality as a developmental phenomenon and its relationship to positive social functions.

Despite the promise spirituality shows as an area of inquiry, the definitions researchers use vary widely, and may differ from those implied by common usage of the term. This paper contributes to the discussion about what spirituality means by presenting the results of a study examining how college students implicitly define spirituality. The first section provides background on psychology and spirituality, including historical considerations and a review of research relevant to conceptualization and measurement. The next sections describe the design and results of a study to determine what factors college students take into consideration when making determinations about the degree of spirituality present in others. Finally, the paper discusses the results in context of the broader dialogue regarding the conceptualization of spirituality in research.

Historical Underpinnings

Psychologists' current interest in spirituality is not novel, but rather a reemergence of interest in studying transcendent experience that began with prominent early figures in the field, such as James, Hall and Freud (see Freud, 1927/1964; Hall 1917; James 1902/1985) but waned during the heyday of behaviorism (Hill et al., 2000). In this early work, the terms *spirituality* and *religion* were used interchangeably. Interest in studying spirituality as a concept separate from religion represents a cultural shift wherein individuals believe that spirituality can be pursued outside of the context of institutional religion (Roof, 1993; Turner, Lukoff, Barnhouse, & Lu, 1995). Roof's (1993) study of over 1,000 members of the baby-boomer generation, revealed a large defection from organized religions in the 1960s and 1970s. People Roof termed "highly active seekers" tended to create their own individualistic spirituality apart from

institutional religion. Rates of church membership have consequently declined during the latter half of the 20th century (Zinnbauer, Pargament, & Scott, 1999). The American Religious Identification survey (Kosmin & Keysar, 2009), which surveyed over 54,000 American adults, indicated that although Americans primarily self-identify as Christian, they are gradually becoming “less Christian”, with an increase in the percentage of individuals who do not affiliate with any organized religion. Accordingly, practices considered “spiritual” by their adherents have risen in popularity, including Eastern, Native American, feminist, twelve-step and ecological spiritualities, as well as interest in yoga and transcendental meditation (Zinnbauer et al., 1999).

The reasons that spirituality and religion were temporarily afforded less attention as the behavioral paradigm gained popularity seem to mirror the current struggle for researchers of spirituality. Early behaviorists contended that for psychology to be a legitimate science, the subject of its investigation must be objectively observable and measurable (Thorne & Henley, 2005). Spirituality, however, is not easily operationalized or quantified (Ellison, 1983). Like other phenomena common in our vocabulary and experience, such as love, grief or wisdom, it resists the confines of scientific investigation. As will be explicated below, spirituality is a highly personal experience that is understood in somewhat idiosyncratic ways by both researchers and the general population, leading to notable divergence in conceptualization and measurement of the construct. Researchers struggle to find methods that seem valid to the scientist, but also remain faithful to how the construct is used by believers in the particular religious or spiritual community. Therefore, for a science of spirituality to advance, it must strive to use the rigor of empirical methods while remembering the richness and complexity of its

subject. Data regarding conceptualization and measurement of spirituality suggests that researchers are struggling to meet these standards.

Conceptualization

What is spirituality, and how does it differ from religion? Though the answers remain elusive, some insight into these most basic questions can be drawn by integrating information from various sources, including historical considerations, as well as quantitative and qualitative research. Note that because religion and spirituality are not defined consistently, the discussion that follows attempts to use the terms in accordance with the different meanings attributed to them by those whose work is being discussed.

Spiritual but not religious?

William James (1902/1985) was the first to assert in his famous series of lectures, *The Varieties of Religious Experience*, that personal religious experience could rightly be considered a subject of psychology. He contrasted personal religion from institutional religion, defining the former as “the feelings, acts, and experiences of individual men in their solitude, so far as they apprehend themselves to stand in relation to whatever they consider divine” (p. 34). James emphasizes the personal, rather than institutional nature of religious experience, and the legitimacy of various possible understandings of the transcendent. His understanding of personal religion resembles the way in which some would currently use the term *spirituality*. Not everyone, however, was convinced regarding the merit of splitting religious experience from organized religion. Hibben (1903), an early critic of James’ work argued that the study of *institutional* religion must be incorporated into any psychological study of the phenomenon, since these institutions are both the sphere of religious activity and the result of religious convictions. He writes,

“If there is to be a science of religion, it must deal in its inductive investigations with the various forms of institutional religion.” (p. 184).

Gordon Allport seemed to agree with James regarding the importance of focusing on the individual’s unique inner experience of religion, but understood the experience as occurring within the context of organized religion. Allport (1952) proposed that religion may be a heterogeneous construct, with two types of religiosity separating the truly committed from the more utilitarian (Van Wicklin, 1990). He thus created a dichotomy between those who use religion as a means (*extrinsic orientation*), and those who view religion as an end in itself (*intrinsic orientation*). Individuals with extrinsic religious orientation utilize religion for the benefits it provides, including safety, acceptance, respect and justification for their decisions. Those with an intrinsic orientation, however, consider religion to be personally meaningful and ultimately valuable in its own right. James and Allport both believed that certain forms of religion (personal and intrinsic, respectively) would be associated with personal well-being and socially-desirable values. Indeed, research has largely confirmed these predictions. For instance, intrinsic orientation is related to positive mental health (Lotufo-Neto, 1996; Smith, McCullough & Poll, 2003), and reduced cardiovascular reactivity associated with exposure to an interpersonal stressor (Masters, Hill, Kircher, Benson & Fallon, 2004).

Similar to the distinctions made by these early theories, the terms *spirituality* and *religion* are no longer considered synonyms – at least not to everyone. Both psychologists and the general public recognize that our language in this area is rapidly changing, but neither group seems to have reached consensus regarding the meaning of

spirituality and its relationship to religion. Further, data regarding spirituality in common usage can be contrasted with its meaning in research contexts.

Spirituality in common usage.

Despite the importance of accurate conceptualization for valid measurement, studies on the meanings attributed to spirituality are fairly limited (Zinnbauer et al., 1997), and no true lexical study has been conducted (Hufford, 2005). A few important conclusions drawn from available data, however, provide preliminary information regarding the public's understanding of spirituality. First, despite the decline in church membership, most people consider themselves to be both religious and spiritual. The General Social Survey indicated that 61% of Americans surveyed considered themselves to be moderately or very religious, and 70% believe in life after death (Idler et al., 2003). Shahabi et al. (2002) obtained similar results with a stratified national sample in which 52% identified themselves as both religious and spiritual, and only 28% considered themselves to be neither. Similarly, Zinnbauer et al. (1997) found that 74% of participants of varying religious affiliations and ages identified themselves as both religious and spiritual, and only 3% identified as neither. Interestingly, the same study found that self-rated religiousness and spirituality were only modestly correlated ($r = .21$).

Research with college students has yielded similar results. The Higher Education Research Institute (2005) conducted a large-scale investigation of the spiritual life of college students that included a final sample of 98,593 first-year students from 209 institutions across the United States. Most students endorsed items indicating the importance of spiritual and religious concerns in their lives. For instance, 80% reported having an interest in spirituality, and 64% agreed that their spirituality was an important

source of joy. Regarding religiousness, 69% reported that their religious beliefs provide strength, support and guidance.

Second, though it seems religion and spirituality are often experienced together, a significant minority of individuals identify themselves as spiritual but not religious. For instance, 10% of individuals in a stratified national sample identified themselves as being only spiritual (Shahabi et al., 2002). Woods and Ironson (1999) reported a much larger percentage, 43.3%, of individuals with serious medical illnesses ($N = 60$) identifying as spiritual but not religious. Similarly, Marler and Hadaway (2002) reported on their 1991 study in which 18% of respondents identified as spiritual but not religious.

Third, religion and spirituality are different, but overlap significantly. Zinnbauer et al. (1997) recruited 11 samples of individuals ($N = 346$) from various churches, institutions and age groups that were likely to differ regarding definitions and self-ratings of religiousness and spirituality. When participants were given options regarding the relationship of religion and spirituality, the most popular choices were, “religiousness and spirituality overlap but they are not the same concept” (41.7%), and “spirituality is a broader concept than religiousness, and includes religiousness” (38.8%). Most respondents in this study saw both religiousness and spirituality as positive qualities. Marler and Hadaway (2002) emphasized the similarities between the concepts, arguing that difference between “being religious” and “being spiritual” in America is not “a zero-sum proposition”. Based on content analysis of 49 transcribed interviews of marginal Protestants, the authors reported that 63% of respondents believe that religion and spirituality were different and interdependent concepts. In the same study, 28% saw no

difference between the terms, and only 8% believed they were different and independent concepts.

Fourth, available research indicates that the content of people's definitions of spirituality and religion varies widely. Zinnbauer et al. (1997) conducted a content analysis of 305 individuals' definitions of the religion and spirituality, which produced 13 content categories and 4 categories for nature of the sacred. Common themes for definitions of spirituality included feelings of connectedness with a higher power (36%) and personal beliefs in a higher power (34%). Interestingly, the most common element in definitions of religion also included belief in a higher power (22%). Further evidence indicating an overlap in individuals' conceptualizations of the constructs includes the finding that 70% of spirituality definitions referred to traditional concepts of God, Christ and the church as constituting what is sacred. However, organized religious practices (21%) and commitment to organized beliefs (16%) were common elements in definitions of religiousness but not spirituality. Rich and Cinamon (2007) conducted a qualitative study using semi-structured interviews with 36 Arab and Jewish Israeli late adolescents, which included questions regarding the nature of spirituality, its relationship to religion, and characteristics of individuals that participants deemed to be spiritual. Though general agreement was found regarding transcendence as the essential element of spirituality, and the authors emphasize the surprising similarities between cultural, religious and gender groups in their understanding of spirituality, some significant discrepancies were reported. For instance, Jewish adolescents, compared to their Arab counterparts, tended to emphasize the cognitive component (i.e. "search for meaning" and "change in perspectives") of spirituality. Further, respondents' conceptions of

spirituality showed only relatively low correspondence with components of spirituality as proposed in existing psychological theory, and this phenomenon will be discussed below in greater detail.

Additionally, two policy-capturing studies (Pargament, Sullivan, Balzer, Van Haitsma, & Raymark, 1995; Zinnbauer & Pargament, 2002), which will be discussed later in greater detail, used statistical analysis to characterize the policies or rules individuals use when evaluating others' level of religiousness or spirituality. The studies asked participants to rate various profiles of hypothetical people that were designed to differ on various "cues" theorized to reflect elements of religion or spirituality (e.g. personal meaning, involvement with organized religion & sacred connection). Both studies indicated that individual participants held organized, coherent policies to evaluate level of religion and/or spirituality – but that policies were not consistent across participants. Pargament et al. (1995) found that only one cue was utilized in the determination of religiousness for the majority of students and clergy, but the cue differed between groups. Similarly, Zinnbauer and Pargament (2002) found that policies differed significantly between nurses and clergy, with clergy acknowledging more overlap between religion and spirituality than nurses. Additionally, no cue was consistently used by a majority of nurses to rate spirituality. For both studies, involvement with religious institutions and practices appeared to be a salient factor in determining level of religiousness. In an effort to integrate varying notions of religion and spirituality, Emblen (1992) reviewed words associated with religion and spirituality as commonly used in the nursing literature. Based on 68 key words, he defined spirituality as "a personal life principle which animates a transcendent quality of relationship with God" (p. 45).

