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Big Man on Campus: An Examination of Religious Life & Spirituality in College Students

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Running head: RELIGIOUSNESS AND SPIRITUALITY

Big Man on Campus:
An Examination of Religiousness & Spirituality in College Students

A thesis presented by
Deryl V. Pace
to the Department of Psychology
in partial fulfillment of the requirements
for the degree of
Bachelor of Arts

Connecticut College
New London, Connecticut

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Abstract

Previous research shows that as college students progress through their four year college experience, they undergo dramatic changes in their religiousness and spirituality levels, their religiousness decreases while their spirituality increases. This study sought to examine that claim by measuring the religiousness and spirituality levels of 75 freshmen and 75 graduating seniors at Connecticut College. It was hypothesized that freshmen would have higher levels of religiousness and lower levels of spirituality than would seniors. These differences were examined through self-report scales and content coding a collected memory of a particular peak moment with religious or spiritual significance. In addition to examining the religiousness and spirituality of Connecticut College students, the researcher also examined the authoritarian attitudes of participants as a measure of their conservatism and political growth throughout their college experience. There were no significant differences found between freshmen and seniors in their relative degrees of religiousness and spirituality. Additionally, there were also no significant differences found between freshmen and seniors regarding their religious identity status or authoritarian attitudes. Women scored significantly higher than did men, regardless of class, on the Prayer Fulfillment and Universality sub-scales of the Spiritual Transcendence Scale. There was also one class year by gender interaction with regard to religious identity; senior men were more foreclosed than were freshmen men. Recommendations for future research are also discussed.

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Big Man on Campus:

An Examination of Religiousness & Spirituality in College Students

The period of late adolescence and young adulthood, according to Erikson (1968) and Kroger (2000), is a time in which individuals change dramatically in many different ways. This thesis focuses on the potential religious and spiritual changes that individuals may undergo over the course of their four year college experience. It explores how religious identity may change through a cross-sectional comparison of students' spiritual and religious life orientations in the first vs. the fourth year of education at a small, northeastern, liberal arts college.

Conceptualizing Religion and Spirituality

Since 1977, most Americans have believed that religion is actually losing its influence on the general public (Gallup, 1999). This loss of influence could be a contributor to the growth of interest in the study of religion. Funder (2002) claims that the field of psychology of religion is undergoing a period of rapid growth. Whether researchers elect to study organized religion or more independent forms of spirituality there is a unifying concern with questions of ultimate meaning. More researchers are studying the role of religion and spirituality in individuals' lives.

Recently there has been a great deal of confusion surrounding the two terms. To many people religion and spirituality may seem like the same construct, but to the researcher that spends his/her life arguing about what each term encompasses, religion and spirituality are two separate but overlapping multi-dimensional constructs. Before discussing the role of religion and spirituality in college students' lives, it would be helpful to clarify these distinctions.

Emmons (1999) explains that spirituality has often been the broader of the two terms, and has often been used to encompass religion. Martin and Carlson (1998) offer one such definition of spirituality:

...a process by which individuals recognize the importance of orienting their lives to something nonmaterial that is beyond or larger than themselves...so that there is an acknowledgment of and at least some dependence upon a higher power, or Spirit. (p. 59)

In contrast to this emphasis on transcendence, Clifford Geertz (1966), an anthropologist who studied religion cross-culturally, conceptualizes religion as:

... a system of symbols which acts to establish powerful, persuasive, and long-lasting moods and motivations by formulating conceptions of a general order of existence and clothing these conceptions with such an aura of factuality that the moods and motivations seem uniquely realistic. (p. 90)

Basically, Geertz defines religion by focusing on a culture's symbols and world view. He claims that rituals and beliefs provide a unifying framework that binds a group of people together; shared worship and religious practices help to define a culture's meaning system and most valued goals.

A number of scholars prior to Geertz have defined religion differently. For example, earlier in the history of psychology, William James (1902) defined religion by focusing on the individual: "the feelings, acts, and experiences of individual men in their solitude, so far as they apprehend themselves to stand in relation to whatever they may consider the divine" (p. 42). James's definition conveys an emphasis on an individual

relation to the divine, which seems closer to our current understanding of spirituality as the more individualized of the two constructs.

With research on religion and spirituality expanding, the meanings of each term are becoming more popularized. “Religion” increasingly refers more to the beliefs, rituals, and practices associated with the institution and community, whereas “spirituality” refers more to the individual’s personal search for ultimate meaning, unity, and transcendence (Cook, 2000; Hill et al., 2000; Pargament, 1999a & b; Zinnbauer & Pargament, 2002; Zinnbauer et al., 1997; Zinnbauer, Pargament, & Scott, 1999).

Although the field’s growing acceptance of this distinction is encouraging, there is also a danger in contrasting the terms. Once polarized, religion can be pigeon-holed by more independent thinkers as the institutional/bad construct, whereas spirituality is the individual/good construct (Hill et al., 2000; Pargament, 1999a & b; Zinnbauer & Pargament, 2002; Zinnbauer et al., 1999). However, this polarization need not be the case because neither construct is completely positive nor negative. Each term has its own positive and negative consequences, specific to each individual.

Cook (2000) demonstrated that college students are also capable of making distinctions between the two terms. Participants generated definitions for each term and the results indicated that they were able to produce a great many more synonyms and defining phrases for spirituality than for religiousness. Cook (2000) concluded that participants generated more words associated with spirituality because it is a broader construct than religion. Piedmont (1999) drew a similar conclusion when conceptualizing “Spiritual Transcendence” stating that spirituality is both distinctly different from and a broader construct than religion. Pargament (1999a) vehemently

opposed dividing religious and spiritual constructs into the “institutional” and “individual” because spirituality, he concluded, was encompassed within the larger construct of religion. More specifically, religion “encompasses the search for many objects of significance. Spirituality focuses on the search for one particular object of significance – the sacred” (Pargament, 1999a, p. 13).

One result of the positive and negative popularizations of religiousness and spirituality is that researchers are seeing individuals describe themselves more frequently as spiritual but not religious, or religious but not spiritual. Many still see themselves as both spiritual and religious, but both Woods and Ironson (1999) and Zinnbauer et al. (1997) found that individuals were more likely to describe themselves as either one or the other. In Zinnbauer et al.’s research, 19% of participants reported themselves as spiritual but not religious, whereas in Woods and Ironson’s research 43% identified themselves as spiritual but not religious.

Measures of Religiousness and Spirituality

Regardless of how individuals define their religious identity, there is a growing amount of research that has linked levels of religiousness and spirituality to mental and physical health outcomes (Hill & Pargament, 2003; Miller & Thoresen, 2003). In addition, there have been a great many new measures developed to assess levels of religiousness and spirituality, and further to relate them to various health aspects, such as coping, well-being, and life-satisfaction. One example of this is the view of religion as a coping process (Pargament, 1997) in relation to stressful events or life experiences. Specifically, religious acts, attendance at services, and frequency of prayer are correlated with an individual’s psychological well-being (Pargament, 1997).

In the 80's and early 90's some researchers believed that the field of psychology of religion had grown so much that measures existed for every topic imaginable. One researcher in particular, Gorsuch (1984, 1990), wrote that no new measures need be developed until the abundance of measures at that current time were thoroughly researched and understood. As the field grows however, and new topics to study and measure emerge, it has become necessary to develop new instruments specific to those newer areas of research.

The pioneer of research in the psychology of religion and measures of religiousness was Gordon Allport, who developed the Religious Orientation Scale (ROS) (Allport, 1950, 1967). The scale measured each individual's religious motivations as either Extrinsic or Intrinsic. The extrinsically motivated person *uses* his/her religion for a specific purpose, whereas the intrinsically motivated person *lives* his/her religion by internalizing its beliefs and practices (Allport, 1967). Allport believed the extrinsic and intrinsic motivations to be at either end of a single continuum in which an individual was usually higher on one end than the other; rarely, he said, did one encounter a "pure" case (Allport, 1967). According to Van Wicklin (1990) however, research that has been done since Allport's early studies shows that the Extrinsic and Intrinsic motivations are in fact independent constructs.

Batson (1976) took the ROS scale one step further by adding three dimensions, measured by three new scales, which he believed were lacking. Together, these three scales, which measure the External, Internal, and Interactional (Quest) aspects of religion, comprise the Religious Life Inventory (RLI) used in conjunction with the ROS scale (Batson, 1976). The Interactional scale measures Quest, defined as "the degree to which

an individual's religion involves open-ended responsive dialogue with existential questions raised by the contradictions and tragedies of life" (Batson, Schoenrade, & Ventis, 1993, p. 169).

Sirch (1994) used both the ROS and RLI scales in conjunction with the Spiritual Orientation Inventory (SOI) (Elkins, Hedstrom, Hughes, Leaf, & Saunders, 1988) to assess the relationship between an individual's religious orientation and his/her spiritual orientation. The SOI is designed to measure spirituality along nine dimensions in order to assess the degree to which the individual is "truly spiritual" (Sirch, 1994). Sirch found statistically significant relationships between an individual's religious and spiritual orientations. One particularly important finding from her study was that individuals who were measured as high on the Quest scale also scored high on the SOI. Sirch further found that the ROS, RLI, and SOI all loaded on differing factors indicating that each scale measured separate and distinct dimensions (Sirch, 1994).

The Spiritual Transcendence Scale (STS; Piedmont, 1997) has been used extensively in conjunction with various topics within the field of the psychology of religion as well as with individuals of varying faiths and differing nationalities. The STS embraces a construct of spirituality that is "relatively stable over time and would impel individuals towards identifiable goals" (Piedmont, 2001, p. 8). It measures "the capacity of individuals to stand outside of their immediate sense of time and place to view life from a larger, more objective perspective. This transcendent perspective is one in which a person sees a fundamental unity underlying the diverse strivings of nature" (Piedmont, 1999, p. 988).