In summary, the data indicate that most people identify themselves as spiritual, which they perceive as related to, but not the same as, religious. A search for the sacred is presented as a critical element of both orientations, but religiousness tends to imply involvement with institutionalized practices, groups and beliefs.

Spirituality in research.

Consistent with trends in common usage, spirituality is not defined consistently among psychologists – even being referred to as a “fuzzy” concept (Zinnbauer et al., 1997). In fact, Hill et al. (2000) highlight the general lack of systematic conceptualization of spirituality and its relationship to religiousness. Scott (1997, as cited by Zinnbauer et al., 1999) conducted a content analysis of 31 definitions of religion and 40 definitions of spirituality appearing in scientific literature during the preceding century. The analysis yielded nine categories, none of which accounted for the majority of definitions. Common themes included connectedness or relationship, behaviors reflecting sacred or secular beliefs, belief in something transcendent, existential questions, and references to institutional structures.

Similarly, Cook (2004) performed a descriptive study of 265 published books and papers on spirituality and addiction in an effort to understand how the term is utilized by clinicians and researchers who publish in this area. Incredibly, only 12% of papers provided an explicit definition for the term *spirituality*. Thirty-two percent of papers simply offered a “description” of spirituality and 11% defined a related concept. In 42% of papers, spirituality was left completely undefined, and only nine of these papers acknowledged that spirituality was too difficult to define or was intentionally left undefined. Analysis of the papers that did provide a definition or description of the

concept produced 13 definitional components, the most common of which were relatedness and transcendence. Cook provides a table illustrating the diversity in definitions/descriptions uncovered in the review. Berenson (1990), for example, offers the following description: “Spirituality, as opposed to religion, connotes a direct, personal experience of the sacred unmediated by particular belief systems prescribed by dogma or by hierarchical structures of priests, ministers, rabbis, or gurus” (p. 59). Contrast this with Booth’s (1987) definition of spirituality as ““being a positive and creative human being in all areas of our life” (p. 27). The value of definitions such as the latter is questionable for scientific-psychological study of spirituality, because they can hardly be differentiated from a description of good mental health. Accordingly, Cook describes the conceptualizations in the study as “diverse, confusing and conflicting” (p. 547).

Despite the diversity in psychologists’ conceptualizations, some papers (e.g. Hill & Pargament, 2003; Zinnbauer et al., 1997; Zinnbauer et al., 1999) have outlined important trends in the literature. For instance, religion is often narrowly-defined as associated with institutions whereas spirituality is not. Religion is also considered external, whereas spirituality is associated with personal experience. Additionally, spirituality is now defined by its function, but religion by its substance (e.g. spirituality may be defined as a force that allows individuals to find meaning and purpose, and religion as involvement in institutional practices). Finally, there seems to be an inclination to view religion as the “bad”, and spirituality as the “good”, orientation toward the transcendent. Spirituality has acquired the connotation of a healthy, freeing path toward communion with the sacred, whereas religion is viewed as a potentially restrictive barrier

to these experiences. Because these connotations are largely inconsistent with common usage of the terms, and empirical research on the relationship of religion to health (Hill & Pargament, 2003), Zinnbauer et al. (1999) referred to this trend as “watered down scholarship and poor science” (p. 905). One wonders if seeing spirituality as more healthy than religion may reflect bias against religious institutions on the part of psychologists, who tend to be considerably less religious than the general population (Bergin & Jensen, 1990; Delaney, Miller, & Bisonó, 2007; Sheridan, Bullis, Adcock, Berlin, & Miller, 1992). Zinnbauer et al. (1999) actually recommend retaining the use of the term religion rather than spirituality in research to avoid a narrow, negative view of the construct, and due to concern about hastily changing terminology to fit with potentially ephemeral cultural changes.

The reality, however, is that these terms are separated in both psychological literature and our language, and researchers have attempted to make explicit recommendations regarding conceptualization based on some of the observations noted above. For example, Hill and colleagues (2000) proposed a set of criteria for use in evaluating any definition or measure of these concepts. They argue that both religion and spirituality should include “the feelings, thoughts, experiences, and behaviors that arise from a search for the sacred” (p. 66). The *search* includes “attempts to identify, articulate, maintain, or transform”, and *sacred* refers to “a divine being, divine object, Ultimate Reality or Ultimate Truth as perceived by the individual” (p. 66). Religion, however, may additionally include the search for non-sacred goals (e.g. belonging, identity), and must include “the means and methods of the search... that receive validation and support from within an identifiable group of people” (p. 66).

In conclusion, a variety of conceptualizations are employed in researching spirituality. Current trends in these definitions, however, suggest that they are potentially inconsistent with the meaning of the term in common usage.

Measurement

Quantitative research hinges on adequate measurement. However, the quality of spirituality measures cannot be known fully without a cohesive body of information regarding the meaning of the concept that is being assessed – and in that regard the field appears to be quite impoverished indeed. Quality aside, the psychology of spirituality enjoys an abundance (perhaps an overabundance) of measures. In fact, Gorsuch (1984) argued over 25 years ago that the field had little need for new instruments. Hill and Hood (1999) compiled a volume reviewing 125 measures of religion and spirituality, which were separated into numerous categories, such as beliefs, faith development and religious orientation. Similarly, Hill (2005) discussed available religion and spirituality scales using a hierarchical organizational structure with two superordinate levels, *Dispositional Religiousness or Spirituality* and *Functional Religiousness or Spirituality*, and 12 subordinate levels. MacDonald, LeClair, Holland, Alter, and Friedman (1995) provided a descriptive review of 20 measures of spirituality and transpersonal constructs that were selected based on their uniqueness in comparison to other available instruments, as well as their ability to represent transpersonal constructs in a way that is not significantly confounded with religious concepts. MacDonald et al. (1995) also list over 50 additional measures of transpersonal constructs not included in the review. MacDonald, Friedman, and Kuentzl (1999; MacDonald, Kuenzel, & Friedman, 1999) compiled a two-part research update as a sequel to the original review. Part one summarizes new research on

each of the previously-reviewed measures. Part two discusses 10 other scales in detail, and lists 28 additional measures not mentioned in the other papers. Beyond the lack of consistent methods implied by the vast array of measurement options, instruments have been criticized on a number of grounds, including sampling bias, self-report bias, ceiling effects, validity concerns, and especially difficulties in conceptualization (Hill, 2005; MacDonald et al., 1995; Slater, Hall, & Edwards, 2001).

A recent paper (Kapusinski & Masters, 2010) provided a critical review of scale development practices for 24 new and frequently-utilized instruments with a focus on conceptual issues. Though conceptualization of spirituality varied widely, certain common elements were identified. First, communion with the sacred, or a search for the sacred, was emphasized in 67% of definitions. The most common words used to reference the sacred were “God” and “transcendent”, but all of the following were also used: “sacred”, “higher/greater power”, “one’s higher being”, “supernatural”, “Divine”, “Ultimate”, and “nonobservable life forces”. Additionally, several conceptualizations make reference to life forces or a search for truth that do not clearly transcend the natural world, or even a force outside oneself. Second, almost all definitions include references to cognitive or emotional components of spirituality, but the specific types varied widely. Several articles mentioned beliefs/values, perceptions, identity, feelings and awareness. Other terms included “agency”, “connection”, “appreciation”, “conviction”, “love”, “reverence”, “closeness”, and “satisfaction”. Third, reference to religion or institutional beliefs or practices was utilized in about one-third of the definitions, and several included behaviors as a critical part of spirituality (i.e. prayer, meditation and paranormal practices).

The review also noted the relative lack of inductive methods involving non-experts to inform the process of item generation and revision. Only two studies reported utilizing informal discussion with respondents and researchers to create items, and a minority of studies used focus groups, interviews or respondents' comments to revise items.

Conclusions and Current Study

Though spirituality has shown promise as a topic for quantitative research, conceptualization is hindered by diverging opinions regarding the definition of spirituality among researchers and non-researchers alike. These conclusions, however, were drawn from the relatively small number of studies available that address individuals' understanding of the construct. Since we cannot confidently measure what we cannot define, a logical step for improving the study of spirituality is to gather more information about what factors individuals perceive as composing one's spirituality. Specifically, we should explore how the conceptualizations used in research relate to the conceptualizations of non-scientists, i.e., the "everyday person" who may become a participant in the research. Miller and Thoresen (2003) argue that since spirituality evades strict definitions, scientific operational definitions are likely to differ from the way in which people typically use the term. They write,

Scientists study beliefs or feelings or perceptions about spirituality, or they study behavioral practices and effects related to religion, all of which, from the believer's perspective, are essentially physical manifestations that fall far short of representing or comprehending the real thing, the essence of what is experienced as spirituality (p. 27).

Obtaining information on the meaning of spirituality to non-scientists, however, necessitates research with features that differ somewhat from the typical group-level quantitative inquiries common in psychology. Though relatively rare, even in the psychology of spirituality (see Aten & Hernandez, 2005), designs that value idiographic, exploratory and qualitative inquiry are highly appropriate, and perhaps indispensable, due to their greater capability for capturing the depth and breadth of individual experience. The divergence of opinion outlined above suggests that exploratory research *at the level of the individual* may provide valuable insights to inform measurement and group-level research. Hufford's (2005) comments on spirituality in scientific usage versus natural language provide a poignant reminder of the limits of strict positivist methods:

To the extent that operationalized definitions meet the conceptual criteria of investigators, they often lose the meanings that they have in ordinary speech. The result is equivocation and loss of validity. The S/R literature often seems to suggest that investigators are seeking the *correct* meaning of these terms with the assumption that their colloquial usages are somehow incorrect, mistaken like colloquial use of "virus" to mean "germs" in general. But for naturally occurring language the only correct meanings are those found in customary usage, and the correct meaning, as Emblen concisely points out "depends on how the ambient community commonly uses the terms". (p. 8)

Policy-capturing.

The current study, therefore, employed a primarily idiographic, but experimental, approach called *policy-capturing* (also referred to as *judgment analysis*) to investigate how college students differentially use a variety of factors to make intuitive decisions

about people's level of spirituality. Policy-capturing is a regression-based technique that is used to investigate how individuals weigh and integrate various pieces of available information to make a decision (Aiman-Smith, Cooksey, 1996; Karren & Barringer, 2002; Scullen, & Barr, 2002). Factors, called *cues*, are selected for use as the independent variables, each of which has two or more levels. Judges are then presented with a series of hypothetical profiles or scenarios, wherein every profile represents a different combination of the factor levels, and asked to make the same type of judgment for each profile. For instance, a marketing researcher studying consumer preferences for a food product may create profiles of hypothetical products that combine different levels of cues such as price, size, nutritional value and convenience, and ask judges to report how likely they would be to buy each product. Though designs with few cues may use a full factorial design where all possible combinations are shown to each judge, the more common method is to select a large random subset of all possible profiles, as full factorial designs may be too taxing on participants (Cooksey, 1996).

A separate regression equation is then computed for each judge by regressing the responses on the cues. The equations provide information regarding consistency of judgment (variance explained by cues) and relative importance of the cues (using *cue weights* computed using regression coefficients). Results can be used to formulate hypotheses about individual differences in policies, compare cue importance between known groups, and identify clusters of individuals with similar policies (Karren & Barringer, 2002).

Two studies mentioned earlier (Pargament et al., 1995; Zinnbauer & Pargament, 2002) have utilized policy-capturing within the field of psychology of religion.

Pargament et al. (1995) reported the results of two studies involving 27 college students and 22 clergy, which asked participants to rate 100 hypothetical profiles on a 9-point religiousness scale. The profiles contained 10 cues (e.g. church attendance, personal benefits, financial behavior), each with three levels (high, moderate and low). Zinnbauer and Pargament (2002) applied the approach to examining policies of both religiousness and spirituality in a study involving 21 clergy and 20 nurses. Participants rated the same 60 profiles for each outcome variable, which contained four religiousness cues and four spirituality cues, each with three levels. The spirituality cues included: personal/existential meaning, spiritual experiences, sacred connection, and spiritual disciplines. For both studies, individual and group differences in cue usage were abundant. Results of the latter study indicate that individuals' policies for religiousness and spirituality were not the same. Zinnbauer and Pargament (2002) also reported statistically-significant differences between nurses and clergy in their usage of three cues in their policies of spirituality (i.e. formal/organizational religion, personal religious practice and sacred connection). Further, policies of religiousness used fewer cues and were more consistent than those for spirituality.

Interestingly, Pargament et al. (1995) also asked participants to explicitly identify the weight that each of the 10 cues had in their definitions of spirituality, by dividing 100 points among the cues in proportion to their importance. These "subjective weights" were compared to the cue weights obtained through regression analyses of their profile ratings. Results indicated that the subjective weights were a poorer predictor of ratings than those obtained through statistical analysis. It seems that individuals' sense for how they define spirituality may be discordant with their actual use of the term.

Contribution and hypotheses of present study.

The factors selected for the current study of spirituality policies among college students were consistent with those identified as frequently-used to conceptualize spirituality in the measurement literature (Kapuscinski & Masters, 2010). College students are the most commonly-utilized group in scale development studies (Kapuscinski & Masters, 2010), and are therefore an ideal sample for determining if and how elements of spirituality commonly proposed in research are naturally utilized when making judgments about the construct. Further, students identifying as more religious were compared with their less religious counterparts in an effort to identify important group differences in policies that may be relevant to selection and development of measures for research. In summary, this study differed from Zinnbauer and Pargament's (2002) study regarding the method for selecting cues, sample, and groups compared. This project is the first to investigate how the definitional models driving measurement of spirituality in research are used by the population most often recruited as research participants. Therefore, the study not only explores the issue of idiosyncrasy in conceptualization of spirituality, but uses methods that allow for some comparison between scientists and non-scientists in this regard.

The following exploratory hypotheses reflected the overall prediction that individuals have consistent but differing policies of spirituality: (1) Individual policies of spirituality can be captured (i.e. each participant will use cues consistently), (2) Participants will demonstrate a broad range in number of cues utilized (3) Individuals within both the more religious and less religious group will show low agreement on ratings of spirituality and the importance of cues and (4) More religious and less religious

students will differ regarding the relative importance of cues for making judgments of spirituality. To summarize, I predict that individuals will be internally consistent in their use of cues. However, I expect that within both the more religious group and the less religious group, individuals will show low agreement on ratings of spirituality and cue importance. Additionally, I predict that cue importance will differ between groups.

Method

Participants

Participants were undergraduate college students ($N=104$) at Syracuse University enrolled in introductory psychology courses. The students were offered course credit in exchange for their participation. Several factors were considered in deciding on the number of participants to include in the study. Because policy-capturing is primarily used idiographically, studies derive their experimental utility based on number of profiles and cues utilized rather than number of participants (Aiman-Smith et al. 2002; Cooksey, 1996; Karren & Barringer, 2002). Samples are commonly less than 50 (Karren & Barringer 2002), as time must be devoted to conducting a series of analyses for each individual. More importantly, as the number of participants grows, the tables displaying individuals' results become large and unmanageable, making visual exploration of the data for identification of important patterns difficult. Statistical power, however, must be considered for the current study in relation to the planned comparisons between more and less religious students. Regarding power analysis for studies using a policy-capturing methodology, Cooksey (1996) explains that because many within-subject observations contribute to the data used to compare groups, "Nomethetic comparisons in a Judgment Analysis study can achieve a power level equivalent to traditional versions of the test

(which use data based on single observations) with fewer observations per group” (p. 134).

To inform the power analysis, effect sizes were calculated from the means and standard deviations of cue weights reported for the two groups in Zinnbauer and Pargament’s (2002) paper. The majority of effect sizes were medium to large (medium = .30 - .80 and large = .80 or greater) according to Cohen’s (1988) criteria. Therefore, in an effort to accommodate the needs of both the individual and group analyses, an effect size between medium and large ($d = .60$) was selected for power analysis. Required sample size was calculated using G*Power Version 3 with $d = .60$, $\alpha = .05$ and a power of .80. Sample size calculations yielded a total N of 90 (45 minimum per group). In Zinnbauer and Pargament’s (2002) study, 10% of respondents were excluded from further analyses due to low Multiple R values. Planning for similar results, a total of 104 participants were recruited for the current study.

Participants were predominantly female (69%). Ages ranged from 18-53 with a mean age of 20 ($SD=5.5$), a median of 19, and mode of 18. The sample was racially diverse, and included individuals who were Caucasian (60%), Asian-American (27%), African-American (6%), Hispanic (6%), Arab-American (1%), and Multi-racial (1%). Seventy percent of the sample reported having a religious affiliation, the most common of which were Catholic (28%) and Jewish (17%). Participants also identified as Protestant (9%), Buddhist (5%), Muslim (1%) and “Other” (11%). On average, participants rated themselves as moderately religious and spiritual, with the entire range of possible responses to these items represented by the sample. The mean response for religious

attendance indicated that participants attend religious services between once or twice per month and once per week. However, 29% reported never attending religious services.

Selection and Development of Cues

Cue selection.

The conceptualizations used to design 24 measures of spirituality (Kapuscinski & Masters, 2010) were examined to identify common themes. Though many options were available, five elements were selected for use in the current study in accordance with Aiman-Smith et al.'s (2002) recommendations regarding the number of cues to include in policy-capturing studies. Thus, though the following cues are not exhaustive, they were designed to be representative of the observed themes: *sacred searching* (communion with or search for the sacred – e.g. God, the transcendent, the Divine), *emotional benefits* (positive feelings associated with search for the sacred, such as faith, connection, agency, appreciation, satisfaction, peace and love), *cognitive benefits* (special knowledge associated with the sacred search regarding meaning/purpose, identity or beliefs/values), *religious involvement* (affiliation and engagement with a formal religious institution), and *spiritual practices* (personal activities designed to facilitate the other elements, such as meditation, prayer, yoga, rituals or paranormal practices). For each cue, three levels were included to represent high, moderate and low levels of the quality. It is important to note that the research from which these elements were derived principally involved researchers and participants from Western cultures, and therefore results obtained from the present study may reflect spirituality within a Western worldview.

Development of cue statements.

A two-step process was used to help ensure the validity and quality of the statements used to represent each level of each cue. First, undergraduate students ($n=10$) were recruited to participate in two consultation groups, one consisting of five men and the other of five women. Participants ranged in age from 18 to 21, with a mean age of 20. Fifty percent of participants identified as Asian-American, and 50% as Caucasian. After consent procedures, participants were asked to complete a brief demographics survey (Appendix A). I then described the purpose of the study as outlined in Appendix B. Within the context of a semi-structured qualitative interview (Appendix B), participants were asked to describe individuals with varying levels of the five theorized elements of spirituality noted above. The sessions were audio-recorded for the purposes of reviewing and analyzing the information. Participants were provided with numbers to wear so that they were not identified by name on the recording. Responses were utilized to identify important themes and language used by the participants when describing elements of spirituality to aid in development of the materials for the main phase of the study. Based in part on results of the consultation groups, three statements were generated for the three levels of each of the five cues to represent high, moderate and low values – yielding a total of 45 statements.

The second step in developing the cue statements involved two stages of consultation with graduate student colleagues. In the first stage, five raters were asked to place each statement into the cue category it seemed to best represent (e.g. religious involvement, cognitive benefits etc.). The 38 statements that were correctly sorted by four of the five raters were retained, as well as two items that were edited based on rater feedback. In stage two, five different raters were asked to determine if each of the 40

remaining statements best represented a high, moderate or low value of the cue it was intended to measure. The 39 statements for which the correct level was selected by four of the five raters were retained for inclusion in the profiles. To increase variety and believability of the profiles, if multiple statements representing the same level of a cue were still available, they were used interchangeably in the creation of the experimental materials. For example, both of the following statements were used to represent a low level of religious involvement: 1.) (*Name*) grew up with parents who considered themselves to be atheists, and has never attended any type of religious service, and 2.) (*Name*) does not consider himself to be religious and attends church only on religious holidays with his family.

Materials

Demographics questionnaire.

Participants completed a demographics questionnaire (Appendix A) that requested information regarding gender, age, academic year, race, religious affiliation, religious involvement and self-rated spirituality. The questionnaire also included an item designed for use in classifying participants as more religious or less religious for group analyses. The item asked participants to rate the extent they agree with the statement *I consider myself to be a religious person* on a Likert scale with the following values: 1 (strongly disagree), 2 (disagree somewhat), 3 (agree somewhat), and 4 (strongly agree). Participants scoring a 1 or 2 were considered less religious, and those scoring a 3 or 4 were classified as more religious. Because some of the less religious individuals may not consider themselves completely unaffiliated with religion, the terms *more religious* and *less religious* are the most accurate reflection of the groups' composition. A single item

was selected to group participants because choosing a measure within which a specific understanding of religiousness is embedded seems dissonant with the spirit of the study. Additionally, participant fatigue must be considered, as quality data requires careful reading and responding to all of the profiles presented.

Profile booklets.