Piedmont (2001) found that the STS indicated that Transcendence was not a quality existing only in the mind of the individual. Rather, qualities of Transcendence could be recognized by others through one's behavior (Piedmont, 2001). Through research conducted in India, Piedmont demonstrated the STS's generalizability to other samples outside the United States (Piedmont, 2002). Lastly, Piedmont demonstrated that the STS could be applied to mental health research including substance abuse. Further refinement of the STS scale into three smaller subscales (Prayer Fulfillment, Universality, and Connectedness) has enabled researchers to examine which aspects of spirituality are particularly relevant to treatment; thus allowing participants to develop a strong base of personal meaning upon which they can build their new lives following treatment (Piedmont, 2004).

Research on Religion and Spirituality in College Students

With the development and abundance of these religious and spiritual measures a great deal more research has been conducted in the psychology of religion, including studies focusing on the religious and spiritual orientations of college students. One of the first studies conducted to examine the religiousness of college students found that students become less involved in their religion throughout their college experience (Pargament, 1984). After measuring students' religious orientations in this study, students were then divided into three groups, highly involved in church, moderately involved church, and uninvolved in church.¹ Within those groups, students' religious needs were measured and compared. Students who were highly or moderately involved in church claimed their decline of church involvement was due to their already full work

¹ One must note here that Pargament conducted his study with mostly Christian participants. Involvement in church is specifically used to differentiate involvement in one's religion outside of church.

and class schedules as well as the addition of other new activities (Pargament, 1984). Those same students also claimed that to strengthen their faith they could attend more worship services as well as pray more individually. In contrast, students initially less involved in church claimed that they would strengthen their faith by praying more individually and getting involved more in community volunteer opportunities (Pargament, 1984). Overall, the religious needs of those initially highly and moderately involved in their churches focused more on orthodox religious beliefs and practices associated with the institution, whereas those who were initially less involved focused more on their social and personal growth through religion (Pargament, 1984).

This pioneer study of the measurement of religiousness in college students was one of the first to find an increasing polarity between college students' religious and spiritual practices. It demonstrated how the institutional practice of religion and the individual practice of spirituality are the popularized constructs of religion and spirituality prevalent on college campuses today. Recently, one group of researchers found that in their survey of four different college institutions across the US, both students and faculty preferred to use the terms "spirituality" and "spiritual" rather than "religion" and "religious" (Cherry, DeBerg, & Porterfield, 2001). One individual, when asked whether students on his campus were very religious answered "No, but most of them are very spiritual" (Cherry et al., 2001, p. 275). According to Cherry et al., this student, like many others they encountered, understood religion to mean the institution and community, whereas spirituality referred more to the individual's experience with God or ultimate values.

Bryant, Choi, and Yasuno (2003) adopted these popularized constructs mentioned previously to conduct their own research on religious and spiritual dimensions of first year college students. Religiousness was operationally defined as attendance at religious services, participation in religious discussions or groups on campus, as well as prayer and meditation. Spirituality was operationally defined as the importance to students of integrating spirituality into their own lives on a daily basis (Bryant et al., 2003). Research prior to Bryant et al. (2003) found that religious involvement of college students in general declines significantly during the college years (Astin, 1993). This trend is evident in current research; however, at the same time first year students also became “more committed to integrating spirituality into their lives” (Bryant et al., 2003, p. 736). This theory, that as students progress through their academic career their religiousness decreases, was further supported by the finding that younger students had higher scores for religiousness overall than did older students (Knox, Langehough, Walters, & Rowley, 1998).

Another study examined the effects of religiousness and spirituality on personal distress in college students (Schafer, 1997). No significant associations were detected between personal distress and variables, such as dependence upon a higher power, degree to which an individual is spiritual, attendance at religious services, frequency of prayer, and current religious preference (Schafer, 1997). One significant association was found, however, that seems particularly pertinent: the higher the rates of importance of religion in an individual’s life, the greater the personal distress (Schafer, 1997). This finding is exactly the opposite of what the expected outcome was for the study and raises one very important consideration: college is a time of questioning and in some cases rejecting the

faith with which one has been raised. Therefore, it makes sense that higher percentages of religiousness could lead to more personal distress in students because they are more likely to worry about questioning their faith. In addition, the many new experiences students are faced with while in school might challenge the religious beliefs with which they were raised. One must also consider the possibility that people who are distressed might turn to religion for personal comfort.

Johnson and Hayes (2003) also examined the common concerns associated with religion and spirituality among college students. Twenty-six percent of college students were found to suffer considerable distress relating to religious or spiritual issues. Of that percentage, 6% reported experiencing extreme distress in relation to religious or spiritual concerns. Of these students reporting religious or spiritual distress, students also reported distress concerning confusion about religious beliefs, a troubled relationship, sexual assault, home sickness, and suicidal thoughts and feelings. These findings raise questions as to what came first.

The aforementioned findings point to a shift during one's college experience where one moves from having higher levels of religiousness and lower levels of spirituality to lower levels of religiousness and higher levels of spirituality. The question remains as to what factors might play a role in that shift. To determine the answer one must explore the possibility of changing religious identities and ask to what degree individuals' religious identities are different from those of their parents.

Identity Formation Over College Years

Although researchers acknowledge that identity formation is a life-long process, the adolescent period is often recognized as a particularly critical period for identity

development (Bernard, 1981; Philipchalk & Sifft, 1985). Philipchalk and Sifft (1985) argue that the college years provide students in their late adolescence and young adulthood with extra time to develop their identity. Further, during these years, the individual's identity begins to crystallize due to career choices and increasing adherence to an ideology, religious and/or political (Erikson, 1963, 1968; Philipchalk & Sifft, 1985).

Erik Erikson (1963, 1968) developed a theory of identity formation in which individuals attempt to reconcile psychological, social, historical and developmental factors in order to form an integrated sense of self. Erikson's conceptual framework has inspired researchers to develop more systematic methods of measurement for identity formation (Adams, 1998). Marcia (1966) crafted an interview procedure that operationally defined identity status by assessing whether or not individuals had yet experienced a crisis or made a commitment and then categorized them into four categories: *Identity Diffused*, *Identity Foreclosed*, *Identity Moratorium*, and *Identity Achieved*. Individuals who had neither experienced a crisis nor made a commitment in their lives were categorized as *Identity Diffused*. In the current research, diffused individuals show little concern with religion or spirituality. *Identity Foreclosed* individuals have made a commitment without yet experiencing a crisis; these are the individuals who might just accept their parents' religion without questioning it themselves. Those individuals who are currently experiencing a crisis are said to be in the *Identity Moratorium* status; these individuals are actively questioning and searching for their religious identity. Finally, those individuals who have experienced a crisis and made a commitment are *Identity Achieved*; they have struggled with their religion and spirituality, found what they believe, and now know their religious identity.

As research on identity formation has improved since the work of Erikson (1963, 1968) and Marcia (1966), methods of measurement for identity status have also evolved. Rather than using lengthy, in depth, interviewing procedures, researchers such as Adams (1998) and Fulton (1997) have begun to use self-report questionnaires. The Objective Measure of Ego Identity Status (OMEIS; Adams, 1979) is an alternative method to measuring an individual's identity status. The scale has been used widely to examine not only identity development and personality, but also in conjunction with such topics as substance abuse, family relationships, career goals, politics, and religion (Adams, 1998).

Foster and LaForce (1999) used the extended version of the OMEIS scale in a longitudinal study examining the religiousness and spirituality levels of students enrolled at a Christian liberal arts college in comparison to those students' identity statuses. Significant differences were found in religiousness levels between students of differing identity status. Consistent with the scale, individuals found to be in the Identity Moratorium or the Identity Achieved statuses had more positive changes in religiousness than did individuals in the Identity Diffused or Identity Foreclosed statuses (Foster & LaForce, 1999).

Since the OMEIS scale's development, some researchers have still chosen to use Marcia's (1966) approach of interviewing procedures. Philipchalk and Siff (1985) made an early attempt to examine the relevance of these identity statuses over the four years of college life by conducting a study in which they examined the role of religious commitment in occupation and overall identity formation in college students. Similar to Marcia (1966), they used extensive semi-structured interviews lasting from 30 to 90 minutes each. They further classified ten freshmen women and 10 senior women into

each of Erikson's identity stages based on those interviews. The researchers concluded that no freshmen were classified as overall identity "achieved" with regard to religious commitment and only eight seniors were classified as such. Each of the ten seniors in the study claimed that sometime during their four years they experienced a period of crisis in which they questioned their goals and beliefs. The majority of the freshmen, consequently, were still in the identity "foreclosed" stage, meaning "they displayed a childlike faith," most likely obtained from the beliefs their parents had instilled in them (Philipchalk & Sifft, 1985, p. 45). Thus, the study showed a progression of identity formation from freshman to senior years.

This progression is similar to what will be examined in the present study; however, this investigation focuses more specifically on an individual's identity status as it relates to religion and spirituality. Therefore, the eight questions of the OMEIS associated with religion and spirituality have been separated to measure an individual's identity status as it pertains to his/her religious and spiritual orientation. Thus, there are two questions for each of Erikson's stages of identity status. This shortened version of the OMEIS will give an alternative method of measuring students' levels of religiousness and spirituality by focusing on their identity status over time. As students' religious and spiritual identities form over time, students may begin to forge their own convictions and beliefs.

Right Wing Authoritarianism

In order to follow college students' progression through these four stages of identity status one must closely examine the causes leading to these changes. Therefore, this thesis also employs a scale to measure the degree of participants' adherence to an

authoritarian value system. Previous research has shown that highly religious individuals tend to be authoritarians and that authoritarians tend to be religious (Altemeyer, 1981, 1988; Leak & Randall, 1995). Right-Wing authoritarianism can be defined as the covariation of submission to authority, inclination towards aggression, and excessive conventionalism (Altemeyer, 1981; Altemeyer & Hunsberger, 1992).