A full factorial design would require that 243 different profiles be evaluated by each judge, and therefore was not a reasonable or effective choice. Recommendations for the ratio of cues to profiles in policy-capturing range from 5 to 1 to 10 to 1 (Cooksey, 1996). The most conservative recommendation was used, and thus 50 unique profiles were presented to each participant. Recall that *one* of the three levels of each cue was included in every profile. Profiles were constructed by using a random number generator to create 50 different combinations of the cue levels. To reduce risk of effects based on order of cue presentation, two different orders of cue presentation were alternated among the 50 profiles. Profiles were inspected carefully for implausible profiles, and awkward wording or ordering of cue presentation. Thus, some slight alterations were made to increase the believability of the profiles. Further, names were included to enhance realism and differentiate the profiles. Judges (i.e., research participants) were asked to rate each profile according to how spiritual they perceived the person described to be on a Likert scale ranging from 1 (not at all spiritual) to 9 (exceptionally spiritual). Appendix C contains the profile booklet.

Procedure

The research was conducted in groups of 6-12 participants who were informed about the general research aims, risks and benefits of participation, as well as the

voluntary nature of their participation. The room in which the research was conducted provided comfortable space and lighting for participants to complete the task. I remained present for the duration of the experiment. Participants were asked to sign a consent form (Appendix D) that specified this information and included the contact information for the investigator and faculty advisor. All participants viewed profiles in the same order. Individuals who asked for a definition of spirituality, were encouraged to understand the term in whatever way was natural for them. Questionnaires were checked before participants left to minimize the incidence of missing data. One hour of course research credit was awarded via SONA to participants following the completion of the session.

Analysis

PASW 18.0 software was used to analyze the data. For the idiographic analyses, a separate multiple regression analysis using a linear simultaneous model was conducted for each participant by regressing the judgments on the corresponding cue levels for each profile. Cue levels were coded as 1 (low), 2 (moderate) and 3 (high). The model assumes that variables combine additively to influence judgments, rather than influencing each other in an interactive fashion. The squared multiple R was used to evaluate consistency of judgment for each respondent and in accordance with previous studies (Pargament et al., 1995; Zinnbauer & Pargament, 2002) judges with low multiple R values were excluded from further analyses. Excluded participants were then compared demographically with those included using ANOVA and Chi-Square techniques.

Beta weights were used as the basis for determining how many cues were emphasized by the participant in making the judgments of spirituality, as well as the relative importance of the five cues. As recommended by Hoffman (1960), standardized

beta weights obtained for each of the cues were converted to relative weights using the formula $RW_i = r_i\beta_i/R^2$, where RW_i is the relative weight for a given cue, r_i is the correlation of the cue with judgment of spirituality, β_i is the beta weight for the cue, and R^2 is the squared multiple correlation. Relative weights sum to 1. Hoffman argued that beta weights do not provide a basis for comparison from one judge to the next, as not every participant has the same multiple R value. Because there is no inferential test for relative weights, previous work considered cues to be “important” if the relative weight was greater than what would be expected if all cues were equally important. Therefore, a $RW > .20$ was interpreted as indicating that a cue was emphasized in a participant’s policy of spirituality.

To investigate agreement on profile ratings and cue importance across participants, the intraclass correlation coefficient (ICC) was used as an index of agreement. Since both the profiles rated and the judges are viewed as randomly-sampled from larger populations of potential profiles and judges, a two-way random model was selected. Values of the ICC range from 0 to 1 with values closer to 0 indicating a lower degree of consensus.

The more religious and less religious groups were compared using two-tailed independent samples t-tests regarding consistency of policies (multiple R ’s), importance of the five cues, and number of cues emphasized. Additionally, exploratory analyses included: 1) cluster analysis to determine whether patterns can be identified in participants’ use of the five dimensions of spirituality included in the study, and 2) repetition of the more religious and less religious group comparisons mentioned above, utilizing the entire sample ($N = 104$).

Results

The entire sample ($N = 104$) included 50 more religious and 54 less religious participants as determined by utilizing the single item in the demographics questionnaire mentioned above.

Idiographic and Within-Group Analyses

Consistency of policies.

Existing studies (Pargament et al., 1995; Zinnbauer & Pargament, 2002) required a multiple R of at least .65 in considering a judge to have demonstrated a consistent policy, and needed to exclude only 10% of participants using this standard (Zinnbauer & Pargament, 2002). Applying this standard to the current study, however, would have excluded the majority of participants (84%). For the total sample ($N = 104$), multiple R values ranged broadly from .03 to .80, with a mean of .50 ($SD = .15$). The exploratory nature of the study justified considering a less conservative inclusion criterion so that additional analyses would be performed on a reasonable sample size. Therefore, multiple R 's of .5 and above were considered indicative of consistent policies, as these values indicate that at least 50% of the variance in ratings of spirituality can be accounted for by the independent variables.

Forty-five participants were excluded due to multiple R 's below .5, and no participants were excluded for any other reason. Thus, the final sample consisted of 59 participants with multiple R 's of at least .5 ($n = 33$ more religious; $n = 26$ less religious), which represented 57% of the initial sample. All but four of 104 participants (3.8%), however, had multiple R 's that were statistically significant with $p \leq .05$. The R^2 for the final sample ranged from .5 to .8, with a mean of .61 ($SD = .08$). One-way ANOVA

indicated that the final sample did not differ from excluded participants in terms of age, $F(1, 102) = .47, p = .50$, self-rated religiousness, $F(1, 102) = 1.13, p = .29$, self-rated spirituality, $F(1, 102) = .00, p = .96$, and frequency of religious attendance, $F(1, 102) = 2.70, p = .10$. Chi square tests indicated that the groups did not differ on gender, $\chi^2(1, n=59) = .85, p = .36$, or religious affiliation, $\chi^2(6, n=59) = 9.89, p = .04$. However, the racial composition of the groups was disparate $\chi^2(5, n=59) = 11.73, p = .04$. Specifically, 40% of excluded participants were Asian-American, compared to 17% of those included. ANOVA confirmed that Asian participants had lower multiple R values than participants with other racial identities, $F(1, 102) = 9.42, p = .003$.

Mean and variability in judgments of spirituality.

The mean and variability of spirituality ratings assigned across the 50 profiles varied substantially among participants. For the entire sample ($N = 104$), the judges' average ratings of spirituality ranged from 3.16 to 6.74 ($M = 5.01, SD = .72$). The mean standard deviation of ratings for the entire sample ranged from 1.07 to 2.58 ($M = 1.9, SD = .35$). For the final sample ($n = 59$), the judges' average ratings of spirituality ranged from 3.78 to 6.72 ($M = 5.0, SD = .60$). The mean standard deviation of ratings for the final sample had the same range and mean as the entire sample, with a slightly smaller standard deviation of .34. The intraclass correlation coefficient of .47, used as a measure of inter-rater agreement, confirmed the relatively low agreement on ratings of spirituality in the final sample.

Importance of cues.

Table 1 contains the means and standard deviations of the RW's for each of the five cues. The mean number of important cues was 1.98 ($SD = .71$). Number of

important cues ranged from 1 to 4, with most participants (55.9%) emphasizing two cues in their policies. The percentages of participants who emphasized each cue are as follows: sacred searching (25.4%), religious involvement (64.4%), cognitive benefits (23.7%), emotional benefits (44.1%), and spiritual practices (39%). Recall that “emphasized” indicates only that a cue accounted for more than its fair share of variance (i.e., 20%), and thus more than one cue may have been emphasized by each participant. Table 2 contains a table displaying the multiple R , RW 's for each cue and number of important cues for each participant in the final sample.

Within-group agreement.

For the ratings of spirituality assigned to the 50 profiles, the more religious and less religious groups demonstrated equal and moderate agreement ($ICC = .48, p < .001$) using Cohen's (1988) criteria. Agreement regarding the importance of the five cues, however, was low for both the more religious ($ICC = .19, p < .001$) and less religious ($ICC = .25, p < .001$) groups.

Nomothetic Analyses

The more religious group and less religious group did not differ in their average ratings of spirituality on the dependent measure, with a mean rating of 5.0 in both groups. Two-tailed independent samples t-tests indicated that the groups did not differ regarding consistency of policies (R^2), $t(57) = .60, p = .55$. Groups also did not differ on the average relative weight for any of the five cues. Test statistics obtained for each cue are as follows: sacred searching, $t(57) = -.63, p = .53$; religious involvement, $t(57) = .31, p = .76$; cognitive benefits, $t(57) = -.91, p = .37$; emotional benefits, $t(57) = .14, p = .89$; and

spiritual practices, $t(57) = .77, p = .45$. Additionally, the number of cues that were important in their policies of spirituality was the same across groups, $t(57) = .16, p = .87$.

Exploratory Analyses

Cluster analysis.

Two-step cluster analysis using the Euclidian distance measure on the final sample ($n = 59$) yielded two clusters. In two-step cluster analysis, the program first creates “preclusters”, which are then clustered again using the hierarchical clustering algorithm. Cluster 1 consisted of 41 participants, and cluster 2 of 18 participants. Table 3 displays the average cue weights for each cluster along with the corresponding effect sizes (η^2). Significant differences between groups were found for religious involvement, $F(1, 57) = 74.38, p < .000$, cognitive benefits, $F(1, 57) = 31.63, p < .000$, and emotional benefits, $F(1, 57) = 69.06, p < .000$. On average, the policies of individuals in cluster 1, relative to those in cluster 2, place more weight on religious involvement, and less weight on cognitive benefits and emotional benefits. To investigate the validity and interpretability of the solution, the clusters were compared on several demographic variables. The clusters did not differ on self-rated religiousness, $F(1, 57) = 3.44, p = .07$, self-rated spirituality, $F(1, 57) = 2.75, p = .10$, religious affiliation, $\chi^2(5, n = 59) = .343, p = .63$, or race, $\chi^2(3, n = 59) = 1.56, p = .67$. However, the gender composition of the clusters was different $\chi^2(1, n = 59) = 6.10, p = .01$. Cluster 1 was 63% female, whereas cluster 2 was 94% female. Only 1 individual in cluster 2 was male.

Nomethetic analyses using entire sample.

To assist in determining if a larger final sample would have allowed group differences between more religious and less religious participants to reach significance,

selected analyses were repeated using the entire sample ($n= 104$). Again, no significant group differences were found for ratings of spirituality, average relative weight for any of the five cues or number of important cues. However, the mean multiple R for the more religious group was higher, $F(1, 102) = 5.85, p = .02$, indicating that more religious participants used the cues more consistently in their ratings of spirituality.

Gender comparison.

Results of the cluster analysis suggested potential gender differences in cue emphasis. ANOVA confirmed that the genders differed in the relative weights for two cues, religious involvement, $F(1, 57) = 4.90, p = .03$, and emotional benefits, $F(1, 57) = 5.66, p = .02$. The RW for religious involvement was higher for men ($M = .45, SD = .21$) than women ($M = .31, SD = .22$). The RW for emotional benefits, however, was higher for women ($M = .27, SD = .19$) than men ($M = .15, SD = .13$).