To measure authoritarianism, Altemeyer (1981) developed the Right-Wing Authoritarianism (RWA) Scale, which combines these three factors (Altemeyer & Hunsberger, 1992; McHoskey, 1996; Watson et al., 2003; Westman, Willink, & McHoskey, 2000). An example of submission is the belief that “obedience and respect for authority are the most important virtues children should learn” while an example of aggression is “one good way to teach certain people right from wrong is to give them a good stiff punishment when they get out of line.” Lastly, conventionalism is illustrated in the questionnaire by the item stating “If a child starts becoming a little too unconventional, his parents should see to it that he returns to the normal ways expected by society.”

Watson et al. (2003) used the RWA scale to examine the possible correlations among Intrinsic Religious Orientation and Religious Fundamentalism and Right Wing Authoritarianism. The results showed that higher scores on the Intrinsic Scale did seem to predict greater Right-Wing Authoritarianism and Religious Fundamentalism (Watson et al., 2003). This thesis examines the potential correlation of the RWA scale with higher levels of religiousness; it also looks at the possibility that individuals who identify themselves as questioning authority will be more likely to see themselves as spiritual rather than religious. The RWA measure thus provides valuable information as to how

some individuals are more questioning of their spiritual orientations than are others. More specifically, the scale will help to determine whether or not individuals are more inclined to follow the beliefs and opinions of their parents rather than seek out a non-traditional and unconventional form of life.

Self-Defining Memories

The approaches discussed thus far have been chiefly self-report questionnaires; therefore, it might be valuable to include an alternative to this survey-based method. By asking individuals a free response question about a particular moment of great significance in their religious or spiritual life, the researcher hoped to collect memories leading to valuable information about an individual's religious and spiritual orientations. How people think about their religious or spiritual identity is often reflected in ways other than just what they report in more structured formats. The ways individuals experience and recall important events in their religious or spiritual lives also give insight into their religious and spiritual orientations.

Conway (1990) demonstrated that memory has an integral function in defining an individual's identity and self-concept. More specifically, autobiographical memory is the type of memory that encompasses specific and personal experiences related to the self (Conway & Pleydell-Pearce, 2000). It is most commonly characterized by the long-term recognition of the general features of an event and may not always have many specific details recorded as part of the memory (Conway, 1990). Singer and Salovey (1993) characterized the specific type of autobiographical memory that records details of an event as if they were a movie playing inside one's head as a Self-Defining Memory (SDM). This type of autobiographical memory has the following features: "affective

intensity, vividness, repetitiveness, linkage to other memories, and a focus on enduring concerns or unresolved conflicts” (Singer & Salovey, 1993, p. 12). In his research, Singer collects these SDM’s in order to assess the personality and self-concept of the participants writing them. Often a prompt is given to the participant to think back to an important memory and write about it. In one particular study the participants were asked:

Think back over your summer internship experience and try to recall a situation or circumstance in which you weren’t sure you could handle a challenge that was presented. Faced with this challenge, you “rose to the occasion” and tapped a strength, value or ability in a way that you had never quite done before... (Singer, King, Green, & Barr, 2002, p. 543)

The participants were then asked to describe the experience as clearly as possible. After the SDM’s are collected by the researcher, they are coded and recorded for thematic analysis. Over many years of research, Singer and his colleagues have found that the “affective quality of self-defining memories [is] a function of the relevance of the memories to the attainment of a person’s most desired goals” (Conway, Singer, & Tagini, 2004, p. 505). In addition to providing valuable information for the researcher, SDM’s have also been found to provide valuable life lessons that help individuals experience personal growth (Blagov & Singer, 2004; Conway et al., 2004).

Present Study

In the present study the researcher examined the religiousness and spirituality levels of Connecticut College freshmen and seniors. According to the previous research discussed throughout this thesis thus far, as college students progress through their four years, their religiousness decreases while their spirituality increases. Therefore, it was

first hypothesized that freshmen would have higher levels of religiousness and lower levels of spirituality than would seniors.

It was further hypothesized that seniors would have higher levels of the active searching stage (Moratorium) and achieved religious identity than would freshmen. Also, it was hypothesized that freshmen would show higher levels of a foreclosed identity than would seniors.

With regard to the Right-Wing Authoritarian attitudes of participants, it was hypothesized that freshmen would have higher scores on the Right-Wing Authoritarianism Scale than would seniors. This finding would confirm that these individuals scoring high on the RWA Scale are still following the beliefs and attitudes of their parents or else have become more liberal in their beliefs during their college experience. It was also hypothesized that individuals scoring higher in intrinsic religiousness would score higher on the Right-Wing Authoritarianism scale than would individuals scoring higher in extrinsic religiousness.

Lastly, the researcher also collected memories of particularly religious or spiritual moments in participants' lives. These memories served as examples of religious and spiritual self-defining memories. It was hypothesized that individuals scoring higher in religiousness would describe more religious memories; freshmen should show more religious memories than seniors. It was also hypothesized that individuals scoring higher in spirituality would describe more spiritual memories; seniors should show more spiritual memories than freshmen.

Method

Participants

Students participating in this study were contacted via e-mail and presented with a brief description of the study and a link to the study's page on SurveyMonkey.com in exchange for research credit in the Psychology Department or entry into a raffle for a \$25 iTunes[®] gift card. The survey was originally opened by 226 participants; however, 76 of those participants did not follow through with the survey to allow their data to be included. Subsequently, they were excluded from the analyses. Therefore, the final number of participants comprising the study was 150 undergraduate students at Connecticut College. Of those 150, there were 75 freshmen and 75 seniors. Distribution of gender was 44 men and 106 women. Distribution of gender across class year in the freshmen class was 21 men and 54 women, and in the senior class there were 23 men and 52 women. Although the sample was primarily comprised of Caucasian students, there were a number of students identifying with other ethnic backgrounds (see Table 1). Further, the students in this study were affiliated with a number of different religious faiths and traditions (see Table 2).

Measures

The *Religious Orientation Scale* (ROS) is a 20 item scale developed by Allport and Ross in 1967 (see Appendix A). The scale measures each individual's religious motivations as either Extrinsic or Intrinsic. An example of an item measuring extrinsicness is "The church is most important as a place to formulate good social relationships." An example of an item measuring intrinsicness is "I try hard to carry my

Table 1

Ethnic Distribution for Sample and Sub Samples (N = 150)

	Class of 2006	Class of 2009	Entire Sample (<i>n</i>)
Arabic	1	0	1
Asian	4	2	6
Black	2	1	3
Caucasian	59	68	127
Hispanic	4	3	7
Other	3	0	3

Table 2

Religious Affiliation Distribution for Sample and Sub Samples (N = 150)

	Class of 2006	Class of 2009	Entire Sample (n)
Catholic	26	15	41
Lutheran	1	0	1
Methodist	2	2	4
Episcopal	3	3	6
Unitarian	0	2	2
Presbyterian	2	3	5
Other Christian	13	6	19
Jewish	14	13	27
Muslim	0	1	1
Hindu	0	0	0
Buddhist	0	2	2
Atheist/Agnostic	12	26	38
Other	0	1	1

religion over into all my other dealings in life.” The original version of this scale measured the extrinsic and intrinsic motivations on one continuum with a score of 4 or 5 indicating an extrinsic motivation and a score of 1 or 2 indicating an intrinsic motivation. A score of 3 was omitted. In this study however, as in Batson et al.’s (1993) study and Sirch’s (1994) study, the version used had each item scored on a seven point Likert scale with (1) indicating strongly disagree and (7) indicating strongly agree. A reliability analysis was computed for both subscales in this study with a Cronbach’s Alpha of .58 for the Extrinsic scale and .88 for the Intrinsic scale.

The *Religious Life Inventory* (RLI) is a 34 item scale developed by Batson in 1976 (see Appendix B). The measure is comprised of three subscales with each item scored on a seven point Likert scale with (1) indicating strongly disagree and (7) indicating strongly agree. The first subscale called the External Scale measures the extent to which one’s religion is influenced by one’s external social environment (Batson, 1976). In the present research, the External subscale had a Cronbach’s Alpha of .77. An example of an item loading on the External subscale is “The church has been very important in my religious development.” The second scale, the Internal Scale, measures the degree to which an individual’s religion meets his/her internal needs for a clear conviction about his/her life’s direction. In this research the Internal scale yielded a Cronbach’s Alpha of .88. An example of an item loading on this subscale is “It is necessary for me to have a religious belief.” The last subscale, or the Quest Scale, measures the degree to which an individual is open to dialogue and questions concerning his/her religion; this subscale had a Cronbach’s alpha in the present research of .77. An

example of an item loading on the Quest subscale is “I am constantly questioning my religious beliefs.”

The *Assessment of Spirituality and Religious Sentiments* (ASPIRES, Piedmont 2004) consists of two scales (see Appendix C). The first is the Religious Sentiments (RS) scale consisting of 12 items addressing questions such as “How often do you pray?” or “How important to you are your religious beliefs?” This scale is comprised of two subscales, the Religiosity scale ($\alpha = .59$) and the Religious Crisis scale ($\alpha = .71$). The second scale is the Spiritual Transcendence Scale (STS) consisting of three subscales totaling 23 items. The subscales are the Prayer Fulfillment scale, measuring an individual’s sense of satisfaction with his/her relationship to God, the Universality scale, measuring an individual’s belief in the unity of all living things, and the Connectedness scale, measuring an individual’s belief that he/she is an important link in the chain of humanity. Each item is scored on a five point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (5). Examples of items on the STS are “I meditate and/or pray so that I can grow as a person” and “I want to grow closer to the God of my understanding.” Overall, for the present research, the STS yielded a Cronbach’s Alpha of .87; for, the three subscales for the STS, the alphas were as follows: the Prayer Fulfillment scale ($\alpha = .87$), the Universality scale ($\alpha = .85$), and the Connectedness scale ($\alpha = .39$).