Discussion

The present study used a policy-capturing approach to examine the meaning of spirituality among undergraduate students at both the individual and group levels. Participants' implicit definitions of spirituality were "captured" by having them rate the spirituality of 50 hypothetical individuals with different combinations and degrees of dimensions thought to comprise spirituality by researchers. As a contribution to the complex discussion about what spirituality means, the study focused on three broad questions. First, are the five dimensions of spirituality that seem to be emphasized in researchers' conceptualizations of the construct (Kapuscinski & Masters, 2010) also consistently reflected in college students' definitional models of the term? Second, will students demonstrate agreement regarding their judgments and policies of spirituality? And third, will policies of spirituality differ between more religious and less religious

college students? Overall, findings discussed below support the idiosyncratic nature of the meanings attributed to spirituality, and highlight the importance of continuing to use idiographic designs in this area of research.

Consistency of Individual Policies

In comparison to previous studies (Pargament et al., 1995; Zinnbauer & Pargament, 2002), the ability to “capture” participants’ policies of spirituality was somewhat limited. Participants were less consistent than expected regarding how they combined the five cues to determine profile ratings. Specifically, Zinnbauer and Pargament (2002) eliminated only 10% of their policy-capturing sample due to multiple R ’s below .65, whereas 84% of the current study’s participants failed to meet that standard. In fact, for the 43% of the sample that was excluded using a more lenient standard in the present study (with multiple R ’s below .5), most of the variance in each individual’s judgments of spirituality could *not* be attributed to the dimensions of spirituality that were varied within the profiles. Several possible explanations for the lower than expected consistency in use of policies must be considered.

Cues.

The cues selected were specifically chosen to represent the conceptualizations of spirituality that researchers favor. Therefore, one potential explanation for the results is a discrepancy between how researchers and non-researchers understand the concept. In particular, some have argued that scholars tend to minimize the overlap between religion and spirituality (Hill & Pargament, 2003; Zinnbauer et al., 1997; Zinnbauer et al., 1999), and thus underestimate the influence of religious and supernatural aspects of spirituality. Zinnbauer and Pargament’s (2002) study included four religiousness cues in addition to

four spirituality cues, and thus may have provided a less restricted range of information from which participants could make judgments. However, because the aforementioned study does appear to share some overlap in selected cues with the present one, including religious involvement, other possibilities for the inconsistency in cue usage must be explored.

It is also important to remember that whereas the researchers' conceptualizations of spirituality failed to mirror participants', the dimensions included were certainly relevant for most participants. On average, the cues explained over half of the variance in judgments, and all but four participants demonstrated a statistically significant policy of spirituality.

Sample.

Although both Zinnbauer and Pargament's (2002) study and the current study were designed to capture judgments of spirituality, the samples were different. The former used nurses and clergy, whereas the latter included college students. Age, and consequently developmental stage, is perhaps the most important characteristic that differentiates college students from other groups. One psychological feature of young adults that may account for the this study's results is their tendency to have a less crystallized identity (Arnett, 2004; Erikson, 1968) than other groups, which means they are less certain about their values, beliefs and worldview. These areas are often volatile and still developing in the undergraduate population. Questions about religion and spirituality, therefore, may be difficult for young adults to answer, as they are often intimately tied to ones' self-concept and worldview. Regarding this study's task in particular, individuals with a fluctuating understanding of the importance of spiritual

experiences in their own lives may have difficulty using data consistently to rate the spirituality of other people.

The results of Pargament et al.'s (1995) study, which captured policies of religiousness in college students, provides some support for the lower reliability of college students' judgments about transcendent constructs. They found that 37% of participants did not demonstrate consistent policies of religiousness, in contrast to the 10% excluded from Zinnbauer and Pargament's (2002) study of nurses and clergy. However, how can we understand the still greater exclusion rate in the present study? The disparity may reflect the "fuzziness" of spirituality as a concept in comparison to religiousness, which is not unique to the undergraduate population (Cook, 2004; Hill et al., 2000; Zinnbauer et al., 1997). The meaning of spirituality is in the midst of being solidified for both researchers and society more generally, after the relatively recent shift in which spirituality is understood as overlapping with but distinct from religion (Marler & Hadaway, 2002), and as individuals begin to identify more frequently as spiritual but not religious (Shahabi et al., 2002; Woods & Ironson 1999). Overall, one would expect that policies of religiousness would be more reliable than policies of spirituality, and that college students would make less reliable judgments of these constructs.

It is also important to mention that college students' level of motivation for completing the assigned task could be low, considering that participation in research was a course requirement for all participants. Failure to carefully attend to the all aspects of profiles would naturally lower the likelihood of obtaining consistent policies. Two pieces of data, however, suggest that participants were indeed attending to the task. First, all but four participants had statistically significant policies. Second, completion time (tracked

informally) was remarkably consistent both within and across the small groups in which data was collected.

Disproportionate exclusion of Asian-American participants.

The study had more difficulty capturing Asian-Americans' policies of spirituality compared to other racial groups. The conceptualization of spirituality assumed by the study design reflected research and theory based in Western culture. Since some aspects of Eastern and Western spiritual worldviews and religious traditions diverge considerably (Ano, Matthew, & Fukuyama, 2009; Hanna & Green, 2004) one would expect to observe cultural differences in the relevance of the variables included in this study. Though not entirely irrelevant, the selected dimensions of spirituality fell short of capturing what spirituality means to most Asian-American participants.

Though not unexpected, the finding implies that a Western conceptualization of spirituality is not sufficient for understanding the construct within a multicultural context. Without specific feedback from participants, we can only speculate regarding what aspects of spirituality would have been more relevant to Asian-Americans – especially considering the array of religious traditions that influence Asian spirituality (Ano et al., 2009; Richards & Bergin, 1997). However, certain elements of Eastern spiritual traditions stand in obvious contrast to Western religious culture. Eastern spiritual values emphasize social harmony, emotional control, non-materialism and filial piety (Ano et al., 2009). Asian immigrants also tend to value *behavior* (e.g., charity, religious attendance, deference to elders) over personal *beliefs* in spiritual life (Carnes & Yang, 2004). The current study may have favored internal and individualistic experiences that seemed less relevant to Asian participants, while omitting important information

regarding social functioning and religious behaviors of relevance to this group. In sum, cultural differences are an important influence on the overall finding that the meaning of spirituality for college students was less easily captured than expected.

Variety in cue representation.

Another methodological difference that may have contributed to less coherent individual policies is the study's intentional emphasis on making the experimental materials realistic. Because I intended to understand what spirituality means to the general public in everyday life, it was critical that the profiles varied in accordance with the diversity present in actual people. The current study had proportionately more statements to choose from when constructing the profiles relative to the other policy-capturing studies discussed earlier. For each level of each cue, the current study had on average of 2.6 statements available, in contrast to 2.1 statements in Pargament et al.'s (1995) study, and only about 1 statement in Zinnbauer and Pargament's (2002) study. For these studies, as variety in cue representation increases, consistency in policies decreases. The trend is entirely expected given the overall tendency in experimental research for external validity to increase at the expense of internal validity (Kazdin, 2003). To explain the problem more concretely, two statements intended to represent a high level of the cue *spiritual practices* may not be perceived as equivalent by a given participant, and thus contribute to their responses in different ways. For example, the individual may consider frequent prayer, but not practicing yoga regularly, to represent a strong commitment to personal spirituality. Since the present study considered statements about frequent prayer to represent the same investment in spiritual practices as regularly practicing yoga, a problem with internal validity arises if the two statements

affected participants' judgments of spirituality differently. Although the variety limits experimental control, it allows for the inclusion of greater breadth and richness in the depiction of the concept.

The implication for research in spirituality posed by this external versus internal validity dilemma is of prime importance. As emphasized above, highly personal and experiential concepts like spirituality seem to resist being operationalized and measured, which limits the ability of science to manipulate and explain them. Researchers must proceed with caution when interpreting results of tightly controlled studies, recognizing that laboratory findings provide only a partial and inexact reflection of how religious and spiritual phenomena function (Miller & Thoresen, 2003).

Summary.

In conclusion, several factors probably contributed to the observed inconsistency in policies of spirituality. First, researchers may have different conceptualizations of spirituality than non-researchers, particularly regarding the overlap of religion and spirituality. Second, the developmental issues relevant for college students may reduce the consistency or clarity with which they understand transcendent constructs. Third, the Western notion of spirituality assumed by this study may have been insufficient to capture the meaning of spirituality for Asian-Americans, who represented a large minority of the sample. And fourth, the study's emphasis on external validity probably compromised its internal validity.

Diversity of Policies among Participants

Ratings of spirituality.

As predicted, individuals with consistent policies of spirituality demonstrated diversity, as a group, in the level of spirituality assigned to the 50 profiles. Consistent with previous studies (Pargament et al., 1995; Zinnbauer & Pargament, 2002), findings indicated a broad range in both the average ratings of spirituality, as well the variability of the individual judges' ratings. In other words, some individuals perceived the profiles to be less spiritual on average than others, and participants differed in terms of whether they perceived the profiles to be relatively similar, or fairly diverse, in terms of level of spirituality depicted. Note that this difference was not assessed with inferential tests, but based upon descriptive statistics, as well as indexes of inter-rater agreement. Both the more religious and less religious students demonstrated only moderate inter-rater agreement for the level of spirituality assigned to the profiles. Many individuals appear to have consistent but differing opinions about what it means to be spiritual.

Importance of cues.

The diversity in ratings of spirituality can be explained, in part, by the degree of importance participants' assigned to the five dimensions of spirituality (i.e., sacred searching, religious involvement, emotional benefits, cognitive benefits, and spiritual practices). Individuals differed on the number of cues that were weighted highly in their decision-making process, with most emphasizing only two cues. The reliance on a small number of cues is partly a function of the standard used to designate an "important" cue (i.e., explaining more than its "fair share" of variance). It would be impossible for all five cues to be considered important using this standard.

Still, individuals clearly valued certain pieces of information more than others, but showed remarkable disagreement regarding the relevance of the cues. Both more

religious and less religious students demonstrated low inter-rater agreement, within their respective groups, on cue importance, indicating that similarity on this demographic does not make policies more alike. Overall, however, certain cues stood out as more important than others. Religious involvement was emphasized most frequently (by 64% of participants). This resonates with other studies indicating that individuals understand the concepts of religiousness and spirituality as overlapping significantly (Marler & Hadaway, 2002; Zinnbauer et al., 1997). For many, involvement with institutional religion, including service attendance and social involvement, is not separable from spirituality – but rather, a vital component of it.

A large minority of participants also emphasized the importance of emotional benefits and spiritual practices in their policies of spirituality (44% and 39%, respectively). Fewer participants emphasized sacred searching or cognitive benefits (25% and 24%, respectively).