The *Extended Version of the Objective Measure of Ego Identity Status* was developed by Adams, Bennion, and Huh in 1987. The measure was designed to assess individuals’ identity statuses and consists of 64 items divided into 8 groups: religion politics, occupation, philosophical lifestyle, friendship, dating, sex roles, and recreation

(Zittel, 1991). For the purpose of this study only the eight items pertaining to religion were used (see Appendix D). These 8 items were scored on a six point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (6). These eight items can be further divided into 4 groups with two items in each. Each group represents one of Erikson's identity statuses, the groups are: Achievement, referring to an individual's fully realized religious identity; Moratorium, referring to an ongoing search for religious meaning; Foreclosure, indicating an acceptance of parental or societal religious conventions; and Diffusion, an avoidant or escapist approach to religion.

The Right-Wing Authoritarianism scale (RWA) was developed by Altemeyer in 1981 (see Appendix E). The scale measures the strength of participants' Right-Wing Authoritarian attitudes (Altemeyer, 1994). It consists of 24 items scored on a Likert scale ranging from -4 (very strongly disagree) to +4 (very strongly agree) with 0 being neutral. The split-half reliability has been calculated for Altemeyer's (1994) past research at .83, however, for the present research a Cronbach's Alpha was calculated to be .93. More commonly used today is Altemeyer's 1993 version of the scale with 30 items rather than 24. The 24-item scale used in this research correlates .86 with the 1993 30-item scale (The Authoritarian Specter, 1996, p. 319, Note 3).

The *Religious or Spiritual Memory Task* was designed by the researcher for this study and asks participants to describe a particularly religious or spiritual moment in their life (see Appendix F). Upon completion of writing down their memory it also asks them to rate the impact the memory has had on their life and record how long ago the memory occurred.

The *Demographics Questionnaire*, with the exception of two items, was also designed by the researcher for this study (see Appendix G). The two items regarding race and religious affiliation were borrowed from the demographics section of Piedmont's (2005) ASPIRES. The researcher did, however, add one religious affiliation to that item. Wiccan was not included in the original list, and as the researcher is aware that Wiccan individuals who espouse Wiccan attend her school, she felt it was important to add this item.

The *Religiousness and Spirituality Definition Ratings* consist of two borrowed items asking participants the degree to which they feel that they are religious or spiritual (see Appendix H). These two items were also used by Lynn Sirch (1994) in her doctoral dissertation. The researcher felt that these last two items were relevant because each would act as a reliability measure against the Religiousness and Spirituality scales used.

Coding Procedures

The religious and spiritual memories collected were compiled and analyzed by the researcher for common themes as well as similarities and differences. The information gathered was then used to create the guidelines for coding the memories (see Appendix I). After going over a few examples to familiarize themselves with the guidelines, two raters independently coded the self-defining memories for either a positive or negative attitude toward religion and spirituality, as well as whether the memory was predominantly more religious or spiritual. Memories that were not emotionally toned were designated "neutral," and memories that were neither religious nor spiritual were coded as "none." The two independent coders were in approximately 91% agreement. The adviser to this thesis then helped to resolve the discrepancies.

Procedure

Participants received an e-mail inviting them to take part in the study by clicking a link to a Survey Monkey[©] website.² Upon completion of the consent page (see Appendix J) at the beginning of the study, participants then continued on through a battery of questionnaires. The battery was in the following order: the Demographics Questionnaire, the Religious Orientation Scale, the Religious Life Inventory, the Spiritual Transcendence Scale, the Extended Version of the Objective Measure of Ego Identity Status, the Right Wing Authoritarianism Scale, the Religious or Spiritual Memory Task, and the two questions pertaining to the Religiousness and Spirituality definitions. Upon completion of the study the participants were shown a debriefing page (see Appendix K). Lastly, after the debriefing page was another page asking participants to enter their name and campus mail box number if they were interested in receiving research credit for their participation or entering into the raffle for the iTunes[©] gift card.

² <http://www.surveymonkey.com/s.asp?u=452641424865>

Results

The means and standard deviations for both class years are found in Table 3. To analyze the first hypothesis, which stated that freshmen would have higher levels of Religiousness than would seniors, a multivariate analysis of variance (MANOVA) was conducted with class year as the fixed variable and scores on the following subscales as dependent variables: Intrinsic, Extrinsic, Internal, External, Quest, Religiosity, and Religious Crisis, Wilks's Lambda = .980, $F(7,126) = 0.361$, $p = .923$. Follow up univariate analyses of variance (ANOVA) were also insignificant for all dependent variables.

A second MANOVA was conducted to examine the second hypothesis, which stated that seniors would have higher levels of Spirituality than would freshmen. This MANOVA, again, had class year as the fixed variable and the following Spirituality subscales as the dependent variables: Prayer Fulfillment, Universality, and Connectedness, Wilks's Lambda = .991, $F(3,130) = 0.388$, $p = .762$; univariate ANOVAS for these measures also revealed no differences. Further, an ANOVA with class years as the fixed variable was conducted on the total score of the Spiritual Transcendence Scale, comprised of the three Spirituality subscales mentioned above, which was also found to be insignificant, $F(1,132) = 0.201$, $p = .655$.

A third MANOVA, with class year as the independent variable and the four religious identity statuses as dependent variables, was conducted to analyze the third and fourth hypotheses made concerning students' religious identities. The results were insignificant, Wilks's Lambda = .991, $F(4,133) = 0.309$, $p = .871$.

To analyze the hypothesis that freshmen would have more Authoritarian attitudes

Table 3

Means and Standard Deviations of Scales for Class Years and Entire Sample (N = 150)

	Class of 2006		Class of 2009		Entire Sample (n)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Extrinsic	38.29	(8.83)	37.86	(7.76)	38.07	(8.29)
Intrinsic	29.82	(12.36)	30.06	(13.01)	29.94	(12.65)
External	23.23	(7.39)	22.05	(8.21)	22.65	(7.80)
Internal	34.10	(13.74)	34.40	(12.71)	34.25	(13.20)
Quest	49.39	(9.75)	51.08	(11.90)	50.24	(10.88)
Religiosity	-0.14	(3.98)	-0.02	(4.34)	-0.08	(4.15)
Religious Crisis	8.75	(3.50)	8.90	(3.03)	8.83	(3.26)
Prayer Fulfillment	32.19	(7.92)	32.26	(8.55)	32.22	(8.22)
Universality	24.49	(4.99)	25.31	(5.97)	24.91	(5.51)
Connectedness	20.87	(3.13)	20.82	(3.00)	20.85	(3.05)
STS Total	77.36	(12.19)	78.37	(13.69)	77.87	(12.93)
Diffused	5.75	(3.30)	5.93	(3.19)	5.84	(3.23)
Foreclosed	5.12	(3.00)	5.00	(2.78)	5.06	(2.88)
Moratorium	6.47	(2.56)	6.92	(2.92)	6.70	(2.75)
Achieved	8.72	(1.57)	8.75	(1.99)	8.73	(1.80)
RWA Total	-19.74	(34.73)	-21.58	(29.52)	-20.69	(32.09)

than would seniors an ANOVA was conducted, with class year as the fixed variable and scores on the RWA as the dependent variable. This analysis revealed no significant differences, $F(1,125) = .0104, p = .748$.

Gender by Class Year Interactions

An examination of the means (see Tables 4, 5, & 6), broken down by class year and gender, suggested that further analyses needed to be conducted. For this reason, the MANOVAS for Religiousness, Spirituality, Religious Identity, and the RWA were repeated with class year and gender as fixed variables, to examine the interaction of class year and gender. The first MANOVA was conducted for the seven Religiousness subscales. The results yielded that there was neither a main effect for gender, Wilks's Lambda = .951, $F(7,124) = 0.910, p = .501$, nor an interaction effect, Wilks's Lambda = .944, $F(7,124) = 1.06, p = .394$.

An additional MANOVA was conducted with class year and gender as the fixed variables and the Spirituality subscales, Prayer Fulfillment, Universality, and Connectedness as the dependent variables. No interaction emerged, however, a main effect for gender was found to be significant, Wilks's Lambda = .977, $F(3,128) = 3.76, p = .013$. Follow up univariate analyses revealed significant differences for Prayer Fulfillment (see Figure 1, Male $M = 29.49$, Female $M = 33.30$), $F(1,133) = 5.46, p = .021$, and Universality (see Figure 2, Male $M = 22.70$, Female $M = 25.78$), $F(1,133) = 8.80, p = .004$. Connectedness did not reach significance (see Figure 3, Male $M = 20.17$, Female $M = 21.12$), $F(1,133) = 2.29, p = .133$. An ANOVA was also conducted on the STS total score encompassing all three subscales, revealing a main effect for gender with

Table 4

Means and Standard Deviations of Religiousness Scales for Genders within Class Years and Entire Sample

	Class of 2006 (<i>N</i> = 75)				Class of 2009 (<i>N</i> = 75)				Entire Sample (<i>N</i> = 150)			
	Men		Women		Men		Women		Men		Women	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Extrinsic	37.65	(10.10)	38.57	(8.31)	37.45	(8.77)	38.01	(7.42)	37.56	(9.38)	38.28	(7.83)
Intrinsic	28.35	(10.76)	30.47	(13.05)	28.90	(13.69)	30.51	(12.84)	28.61	(12.10)	30.49	(12.88)
External	22.79	(6.81)	23.44	(7.69)	20.62	(9.40)	22.62	(7.72)	21.75	(8.13)	23.02	(7.68)
Internal	31.00	(12.94)	35.47	(13.99)	32.00	(13.35)	35.34	(12.46)	31.48	(12.99)	35.40	(13.17)
Quest	47.27	(7.48)	50.33	(10.53)	50.52	(15.03)	51.30	(10.61)	48.82	(11.68)	50.82	(10.53)
Religiosity	-1.55	(3.32)	0.48	(4.12)	0.33	(4.71)	-0.16	(4.22)	-0.61	(4.14)	0.15	(4.16)
Religious Crisis	9.43	(3.54)	8.44	(3.47)	9.19	(2.34)	8.79	(3.29)	9.32	(2.99)	8.62	(3.36)

Table 5

Means and Standard Deviations of Spirituality Scales for Genders within Class Years and Entire Sample

	Class of 2006 (<i>N</i> = 75)				Class of 2009 (<i>N</i> = 75)				Entire Sample (<i>N</i> = 150)			
	Men		Women		Men		Women		Men		Women	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Prayer Fulfillment	29.95	(6.14)	33.12	(8.43)	29.00	(9.98)	33.47	(7.72)	29.49	(8.14)	33.30	(8.03)
Universality	21.90	(3.80)	25.55	(5.07)	23.50	(7.21)	26.00	(5.34)	22.70	(5.74)	25.78	(5.19)
Connectedness	20.95	(2.54)	20.84	(3.37)	19.43	(3.11)	21.38	(2.79)	20.17	(2.92)	21.12	(3.08)
STS Total	72.80	(7.52)	79.37	(13.33)	72.21	(17.14)	80.76	(11.42)	72.51	(12.94)	80.07	(12.34)

Table 6

Means and Standard Deviations of Identity Scales for Genders within Class Years and Entire Sample

	Class of 2006 (<i>N</i> = 75)				Class of 2009 (<i>N</i> = 75)				Entire Sample (<i>N</i> = 150)			
	Men		Women		Men		Women		Men		Women	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Diffused	7.15	(3.30)	5.17	(3.15)	6.81	(3.41)	5.57	(3.05)	6.98	(3.32)	5.37	(3.09)
Foreclosed	6.45	(3.69)	4.55	(2.49)	4.05	(2.58)	5.39	(2.79)	5.22	(3.56)	4.98	(2.67)
Moratorium	6.75	(2.57)	6.35	(2.57)	6.00	(2.92)	7.29	(2.87)	6.37	(2.75)	6.84	(2.75)
Achieved	8.70	(1.49)	8.72	(1.62)	8.90	(2.49)	8.69	(1.77)	8.80	(2.04)	8.70	(1.69)
RWA Total	-5.65	(38.30)	-25.18	(32.07)	-22.52	(34.13)	-21.14	(27.47)	-14.97	(36.55)	-23.16	(29.76)

Figure 1

Means of Prayer Fulfillment by Class Year and Gender

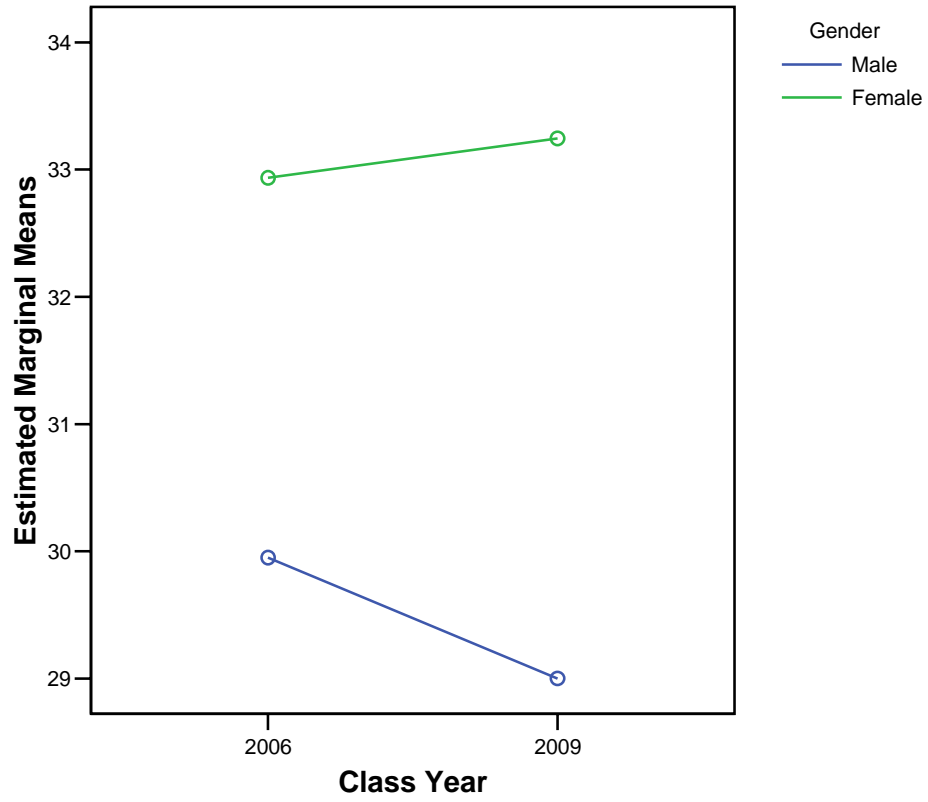


Figure 2

Means of Universality by Class Year and Gender

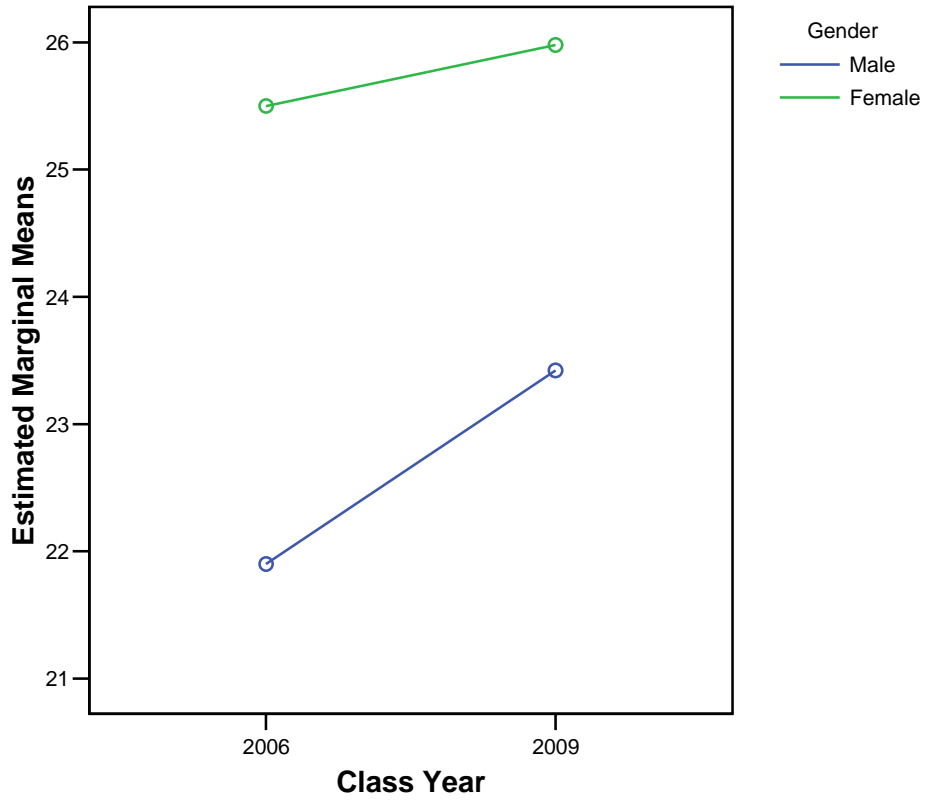


Figure 3

Means of Connectedness by Class Year and Gender

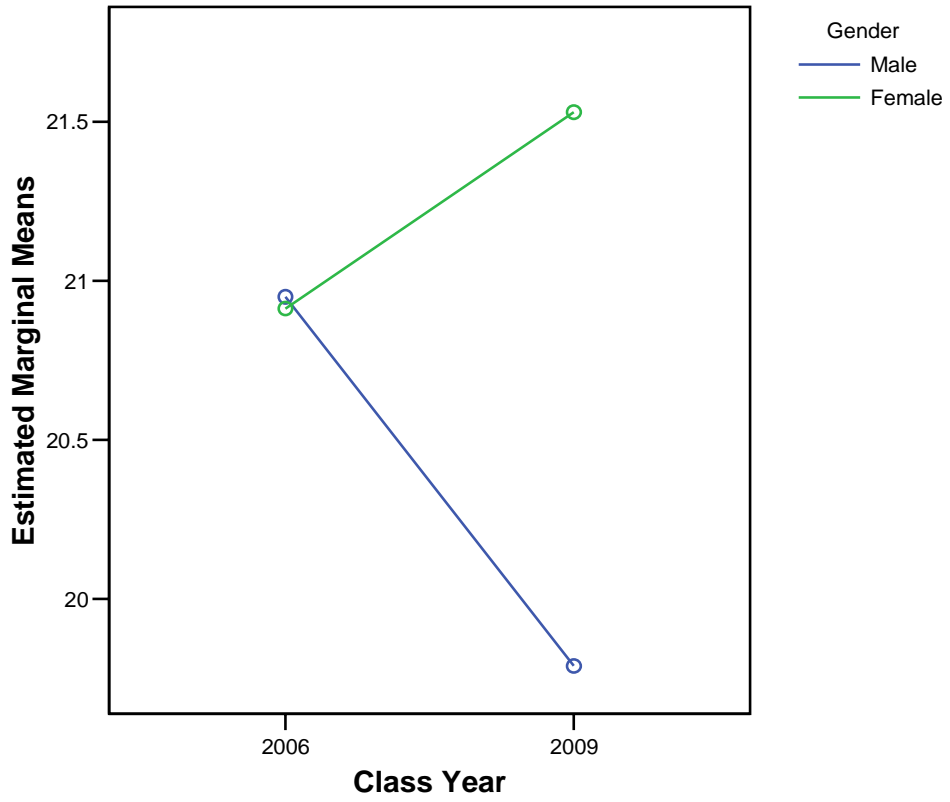
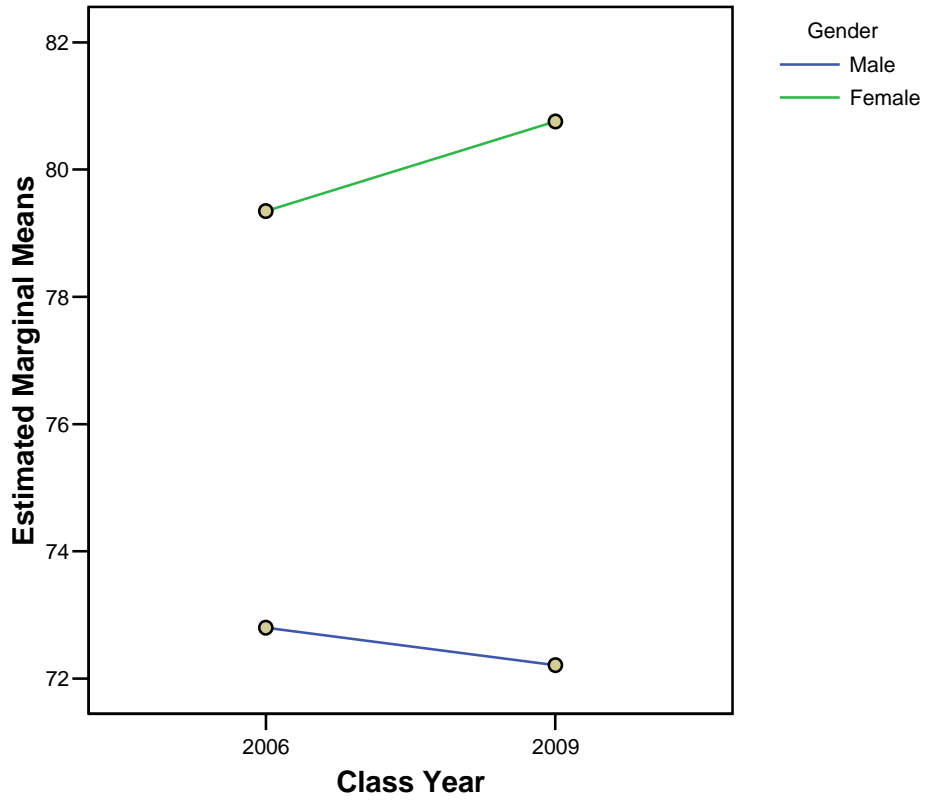