The importance of spiritual practices is understandable in light of its close connection with formal religious systems. Engagement in solitary activities such as prayer, meditation, scripture reading and yoga imply formal affiliation with institutions that support these practices, or commitment to a religious worldview.

The reasons that participants emphasized emotional benefits more than sacred searching or cognitive benefits are more elusive. In fact, these dimensions seem to share much in common. All three contrast religious involvement and spiritual practices in their focus on internal experience, rather than external behavior. They also share in common a relationship to or resonance with the concept of *intrinsic* religious orientation. Recall that religious orientation theory (Allport, 1952; Batson, Shoenrade and Ventis, 1982)

assumes a theoretical dichotomy separating those who use religion as a means (extrinsic orientation), and those who view religion as an end in itself (intrinsic orientation).

Individuals with extrinsic religious orientation do not internalize the religious systems in which they are involved, but participate for other reasons, including adherence to cultural expectations or desire for social affiliation. Those with an intrinsic orientation, however, consider religion to be personally meaningful, and tend to view all aspects of life through the lens of their religious convictions (Batson, Shoenrade & Ventis, 1982). Research has indicated that positive emotional adjustment (emotional benefits), is associated with an intrinsic orientation (Dezutter, Soenens & Hutsebaut, 2006, Lotufo-Neto, 1996; Smith, McCullough & Poll, 2003; Yohannes, Koeing, Baldwin & Conolly, 2008). A strong sense of values, purpose and identity (cognitive benefits) also seems consistent with the internalization of religious or spiritual pursuits. Similarly, searching for sacred meaning in life requires more than a shallow investment in one's spiritual belief system. Despite the seeming overlap, participants did not see these elements as equally relevant.

The unequal gender composition of the sample (69% female) may provide an explanation for the emotional cue taking precedence. Women demonstrate greater attunement to affective information (Knyazev, Slobodskoj-Plusnin, & Bocharov, 2010), and are better at decoding nonverbal expressions of emotion (McClure, 2000). They are also more apt to express their emotional experiences than men (Dinberg & Lindquist, 1990). Perhaps consequently, women tend to score higher on tests of emotional intelligence than men (Joseph & Newman, 2010).

The results of the exploratory cluster analysis also support a gender difference in the salience of the emotional cue. One group weighted emotional benefits more highly than

the other, and all but a single individual in that group were female. Further analysis confirmed that there was a statistically significant difference between the genders regarding the importance of emotional benefits in their policies of spirituality.

Summary.

Individuals disagreed regarding the relative importance of the five dimensions of spirituality. The emphasis on religious involvement and spiritual practices is consistent with strong conceptual overlap between religiousness and spirituality. The importance of emotional benefits may reflect the greater proportion of females in this study.

Comparison of More Religious and Less Religious Students

More and less religious students were compared in an effort to understand some of the individual differences that may influence the meaning of spirituality. Differences seemed likely based on data from the Higher Education Research Institute's study (2005) of almost 100,000 college students from across the United States, which suggested that these groups tend to have dissimilar social/political views, as well as differing levels of physical and mental health. For example, the survey found that religious college students were more likely to be politically conservative, and less likely than their less religiously-engaged classmates to support casual sex, keeping abortion legal, allowing homosexual couples to have legal marital status, and legalizing marijuana. The study also found that religious college students had better physical health habits, more psychological distress, and greater ability find meaning during difficult times. Surprisingly, more religious and less religious participants in the current study did not differ in any meaningful way. Neither group demonstrated higher ratings for the profiles, more consistent policies of spirituality, or greater emphasis on any of the five dimensions of spirituality. If this study

had focused purely on the group-level, one might have been tempted to focus on this lack of difference, and ignore the great diversity that participants exhibited. This possibility exemplifies the need for research in religion and spirituality to use varied and unique methodologies to understand the idiosyncratic ways in which individuals experience and understand transcendent aspects of life. Although psychological research typically relies on the variance among individuals to understand human behavior, conclusions tend to focus on *group* differences. The problem is that group averages can be an inaccurate or insufficient representation of reality. For some areas of inquiry, like spirituality, conclusions drawn from group comparisons are sometimes a poor representation of the actual subject of interest – the person. For this study, the important variance was not between the groups, but within them. In particular, this finding highlights the value of implementing idiographic designs in the study of spirituality. When the individual is the unit of analysis, the complexity of the subject matter is better represented.

Limitations

The study was limited in several ways. First, the five dimensions of spirituality included reflect my own attempt to categorize the conceptualizations used by researchers. Others may have organized these definitions differently, leading to the inclusion of more or fewer key elements. A similar caution exists regarding the statements used to represent these dimensions in the experimental materials. Though measures were taken to ensure that cue statements reflected the dimensions of spirituality that were manipulated in the profiles, the statements are only a subset of the ways in which these components could have been signified. As noted earlier, the Western cultural bias of the research on which the study was based, likely contributed to the design's inability to capture the meaning of

spirituality for non-Western individuals. Therefore, the study's conclusions about what spirituality means to college students reflects only how participants used the five elements included, as they were represented by the specific cue statements used.

Second, the idiographic nature of the analyses made a very large sample impractical. The disadvantage of a smaller sample for group comparison is that it affords limited power to detect differences. The study assumed moderate effect sizes between groups, and thus the sample size would not have been adequate to detect small disparities between more religious and less religious students if they were present. Further, a minimum sample of 90 would have been required to detect the moderate effect sizes assumed, and due to a higher than expected exclusion rate, the final sample was significantly underpowered, consisting of only 59 individuals. Although exploratory analyses indicated that using the entire sample ($N = 104$) did not produce significant differences between groups, it is possible that differences would have emerged if the study had included a larger number of individuals with adequate R squares. Further, the sample was also predominantly female, which limits the generalizability of results to male college students.

Third, the design *inferred* policies of spirituality based on ratings of spirituality that participants assigned to profiles. Other studies mentioned earlier asked participants directly to define religion or spirituality, or asked how important certain predetermined elements were in these definitions (Pargament et. al, 1995; Rich and Cinamon, 2007; Zinnbauer et al., 1997). This study's design was selected on the basis of findings indicating that participants' subjective sense for what they consider important when making judgments about spirituality was a poorer predictor of actual ratings than the

relative weights derived using the policy-capturing approach (Pargament et al., 1995). Nevertheless, participants' explicit definitions may be more complex, and show greater similarity to each other, in comparison to those captured by this study.

Fourth, participants were not asked when they became fluent in English. Given that many Asian-American students, whose first language may not be English, were excluded from the final sample, fluency presents a potential confound to the notion that cultural differences influenced the high exclusion rate. It is possible that some Asian-American participants demonstrate less consistent policies of spirituality due to limited comprehension of the experimental materials.

Future Directions

The discussion points to several profitable directions for future research. A few possible explanations were offered above for the study's inability to better capture policies of spirituality, each of which could be explored by future projects. Specifically, qualitative work that asks college students to explicitly define spirituality would be helpful in clarifying the magnitude of discrepancy between their definitions and those used by researchers. Additionally, since universities are multicultural communities, research exploring the meaning of spirituality to non-Western students is critical. The task may involve semi-structured interviews in which students influenced by Eastern culture are asked about how they understand spirituality, as well as eliciting feedback from these individuals about the relevance of the specific Western meanings of spirituality used in this study. Further, comparing the meanings of spirituality for college students with other age groups would be useful in determining whether or not developmental stage is relevant.

Researchers may also want to examine the literature to determine if there are groups whose definitions of spirituality may differ in meaningful ways. Although cultural background has already been cited as one such demographic, the study's results leave the diversity in meanings of spirituality appearing random. The discovery of such group differences would be particularly useful not only for creating more nuanced measurement instruments, but also for appropriately tailoring spiritually-focused interventions or health programs to the population of interest. For example, religiously-based programs have been developed to promote breast cancer screening (Darnell, Change & Calhoun, 2006; Powell et al., 2005). If women's definitions of spirituality differs from men's, these programs may be more effective if their designs are informed by research that specifies the more feminine understanding of spirituality.

On a broader level, researchers much continue to discuss the appropriateness of psychology's methods and assumptions for studying spiritual constructs scientifically. Traditional quantitative science relies on conceptualizations and measurement instruments that do not retain the biases of their creators. It is disconcerting to realize that a researcher's definition of spirituality may only be shared by a small percentage of the individuals she studies. Scale development research rarely asks participants for input regarding what they believe the instrument measures (Kapusinski & Masters, 2010). However, when Nasel & Haynes (2005) asked participants whether or not they thought the Spiritual and Religious Dimensions Scale assessed spirituality, 40% responded negatively. The theoretical problem presented by researchers' inability to sufficiently conceptualize and measure spirituality is complex and serious. A critical aspect of the issue is that, at its core, spirituality requires belief in the supernatural, which can interact

with or act on the natural world in meaningful ways. The scientific method assumes a natural world governed by stable laws, and may struggle to accommodate that which transcends it. Researchers must continue to ponder the benefits, challenges and limits of studying the supernatural with methods that normally assume its nonexistence.

Conclusion

This study explored the meaning of spirituality for college students using a policy capturing approach. Participants demonstrated diversity in their understanding of what spirituality means, but exhibited less than expected consistency in their policies of spirituality. Spirituality appears to be understood in individualistic ways, making it challenging for researchers to obtain a conceptualization of the construct that is suitable for empirical study. Therefore, many studies, utilizing different methodologies, from a variety of perspectives are needed to understand spirituality. Researchers must be aware of the assumptions underlying their work, and how their choices affect and even limit possible outcomes. This will create the multifaceted dialogue that is necessary to broaden our understanding of a highly significant and complex topic.

Appendix A

Demographics Questionnaire

Participant ID# _____

1. Age _____

2. Gender

- Male
- Female

3. Racial/Ethnic Background

- African-American/Black
- American Indian or Alaskan Native
- Arab American
- Asian American/Asian
- Caucasian/European American/White
- East Indian
- Hispanic/Latino/a
- Native Hawaiian/Pacific Islander
- Multi-racial
- Prefer not to answer
- Other (please specify): _____

4. Academic Year:

- Freshman
- Sophomore
- Junior
- Senior
- Graduate Student

5. Religious Affiliation

- Buddhist
- Catholic
- Hindu
- Jewish
- LDS
- Muslim
- Protestant
- Other (please specify): _____
- No affiliation

6. Approximately how often do you attend religious services or activities?

- Never
- A few times per year
- Once or twice per month
- Once per week
- Several times per week

7. Please rate how strongly you agree with the following statement on the scale below.

I consider myself to be a religious person.