Figure 4

Means of STS Total Scores by Class Year and Gender



women measuring higher in spirituality than did men (see Figure 4), $F(1,133) = 9.92, p = .002$.

An ANOVA was conducted on the RWA total scores to assess the presence of any significant gender differences between men and women. The results approached significance, $F(1,125) = 2.85, p = .094$, indicating that senior men scored higher on the RWA than did freshmen men (see Figure 5).

One final MANOVA was conducted with class year and gender as fixed variables and the religious identity statuses as dependent variables. The results indicated a main effect for gender on the Diffusion subscale, Wilks's Lambda = .928, $F(1,137) = 9.81, p = .01$, as well as an interaction effect by class year and gender on the Foreclosure scale, Wilks Lambda = .910, $F(1,137) = 9.42, p = .003$. A follow up univariate ANOVA revealed that men, regardless of class year, have more diffused religious identities than do women (see Figure 6), $F(1,139) = 7.47, p = .007$. A second follow up ANOVA revealed a significant interaction by class year and gender on the foreclosure scale, $F(1,134) = 9.42, p = .003$. A simple effects test revealed that senior men scored higher in foreclosure than did freshmen men (see Figure 7), $F(1,40) = 5.88, p = .02$. Results from the initial MANOVA also indicated that there was a trend towards significance in the moratorium category. One final simple effects test revealed that freshmen women measured higher in moratorium status did than senior women (see Figure 8), $F(1,98) = 2.94, p = .09$.

Correlations of Personality and Memory Measures across the Entire Sample

For each sample two Pearson Correlations were also utilized to examine the differences across class year on religiousness, spirituality, and identity measures in

Figure 5

Means of RWA Total Scores by Class Year and Gender

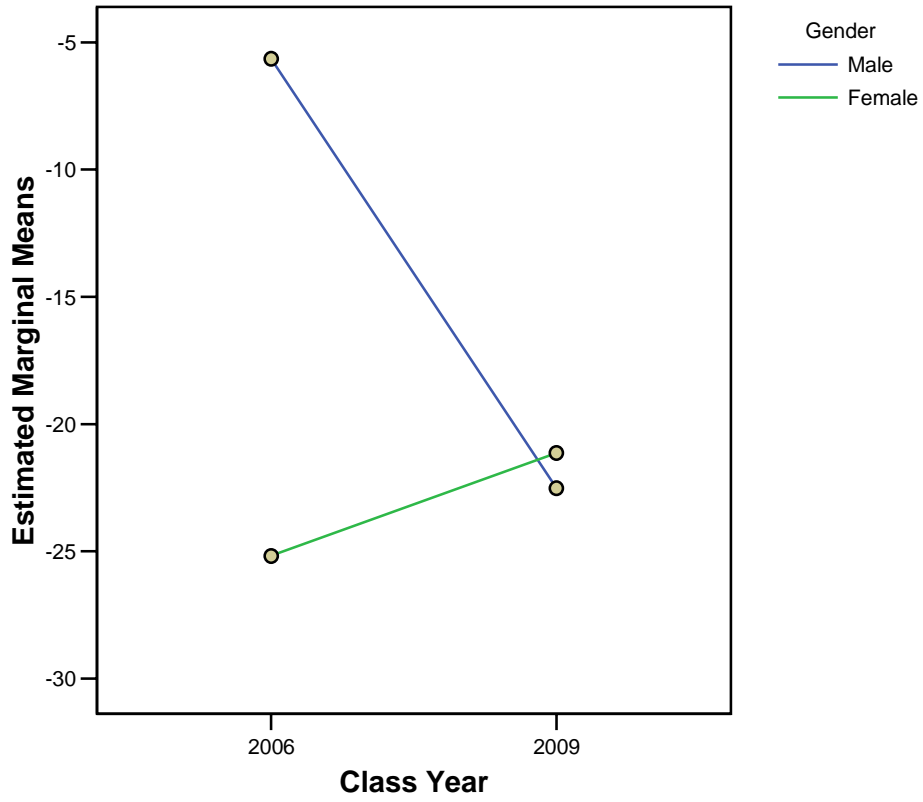


Figure 6

Means of Diffused Identity Status by Class Year and Gender

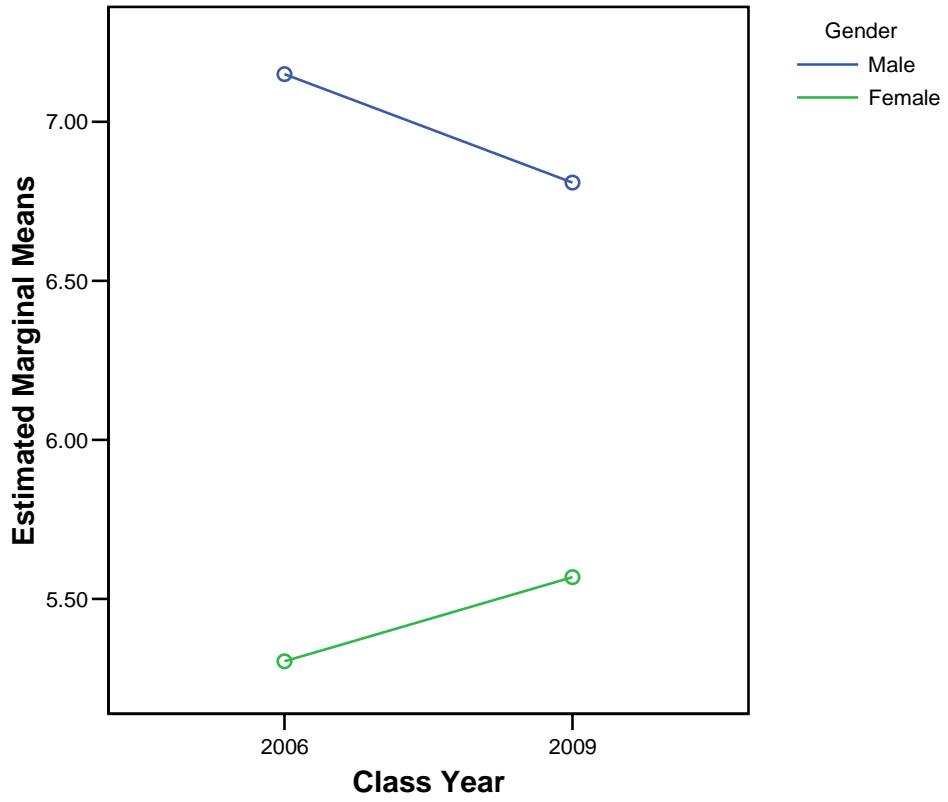


Figure 7

Means of Foreclosed Identity Status by Class Year and Gender

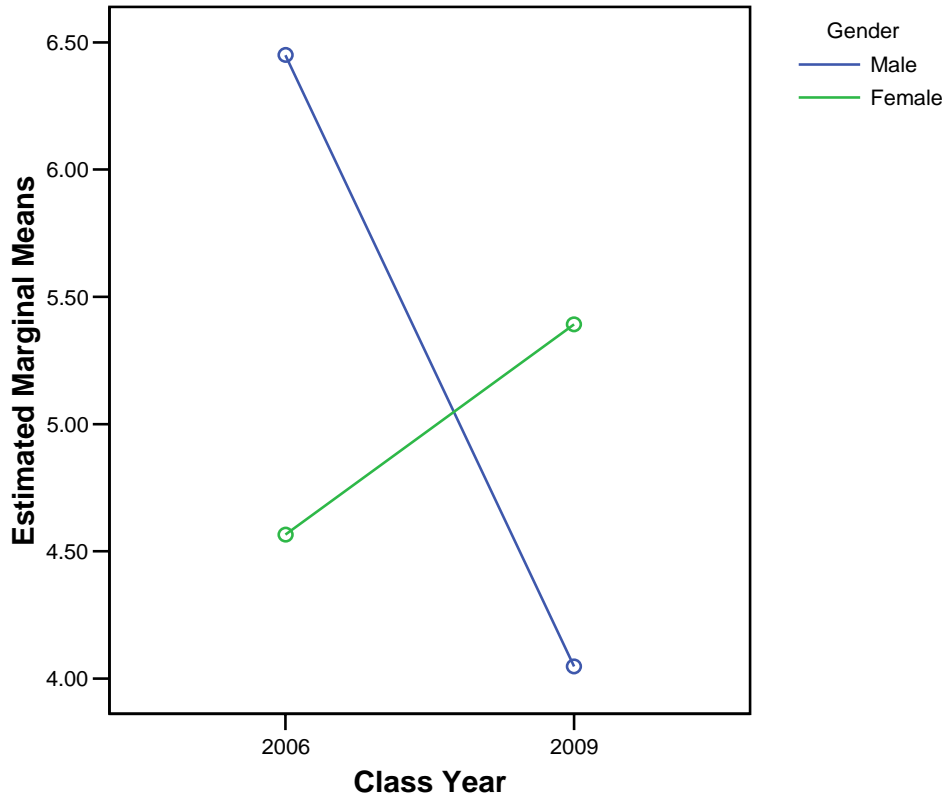
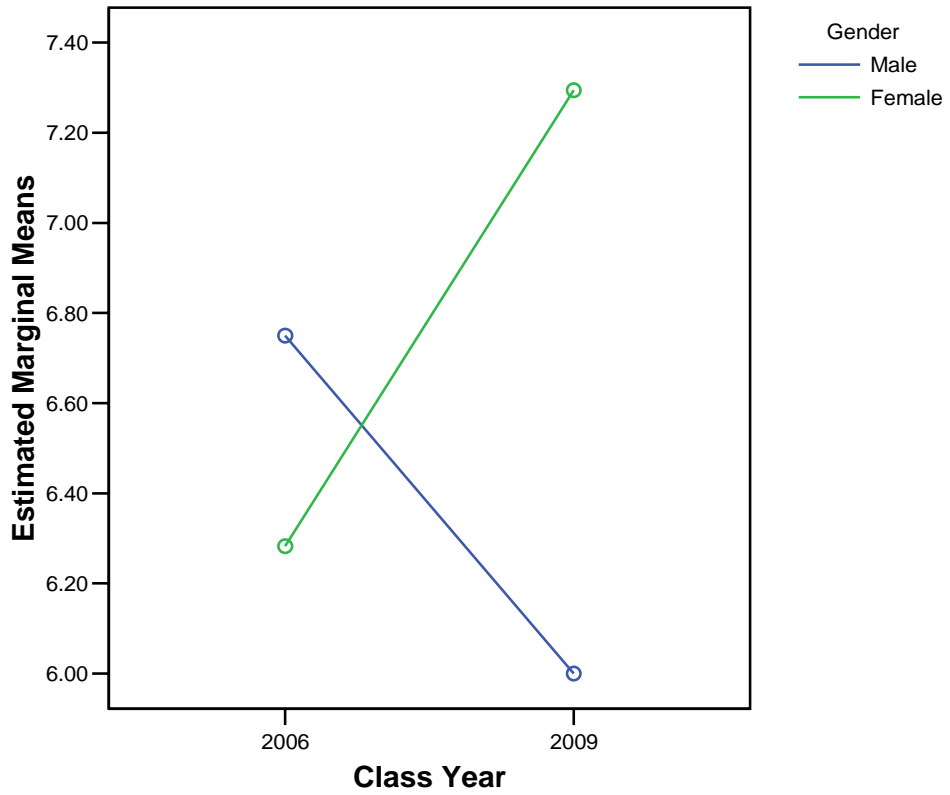


Figure 8

Means of Moratorium Identity Status by Class Year and Gender



relation to the degree to which they rated the impact of their religious or spiritual memory. There were no significant differences.

Correlations of Class Year with Religious and Spiritual Memory Codings

After coding the religious and spiritual memories for either positive or negative views towards Religion and Spirituality and for predominantly more religious or spiritual tone, the coded data were then entered into SPSS and analyzed using a Chi Square analyses. Two 3x2 Chi Square analyses were conducted, one for positive or negative by class year and the other for religious or spiritual by class year. Neither analysis yielded significant results, $X^2(2, N = 102) = .437, p = .804$.

Discussion

Contrary to expectations there were no marked differences between freshmen and seniors at a liberal arts college in their relative degrees of Religiousness and Spirituality. There were also no significant differences found between freshmen and seniors regarding their religious identity status or authoritarian attitudes. However, when gender was added to the analyses as a fixed variable, there were some significant differences between men and women, regardless of class year, in spirituality and religious identity. There was also one class year by gender interaction with regard to religious identity; senior men were more foreclosed than were freshmen men.

Women scored a great deal higher on the Fulfillment and Universality subscales of the Spiritual Transcendence Scale than did men. This finding serves to show that women feel a greater sense of joy and contentment from their personal encounters with God than do men (Piedmont, 2005). The finding also demonstrates that more women felt more strongly than did men that all of life is intimately tied together in a universal manner (Piedmont, 2005). Supporting this result, women, regardless of class year, scored lower on the diffused identity scale than did men. This finding indicates that women have taken more steps toward a committed religious identity than have their male counterparts.

Representative individuals who scored high on the Fulfillment and Universality subscales and low on the diffused identity scale recorded memories such as the following:

When I was 15 I had an extremely vivid dream about my Grandmother a few months after she died. When I woke up I could still smell her and I

felt her presence a very spiritual closeness to her. It solidified my faith in God and some sort of afterlife (participant 17).

During a revival week, the worship was so wonderful and I really felt God's spirit touch me and comfort me, reaffirming His hand on my life and taking away my pain (participant 92).

In contrast, individuals who scored low on the Fulfillment and Universality subscales and high on the diffused identity scale recorded memories such as the following:

The moment for me would be my liberation from organized religion, which I never found to be useful and actually found it to cause more problems. So the moment would be when I told my parents that I was no longer going to be attending temple (participant 45).

I was never raised to follow religion since both of my parents did not follow any traditional or organized religion. As a result, I grew up without any religion, but with the objectivity to view the problems and benefits of organized religion. This continuous process of analyzing other religions cemented my atheism (participant 32).

The examples given here certainly demonstrate the differing levels of Spirituality and diffused identity between men and women in this research.

These findings are also evident in everyday life; women are often described to be more religious than are men (Miller & Hoffman, 1995). If one were to look carefully at a congregation in any house of worship, the women present almost always outnumber the men. In research as well women have been found to attend church more frequently than have men (Batson, Schoenrade, & Ventis, 1993; Moberg, 1962). Another explanation for

this finding might be that women have also been found to demonstrate a greater interest in religion and thus commit to it more personally than have men (Argyle & Beit-Hallahmi, 1975; Donohue, & Erickson, 1989; Sasaki, 1979; Yinger, 1970). This can also be demonstrated in the fact that when prompted to participate through an e-mail, many more women than men participated in this research. It is possible that more women were interested in the topic and wanted to spend the time to help the researcher. However, traditionally women are more compliant with requests for participation in psychological research than are men, and therefore the content of the study may not have been the primary influence on the participation rate of men and women (Rosenthal & Rosnow, 1975).

Limitations

As alluded to in the previous paragraph, this study attracted a much larger number of women than men. It is possible that a more gender balanced sample might have revealed greater differences between the two class years. If women are indeed more inclined towards religious and spiritual concerns, then by having such a large number of women in the current study the possibility of finding variation in degrees of religiousness and spirituality may have been reduced. A sample with greater numbers of men might have offered greater variation in attitudes towards religion and spirituality as well.

Another significant limitation for this research was that participants were solicited via e-mail and participated solely through the Internet. The survey format utilized by the researcher on the Survey Monkey[®] website was one that allowed participants to progress through the survey without completely answering every question. This feature therefore allowed many participants to skip questions or even exit the survey without completing it.

Thus, the initial sample was almost twice the size of the final sample but with very incomplete data. After limiting the participants to those who had completed at least two-thirds of the research, participant numbers were almost cut in half. One last limitation of the research concerning incomplete data was that the researcher placed the self-defining memory as the last task in the battery of questionnaires. Therefore, of the 150 participants included in the final study, only about 100 had recorded a memory.

The researcher also acknowledges that the reduced sample of participants could have been more diverse in both faith and cultural backgrounds. With the demographics of a small, northeastern, predominantly White, liberal arts college comes the difficulty of finding a diverse sample for research. The achieved sample was comprised mostly of Judeo Christian and atheistic/agnostic faiths. The research's outcome would surely have been different had the sample been comprised of a different demographic background in another regional location, such as mostly Mormons in the West or Baptists in the South.

In addition, the present research utilized a great many different measures than the previous research referenced when forming preliminary hypotheses. This difference in measures utilized could suggest that some measures were insufficiently validated or others could have been outdated. The Cronbach's Alpha scores of the scales used in this study varied considerably from .38 for the Connectedness subscale of the STS to .93 for the RWA scale. Many of the scales with lower Cronbach's Alpha scores could have been contributing factors to the general null results for this thesis..

In addition, the broad content area measured by the battery of questionnaires was extensive and exhaustive. Participants may not have realized until half way through the

research just how in depth or time demanding it could be. This is another possible explanation for the lack of participants' abilities to complete the battery.