1	2	3	4
strongly disagree	disagree somewhat	agree somewhat	strongly agree

Appendix B

Qualitative Focus Group Interview Guide

I. Introduction and Consent

Facilitator will introduce herself and review the major points of the consent form with the group:

- **WHO:** The project directors for this study are Afton Kapuscinski, M.S., a clinical psychology doctoral student at Syracuse University and Kevin Masters, Ph.D., a professor of psychology at Syracuse University.
- **PURPOSE & PROCEDURE:** You are being asked to participate in a research study designed to learn more about what various aspects of spirituality mean to college students. You will be asked to describe individuals with different levels of qualities that may be considered “spiritual”. We will use the information obtained in this study to inform the development of similar descriptions that will be used in future research to help us understand what spirituality means to college students. The discussion will be audiotaped.
- **TIME & COMPENSATION:** Your participation involves a group discussion and filling out a short questionnaire, a total of 1 hour. You will receive one hour of course research credit for your time.
- **RISKS/BENEFITS:**
 - Breach of confidentiality: Because we will be meeting in a group, there is the potential for other group members to tell other people what you say during the discussion. We will try to prevent this from happening by asking group members to keep everything that is said in the group discussion confidential. Note that you will not be asked to share information about yourself with the group.
 - Discomfort: It is possible that you may experience some discomfort associated with describing others’ spirituality.
 - Benefits: The benefit of this research is that you will be helping us to further our understanding of how people intuitively define spirituality. This information should help researchers to define and measure spirituality more accurately in future studies.
 - Questions?
 - Participants will sign consent form
 - Participants will be given a number to wear so they will not be identified by name on the recording.

II. Description of task: Throughout our discussion today, you will be provided with definitions of concepts that researchers believe to be part of what makes a person

spiritual. Your task is to use the definition to describe people with high, moderate and low levels of that characteristic. It is important for the purpose of the study that you stick to the definition provided, and do not try to redefine the term. Descriptions are most helpful if they are realistic and contain as much detail as possible, including what the person would think, feel and do.

III. Eliciting Descriptions

The first element of spirituality we will discuss is *sacred searching*. Sacred searching is defined as communion with or search for what is sacred in life. Sacred can refer to God, the transcendent, the Divine, or any power or force that seems to transcend the natural world.

- Describe a person who you would consider to have a high level of sacred searching.
- Describe a person who you would consider to have a moderate level of sacred searching.
- Describe a person who you would consider to have a low level of sacred searching.

The second element of spirituality we will discuss is *emotional benefits* associated with spirituality, defined as positive feelings toward the transcendent, others, self and world, such as faith, connection, agency, appreciation, satisfaction, peace and love.

- Describe a person who receives a high level of emotional benefit from his/her spirituality.
- Describe a person who receives a moderate level of emotional benefit from his/her spirituality.
- Describe a person who receives a low level of emotional benefit from his/her spirituality.

Third we will discuss *cognitive benefits* of spirituality, defined as acquiring some type of special knowledge associated with the sacred regarding meaning/purpose in life, identity or appropriate beliefs and values.

- Describe a person who receives a high level of cognitive benefit from his/her spirituality.
- Describe a person who receives a moderate level of cognitive benefit from his/her spirituality.
- Describe a person who receives a low level of cognitive benefit from his/her spirituality.

Next we will discuss *religious involvement* as an aspect of spirituality, which includes affiliation and engagement with a formal religious institution (e.g., Christianity, Judaism, Islam etc.).

- Describe a person who you would consider to have a high level of religious involvement.
- Describe a person who you would consider to have a moderate level of religious involvement.

- Describe a person who you would consider to have a low level of religious involvement.

Finally, we will discuss what we have termed *spiritual practices* as an element of spirituality. This includes personal or group activities that facilitate one's spirituality but that are not necessarily tied to formal religious involvement. Some examples include yoga, meditation, rituals and paranormal practices.

- Describe a person who you would consider to be highly involved with spiritual practices.
- Describe a person who you would consider to be moderately involved with spiritual practices.
- Describe a person who you would consider to have a low level of involvement with spiritual practices.

Profile 8

Though Susan has a strong sense of internal purpose, she finds it difficult to implement this knowledge in her daily life. Her friends describe her as cynical and pessimistic; she finds it difficult to feel content in the face of any adversity or discomfort. Susan has never engaged in yoga or meditation. She has rarely felt concerned with the supernatural forces in the world. Susan does not consider herself to be religious, and attends church only on religious holidays with her family.

1	2	3	4	5	6	7	8	9
Not at all spiritual						Exceptionally spiritual		

Profile 9

Joseph treasures the times when he is in tune with the sacredness of life but finds it difficult to maintain a high level of spiritual awareness. Joseph feels a sense of obligation to attend weekly mass, but does not typically get involved with other church activities. He desires that his life be directed by an organized set of beliefs and values, but sometimes has difficulty deciding on them. He derives an overwhelming sense of joy from his relationship with God, which he feels compelled to share with others. Though they are not priorities in his life, Joseph sometimes engages in mediation and occasionally consults psychics regarding his future.

1	2	3	4	5	6	7	8	9
Not at all spiritual						Exceptionally spiritual		

Profile 10

Everyone who comes into contact with Omar can tell he knows who he is and where he is headed in life. Others also recognize that he enjoys a sense of peace and connectedness with the world. As a devout Muslim, he drops whatever he is doing five times per day to pray at the appropriate times. Omar has to remind himself to look for the sacred significance of events in his life because he notices positive changes in himself when he remembers to do so. He derives a strong sense of community through involvement with his mosque, attending services several times per week, and volunteering his time in services activities.

1	2	3	4	5	6	7	8	9
Not at all spiritual						Exceptionally spiritual		

Profile 11

Peter treasures times when he is in tune with the sacredness of life, but finds it difficult to maintain a high level of spiritual awareness. He attends church a couple of times per month, and sometimes sings solos in the church choir. He has a strong sense of identity, and believes his life has an important purpose. However, he often feels lonely and depressed even in the midst of his religious community, as if he is not truly connected to anyone. Peter has never engaged in yoga or meditation.

1	2	3	4	5	6	7	8	9
Not at all spiritual						Exceptionally spiritual		

Profile 12

Though Paul considers himself to be fairly self-assured, he sometimes wonders if he is on the right path in life. Paul's spiritual life offers him a sense of connectedness to nature and other people, but he sometimes experiences anxiety and uncertainty about his belief system. He does not pray unless he is in the presence of others who are praying. Paul has rarely felt concerned with supernatural forces in the world. He does not consider himself to be religious and attends church only on religious holidays with his family.

1	2	3	4	5	6	7	8	9
Not at all spiritual						Exceptionally spiritual		

Profile 13

Carlos has rarely felt concerned with noticing God's hand in the world. He considers his religious community to be like his family, spending most of his free time with friends from his church. Family and friends are often concerned that he lacks a set of values and goals by which to live. However, others recognize that Carlos enjoys a sense of peace and connectedness with the world. He has never engaged in yoga or meditation.

1	2	3	4	5	6	7	8	9
Not at all spiritual						Exceptionally spiritual		

Profile 14

Danielle often struggles with knowing who she is, as well as the meaning and purpose of her life. Her friends describe her as cynical and pessimistic; she finds it difficult to feel content in the face of any adversity or discomfort. Danielle makes an effort to meditate daily, but finds she often becomes distracted with other activities and does not follow through. She treasures times when she is in tune with the sacredness of life, but finds it difficult to maintain a high level of spiritual awareness. Danielle grew up with parents who considered themselves to be atheists, and has never attended any type of religious service.

1	2	3	4	5	6	7	8	9
Not at all spiritual						Exceptionally spiritual		

Profile 15

Chloe has to remind herself to look for the sacred significance of events in her life, because she notices positive changes in herself when she remembers to do so. She does not consider herself to be religious, and attends church only on religious holidays with her family. She desires that her life be directed by an organized set of values and goals, but sometimes has difficulty deciding on them. Her friends describe her as cynical and pessimistic; she finds it difficult to feel content in the face of any adversity or discomfort. Chloe does not pray unless she is in the presence of others who are praying.

1	2	3	4	5	6	7	8	9
Not at all spiritual						Exceptionally spiritual		

Profile 26

Family and friends are often concerned that Maria lacks a set of values and goals by which to live. She has strong sense of peace and assurance that even seemingly bad circumstances will work out for the best. Maria makes an effort to pray or meditate daily, but finds she often becomes distracted with other activities and does not follow through. She seeks to be entirely open to the presence of the Divine in her life. Maria grew up with parents who considered themselves to be atheists, and has never attended any type of religious service.

1	2	3	4	5	6	7	8	9
Not at all spiritual						Exceptionally spiritual		

Profile 27

Martin finds that contemplating the complexity and beauty of nature brings him in tune with the sacredness of life. He does not consider himself to be religious, and attends church only on religious holidays with his family. Though Martin has a strong internal sense of purpose, he finds it difficult to implement this knowledge in his daily life. Others recognize that he enjoys a sense of peace and connectedness with the world. He sets aside time every evening before bed to practice yoga or meditate.

1	2	3	4	5	6	7	8	9
Not at all spiritual						Exceptionally spiritual		

Profile 28

Stephen believes that the entirety of his life, including his occupation, family life and volunteer work, has a unified purpose and will leave a positive mark on the world. Though Stephen's spiritual life offers him a sense of connectedness to nature and other people, he sometimes experiences anxiety and uncertainty about his belief system. He has never engaged in yoga or meditation. Stephen seeks to be entirely open to the presence of the Divine in his life. He grew up with parents who considered themselves to be atheists, and has never attended any type of religious service.

1	2	3	4	5	6	7	8	9
Not at all spiritual						Exceptionally spiritual		

Profile 29

Julia treasures times when she is in tune with the sacredness of life, she finds it difficult to maintain a high level of spiritual awareness. She does not consider herself to be religious, and only attends church on religious holidays with her family. She has a strong sense of identity, and believes that her life has an important purpose. She alternates between strong feelings of faith and anxious doubt regarding her spiritual beliefs. Though they are not priorities in her life, she sometimes engages in meditation and occasionally consults psychics regarding her future.

1	2	3	4	5	6	7	8	9
Not at all spiritual						Exceptionally spiritual		

Profile 30

Toa alternates between feelings of faith and anxious doubt regarding his spiritual beliefs. He desires that his life be directed by an organized system of beliefs and values, but sometimes has difficulty deciding on them. Toa does not pray unless he is in the presence of others who are praying. He finds that contemplating the complexity and beauty of nature brings him in tune with the sacredness of life. He attends services at his church a couple of times per month, and sometimes sings solos in the church choir.

1	2	3	4	5	6	7	8	9
Not at all spiritual						Exceptionally spiritual		

Profile 31

Jonathan has rarely felt concerned with noticing God's hand in the world. Though his parents stressed the importance of attending synagogue weekly, as an adult, he feels satisfied with going to services a couple of times per month. Everyone who comes into contact with Jonathan can tell that he knows who he is and where he is headed in life. Others also recognize that he enjoys a sense of peace and connectedness with the world. He only prays when he is in the presence of others who are praying.