One significant difference between the present research and the research referenced when making hypotheses, specifically a foundational study of Bryant, Choi, and Yasuno (2003), is that that latter study was longitudinal, whereas the present study was not. Due to the time constraints of a two semester thesis, a longitudinal study was out of the question. Bryant et al. conducted their longitudinal study on incoming freshmen, measuring them at both the beginning and end of their freshmen year. Most of the first year student data for this thesis was conducted toward the end of their initial semester at Connecticut College. It is possible that a data collection that captured students' attitudes within the first weeks of their arrival on campus would have been a better reflection of their pre-college points of view. By November and December of their first semester they may already been exposed to a variety of alternative perspectives from both their course work and their newly forged social relationships. Perhaps the present research would have yielded different results if the same group of students had been followed over the course of a year as in Bryant et al.'s study or over the course of all four years of their college experience.

This notion of the freshmen participating in this research already being significantly into their first year of college is further supported when one compares the religious service attendance data obtained for this research to the corresponding data obtained in the research by Bryant et al. In this research, 27% of the freshmen measured claimed that they attend religious services either "often" or "quite often," while in Bryant et al.'s research 27% of the freshmen also stated they attended religious services

frequently. Bryant et al.'s percentage however, was measured in the spring of these students' first year at their college or university. Further, the percentage of freshmen in the present study claiming that they "rarely" or "never" attend religious services was approximately 48%, which also corresponded to the data collected by Bryant et al. in the spring. About 43% of the students they measured in the spring of their freshmen year claimed that they did not attend religious services at all, which was a 27% increase for them from the data they collected in the fall of that academic year (Bryant, Choi, & Yasuno, 2003). It is also important to note that Bryant et al.'s research was conducted on students at 50 four-year colleges and universities nationwide. Therefore, the data collected are certainly representative of the average American college student.

Future Research

To improve on the present research as well as the past research, the researcher acknowledges that the two most important changes made would be to change from a cross-sectional design to a longitudinal design as well as a shortened battery of questionnaires. The longitudinal design would ideally be conducted with incoming freshmen and follow them through their college careers, measuring them again just before they graduated. In addition, if one had the resources and participants available, perhaps research could be conducted even earlier than the college years, on high school or boarding school students, thus following them to diverse colleges and universities throughout the United States. If one could establish a baseline of religious and spiritual attitudes at high school graduation, the subsequent research could track the different pathways of religious exploration that students travel in their undergraduate years.

Another methodological consideration for future research is how to gain the greatest benefit from using an online survey approach. As mentioned previously surveys should be designed to require completion of each item before the individual can advance to the end of the survey. When possible, participants might complete the surveys using banks of computers in the presence of the experimenter. This strategy would ensure a more personal relationship between the researcher and the participants as well as give the researcher a greater capacity to monitor the participants' activity.

Conclusion

Based on the results of this study there do not appear to be any significant differences between freshmen and seniors at Connecticut College in Religiousness or Spirituality. However, there do appear to be some significant differences regarding gender, class year, and spirituality and religious identity. As mentioned previously, women were a great deal higher on the Fulfillment and Universality subscales of the Spiritual Transcendence Scale than were men. Women also, regardless of class year, scored lower on the Diffused Identity Scale than did men. Each of these findings seems to indicate that women at Connecticut College demonstrate a greater interest in religion and spirituality and therefore commit to it a great deal more personally than do men. Future studies on this topic could better utilize online data collection, shorten the number and length of questionnaires used, and utilize longitudinal designs rather than cross-sectional designs.

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How often would you say you have regularly attended religious services during the following periods of your life?

- | | | |
|--------------------------------|---|--|
| High School (grades 9-12) | <input type="checkbox"/> At least once per week | <input type="checkbox"/> At least once per month |
| | <input type="checkbox"/> At least once per year | <input type="checkbox"/> Less than once per year |
| Middles School (grades 6-8) | <input type="checkbox"/> At least once per week | <input type="checkbox"/> At least once per month |
| | <input type="checkbox"/> At least once per year | <input type="checkbox"/> Less than once per year |
| Elementary School (grades K-5) | <input type="checkbox"/> At least once per week | <input type="checkbox"/> At least once per month |
| | <input type="checkbox"/> At least once per year | <input type="checkbox"/> Less than once per year |

Appendix H
 Religiousness and Spirituality Definition Ratings

Please indicate the degree to which you see yourself as *religious* where *religious* refers to an adherence to a special body of beliefs and practices having some kind of institutional or organizational affiliation with what is considered a traditional religion.

Not at all Religious 1 2 3 4 5 6 7 Very
 Religious

Please indicate the degree to which you see yourself as a *spiritual* person where *spiritual* refers to a way of being and experiencing that comes about through awareness of a transcendent dimension (that which surpasses the senses) and is characterized by attending to and pursuing mystical experiences that value the interconnection of self, others, nature and the cosmos.

Not at all Spiritual 1 2 3 4 5 6 7 Very Spiritual

Appendix I

Religious or Spiritual Memory Coding Guidelines**Positive**

Religion enriching their lives, memory has an uplifting aspect, memory ends on a positive note.

Negative

Criticism of church, memory mentions disappointment with their religious or spiritual experience, ends on a negative note. Often mentions individual being agnostic or atheistic. May also include individual specifically stating that they do not need religion, God, faith or beliefs.

Religious

May include the following key phrases or words:

Church, worship, service, prayer, community, institution, bar/bat mitzvah, confirmation, mission trip, Jesus, Christ, Messiah.

Spiritual

May include the following key phrases or words:

Connection to God, Connection to a loved one lost, transcendent, higher power, being, divinity, or meditation.

***If the spirituality is related to a religious practice, and individual finds comfort within the conventions of a religion then the memory is probably more religious than spiritual.

***If there is a spiritual awakening independent of religion, in opposition to, or away from the tradition of religion in general, then memory is more spiritual than religious.

***If a religious place or entity is mentioned, but used as a contrast, then its more spiritual than religious. If the mention of religion is presented almost as an obstacle, even though explicit language referencing religion is used, memory is still more spiritual than religious.

Appendix J
Informed Consent

I hereby consent to participate in Deryl Pace's Honors Thesis research concerning religiousness and spirituality in college students, under the direction of Professor Jefferson Singer in the Psychology department at Connecticut College. I understand that this research will involve filling out five questionnaires, recalling and recording one memory, as well as filling out a background information sheet. While I have been told that my participation will aid the researcher in her study, I understand that the direct benefits of this research to society are not known. I also understand that this research will take about 45 minutes. I have been told that there are no known risks or discomforts related to participating in this research. I have been told that Deryl Pace can be reached at (860) 439-4246 or dvpac@conncoll.edu.

I understand that I may decline to answer any questions as I see fit, and that I may withdraw from the study without penalty at any time. I understand that all information will be identified with a code number and not my name.

I have been advised that I may contact the researcher who will answer any questions that I may have about the purposes and procedures of this study. I understand that this study is not meant to gather information about specific individuals and that my responses will be combined with other participants' data for the purpose of statistical analyses. I consent to publication of the study results as long as the identity of all participants is protected. I understand that this research has been approved by the Connecticut College Human Subjects Institutional Review Board (IRB). Concerns about any aspect of this study may be addressed to Professor Jason Nier, Chairperson of the Connecticut College IRB (860-439-5057 or janie@conncoll.edu) or Professor Jefferson Singer (860-439-2343 or jasin@conncoll.edu).

Appendix K Debriefing

First of all, thank you for participating in this research concerning religiousness and spirituality of college students. In this study I am measuring the levels of religiousness and spirituality in Connecticut College freshmen and seniors. “Spirituality is about a person’s beliefs, values, and behavior, while religiousness is about a person’s involvement with a religious tradition and institution.”³ The *Religious Life Inventory* as well as the *Religious Orientation Scale* measure the degree to which an individual is religious. The *Spiritual Transcendence Scale* measures the degree to which an individual is spiritual.

In addition to levels of religiousness and spirituality, I am also measuring conservatism by using the *Right Wing Authoritarianism Scale* and identity formation by using the *Objective Measure of Ego Identity Status*. Another measure I am using asked you to describe a particularly religious or spiritual moment in your life. These memories that I collected from you and others will be coded for religious or spiritual aspects. I can then compare your memories’ aspects to your scores on the Religiousness and Spirituality questionnaires.

The questionnaires and the recorded memory in this study provide both quantitative and qualitative data to analyze my hypotheses with. Past research has shown that during the course of an individual’s college education, his/her levels of religiousness decrease while her spirituality levels increase. Therefore, I hypothesized that the freshmen would have higher levels of religiousness than the seniors and lower spirituality levels than the seniors. I also hypothesized that those individuals with higher levels of religiousness would describe more prominent religious aspects than spiritual aspects in their memories and vice versa. Lastly, I hypothesized that those with higher levels of authoritarianism would also have higher levels of religiousness.

Previous research has measured the religiousness and spirituality levels of college students, but to my knowledge religiousness and spirituality measures have not been used in conjunction with the *Right Wing Authoritarianism Scale*. Further, to my knowledge, religiousness and spirituality levels have not been measured and compared to self-defining memories.

Please do not discuss this study with anyone as this could bias data collected in the future.

If you are interested in this topic and want to read the literature in this area, please contact me (Deryl Pace) at (860) 439-4246.

Listed below are two sources you may want to consult to learn more about this topic:

Bryant, A. N., Choi, J. Y., & Yasuno, M. (2003). Understanding the religious and spiritual dimensions of students’ lives in the first year of college. *Journal of College Student Development, 44*, 723-745.

Zinnbauer, B. J., Pargament, K. I., Cole, B., Rye, M. S., Butter, E. M., Belavich, T. G., et al. (1997) Religion and spirituality: Unfuzzifying the fuzzy. *Journal for the Scientific Study of Religion, 36*, 549-564.

³ Spilka, B., Hunsberger, B., Gorsuch, R., & Hood, R. W., Jr. (2003). *The psychology of religion: An empirical approach*. New York: The Guildford Press.