1	2	3	4	5	6	7	8	9
Not at all spiritual						Exceptionally spiritual		

Profile 32

Katie has a strong sense of identity and believes that her life has an important purpose. She derives overwhelming joy from her relationship with God, which she feels compelled to share with others. She makes an effort to meditate daily, but finds that she often becomes distracted with other activities and does not follow through. Katie treasures times when she is in tune with the sacredness of life, but finds it difficult to maintain a high level of spiritual awareness. Katie grew up with parents who considered themselves to be atheists, and has never attended any type of religious service

1	2	3	4	5	6	7	8	9
Not at all spiritual						Exceptionally spiritual		

Profile 33

Karen has to remind herself to look for the sacred significance of events in her life because she notices positive changes in herself when she remembers to do so. She does not consider herself to be religious, and attends church only on religious holidays with her family. Family and friends are often concerned that Karen lacks a set of values and goals by which to live. Her friends describe her as cynical and pessimistic; she finds it difficult to feel content in the face of any adversity or discomfort. She has never engaged in yoga or meditation.

1	2	3	4	5	6	7	8	9
Not at all spiritual						Exceptionally spiritual		

Profile 34

Collin believes that the entirety of his life, including his occupation, family life, and volunteer work, has a unified purpose and will leave a positive mark on the world. He enjoys a strong sense of peace and assurance that even seemingly bad circumstances will work out for the best. He has never engaged in yoga or meditation. Collin treasures times when he is in tune with the sacredness of life, but finds it difficult to maintain a high level of spiritual awareness. He attends church a couple of times per month, and sometimes sings solos in the church choir.

1	2	3	4	5	6	7	8	9
Not at all spiritual						Exceptionally spiritual		

Profile 35

James finds that contemplating the complexity and beauty of nature brings him in tune with the sacredness of life. Though his parents stressed the importance of attending synagogue weekly, as an adult, he feels satisfied with going to services a couple of times per month. Though James has a strong internal sense of purpose, he finds it difficult to implement this knowledge in his daily life. He derives an overwhelming sense of joy from his relationship with God, which he feels compelled to share with others. He has never engaged in yoga or meditation.

1	2	3	4	5	6	7	8	9
Not at all spiritual						Exceptionally spiritual		

Profile 36

Mia has rarely felt concerned with noticing God’s hand in the world. She attends services at her church several times per week, and volunteers to teach Sunday school for high school students. She desires that her life be directed by an organized system of beliefs and values, but sometimes has difficulty deciding on them. She alternates between feelings of faith and anxious doubt regarding her spiritual beliefs. Though they are not priorities in her life, she sometimes engages in meditation, and occasionally consults psychics regarding her future.

1	2	3	4	5	6	7	8	9
Not at all spiritual						Exceptionally spiritual		

Profile 44

Although Charlie considers himself to be fairly self-assured, he sometimes wonders if he is on the right path in life. He derives an overwhelming joy from his relationship with God, which he feels compelled to share with others. Charlie has never engaged in yoga or meditation. He seeks to be entirely open to the presence of the Divine in his life. Charlie considers his religious community to be like his family, spending most of his free time with friends from church.

1	2	3	4	5	6	7	8	9
Not at all spiritual						Exceptionally spiritual		

Profile 45

Lynn diligently seeks to be close to God, and sees God’s hand in every aspect of her life. She attends services at her church several times per week, and volunteers to teach Sunday school for high school students. She desires that her life be directed by an organized set of beliefs and values, but sometimes has difficulty deciding on them. Lynn enjoys a strong sense of peace and assurance that even seemingly bad circumstances will work out for the best. She is concerned about how she treats the environment and her body; she makes an effort to live a “green” lifestyle and is vegan.

1	2	3	4	5	6	7	8	9
Not at all spiritual						Exceptionally spiritual		

Profile 46

Eli often struggles with knowing who he is, as well as the meaning and purpose of his life. He feels happy and full of faith during religious services, but finds that he cannot maintain those positive feelings day to day. He sets aside time every evening before bed to practice yoga or meditate. Eli finds that contemplating the beauty and complexity of nature brings him in tune with the sacredness of life. Though his parents stressed the importance of attending synagogue weekly, as an adult, he feels content with going to services a couple of times per month.

1	2	3	4	5	6	7	8	9
Not at all spiritual						Exceptionally spiritual		

Profile 47

Appendix D

INFORMED CONSENT TO PARTICIPATE IN THE
MEANINGS OF SPIRITUALITY STUDY

My name is Afton Kapuscinski and I am a graduate student at Syracuse University in the department of psychology. I am inviting you to participate in a research study. Involvement in the study is voluntary, so you may choose to participate or not. This sheet will explain the study to you and please feel free to ask questions about the research if you have any. I will be happy to explain anything in detail if you wish.

I am interested in learning more about what the term *spirituality* means to college students. You are being asked to participate in a research study designed to learn more about what various aspects of spirituality mean to college students. The study involves reading descriptions of hypothetical people, and rating how spiritual you perceive them to be. You will also be asked to fill out a short questionnaire giving basic information about yourself. The study will take approximately one hour to complete. All information will be kept confidential, which means that your name will not appear anywhere, and your specific answers will not be linked to your name in any way.

The benefit of this research is that you will be helping us to further our understanding of how people intuitively define spirituality. This information should help researchers to define and measure spirituality more accurately in future studies. If you choose to participate, you will be awarded 1 hour of research credit that counts toward the course requirement for a psychology course in which you are currently enrolled. If you wish to discontinue the study after it begins, you will be awarded either ½ hour or 1 hour of course credit depending on which best reflects the amount of time that you participated.

A risk to you of participating in this study is minor discomfort associated with describing individuals with various levels of spirituality.

If you experience uncomfortable emotions for a prolonged period of time as a result of your participation in this study, you may contact the Syracuse University Counseling Center at 443-4715 to address your concerns.

If you do not want to take part, you have the right to refuse to take part, without penalty. If you decide to take part and later no longer wish to continue, you have the right to withdraw from the study at any time, without penalty.

If you have any questions, concerns or complaints about the research, contact the principal investigator, Afton Kapuscinski, at ankapusc@syr.edu or Dr. Kevin Masters at 315-443-3666. If you have any questions about your rights as a research participant, you have questions, concerns, or complaints that you wish to address to someone other than the investigator, or if you cannot reach the investigator, contact the Syracuse University Institutional Review Board at 315-443-3013.

All of my questions have been answered, I am over the age of 18 and I wish to participate in this research study. I have received a copy of this consent form.

Signature of participant

Date

Printed name of participant

Signature of researcher (or witness)

Date

Printed name of researcher (or witness)

Table 1

Descriptive Statistics for Relative Weights

Cue	<i>M (SD)</i>
Sacred Searching	.14 (.14)
Religious Involvement	.35 (.23)
Cognitive Benefits	.13 (.11)
Emotional Benefits	.24 (.18)
Spiritual Practices	.15 (.11)

Table 2

Summary of Final Sample's Policies of Spirituality

Subject #	R^2	RWSS ^a	RWRI ^b	RWCB ^c	RWEB ^d	RWSP ^e	# of cues ^f
13	.59	.07	.47	.23	.12	.10	2
18	.64	.10	.74	.08	.08	.01	1
19	.51	.21	.09	.26	.21	.23	4
20	.56	0	.13	.45	.34	.09	2
22	.54	.09	.08	.19	.63	0	1
25	.55	.08	.51	.11	.07	.23	2
26	.68	.14	-.01	.14	.42	.32	2
28	.55	.10	.49	.19	.16	.06	1
29	.08	.28	.09	.16	.47	-.01	2
30	.60	0	.03	.56	.20	.23	3
33	.64	.07	.27	.22	.36	.06	3
34	.56	0	.70	.01	.05	.23	2
35	.68	.04	.62	.08	0	.26	2
37	.61	.64	.10	.01	0	.24	2
38	.76	.07	.60	.03	.25	.05	2
39	.66	0	.78	.01	.11	.12	1
40	.60	.02	.07	.17	.71	.03	1
41	.57	.07	.45	.22	.13	.13	2
42	.54	.15	-.04	.08	.72	.09	1
43	.77	.11	.39	0	.13	.36	2
44	.52	.24	.26	.05	.01	.45	3
46	.62	.60	.08	.08	.03	.21	2
47	.61	.01	.52	.02	.25	.20	3
49	.51	.04	.61	.05	.05	.24	2
50	.74	.22	.30	.10	.33	.04	3
51	.62	.21	.35	.13	.18	.13	2
52	.56	.12	.43	.01	.19	.24	2
54	.57	.04	.51	.10	.19	.17	1
56	.66	.18	.17	.03	.53	.08	1
57	.71	.21	.48	.11	.17	.03	2
58	.59	.15	.31	.02	.44	.09	2
59	.52	.12	.10	.21	.36	.20	3
60	.66	.34	.30	.02	.26	.08	3
63	.68	.12	.61	.06	.10	.11	1
65	.57	.18	.19	.22	.18	.23	2

66	.59	.05	.40	.15	.01	.40	2
68	.63	.47	.30	.06	.17	.01	2
69	.54	.18	.09	.27	.42	.03	2
70	.59	.09	.39	.08	.13	.31	3
72	.58	.11	.33	.19	.15	.20	2
73	.52	.24	.51	.04	.14	.07	2
75	.62	.06	.32	.20	.26	.16	3
76	.50	0	.01	.39	.56	.05	2
77	.67	.01	.48	.08	.30	.13	2
78	.50	.06	.14	.26	.54	-.01	2
79	.54	.36	.19	.20	.11	.13	2
84	.61	.16	.02	.14	.52	.15	1
86	.53	.11	.18	.20	.24	.28	3
88	.54	.05	-.02	.16	.46	.37	2
89	.78	0	.60	.01	.10	.27	2
91	.74	.01	.74	.01	.23	0	2
94	.55	.14	.48	0	.09	.28	2
97	.56	.20	.46	.02	.32	0	3
102	.51	.21	.40	.19	.04	.16	2
103	.69	.05	.47	.13	.15	.19	1
104	.70	.06	.72	.03	-.01	.20	2
111	.72	.10	.68	0	.19	.03	1
112	.64	.51	.17	.17	.15	-.01	1
114	.52	.09	.58	.05	.16	.11	1

^a RWSS = relative weight for sacred searching. ^b RWRI = relative weight for religious involvement. ^c RWCB = relative weight for cognitive benefits. ^d RWEB = relative weight for emotional benefits. ^e RWSP = relative weight for spiritual practices. ^f Number of important cues.

Table 3

Mean Cue Weights by Cluster and Eta Squared

Cue	Cluster 1	Cluster 2	η^2
Sacred Searching	.15	.11	.02
Religious Involvement	.46	.09	.57
Cognitive Benefits	.08	.23	.36
Emotional Benefits	.15	.44	.55
Spiritual Practices	.16	.13	.01

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