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PROFILES OF SPIRITUALITY AND RELIGIOSITY
AMONG DIVERSE YOUNG ADULTS:
RELATIONSHIPS WITH MEANING-MAKING AND WELL-BEING

by

Caroline C. Kaufman

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Dedication

This dissertation is dedicated to my father, Robert G. Kaufman, PhD, J.D., for his tireless

encouragement and support. My father has championed my dreams and aspirations for as long as

I can remember and continues to do so today. Dad, thank you for teaching me the timeless

mantra, "don't back down from that wave."

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Finally, I would like to thank my little sister, Natalie Kaufman, who believes that her mere existence serves as creative inspiration to those around her. As a result, she is partly the inspiration for this dissertation and many of my other research projects.

"To understand the world at all, sometimes you could only focus on a tiny bit of it, look very hard at what was close to hand and make it stand in for the whole…"

— Donna Tartt

Abstract

Spirituality and religiosity are salient constructs in the lives of young adults and are associated with several positive physical and mental health outcomes. A significant body of research suggests that these constructs should be assessed concurrently and multidimensionally to gain a full understanding of these phenomena. The current study examined patterns of spirituality/religiosity, associations between such patterns and positive outcomes, and demographic predictors of patterns in an understudied population. A total of 199 racially diverse, non-university attending young adults were recruited from a job-preparedness program situated in the Midsouth United States. Participants completed measures of demographics, multiple measures of spirituality and religiosity, meaning-making, and well-being. Latent profile analysis was used to identify patterns of spirituality/religiosity (based on scores across multiple measures of spirituality and religiosity) and associations between these profiles and meaning-making and well-being were examined. Demographic predictors of class membership (i.e., race and ethnicity, gender) were also examined. Hypotheses included the following: 1) Several distinct typologies of spirituality/religiosity will emerge and typologies will be characterized by differing levels of spirituality/religiosity; 2) Spirituality/religiosity typologies characterized by high levels of spirituality/religiosity will be significantly and positively associated with well-being and meaning-making; and 3) Identifying as a man or White/European American will predict membership in classes characterized by lower spirituality/religiosity. Four profiles emerged, including Class 1 (Average S/R, Higher Negative Religious Coping Class), Class 2 (High Religiosity, Mixed Spirituality), Class 3 (Low Religiosity, Low to Average Spirituality), and Class 4 (Highest S/R and Lower Negative Religious Coping). Consistent with hypotheses, identifying as White/European American or male were found to be significant predictors of

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class membership. Generally, classes characterized by higher spirituality/religiosity were associated with greater meaning-making and well-being compared to classes characterized by lower spirituality/religiosity. These findings offer novel contributions to the literature by highlighting the heterogeneity and salience of spirituality/religiosity patterns. Findings extend the current research literature by examining spirituality/religiosity among an understudied population of non-university attending young adults and highlight the need to examine mechanisms behind these relationships. Interventions aimed at improving well-being and meaning-making among this population may be enriched by elements of spirituality/religiosity.

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Introduction

Young adulthood (18-25 years old) is a critical developmental time period (Wood et al., 2017). Indeed, during this developmental period, individuals often experience opportunities for self-determination and exploration, as well as challenges associated with increased responsibilities across education, career, and social contexts (Wood et al., 2017). The critical nature of young adulthood is highlighted by the many developmental trajectories young adults may embark upon during this period. These trajectories may be characterized by either or both successes and challenges (Wood et al., 2017). Thus, examining experiences and outcomes among this population is pivotal for developing prevention and intervention strategies.

Spirituality and religiosity are salient constructs among young adults, given that young adulthood is often characterized by spiritual and religious exploration and identification (McNamara, Nelson, Davarya, & Urry, 2010). In fact, a significant body of research has examined spirituality, religiosity and related outcomes among young adults (Yonker, Schnabelrauch, & DeHaan, 2012). However, the vast majority of this research has been conducted with university students and predominantly White/European American samples (Yonker et al., 2012). Furthermore, much of the research examining these constructs from a unidimensional perspective. For example, a recent review of the literature examining religiosity and spirituality indicated that much of the research examining religiosity has primarily focused on attendance at religious services or religious affiliation rather than multidimensional conceptualizations of the construct (Harris, Howell, & Spurgeon, 2018). This same review indicated that of the hundreds of studies examining spirituality, only 11 conceptualized and measured spirituality as a multidimensional construct (Harris et al., 2018). As a result, researchers have called for examination of spirituality and religiosity among diverse populations

of young adults from non-university samples using multidimensional perspectives (Chan, Tsai, & Fuligni, 2015; Yonker et al., 2012).

Spirituality

Spirituality is an increasingly studied construct in the psychological research literature, with the number of publications examining spirituality in the context of health increasing by over 600% between 1965 and 2000 (Weaver, Pargament, Flannelly, & Oppenheimer, 2006). Currently, many definitions of spirituality exist in the psychological research literature (Harris et al., 2018; Meezenbroek, Garssen, Berg, Dierendonck, & Visser, 2012). A recent analysis of definitions of spirituality and religiosity in this literature revealed approximately eight different definitions of spirituality (Harris et al., 2018). This definitional analysis, however, also revealed similar themes across the disparate definitions presented in the literature. Across studies, spirituality was often characterized as relating to having a connection with humanity, the sacred, or the soul and also by one's sense of meaning and purpose (Harris et al., 2018). Many researchers also characterized spirituality as a multidimensional construct that is likely connected to a set of values or beliefs (Harris et al., 2018). Having examined and reflected upon their findings, Harris et al. (2018) broadly defined spirituality as "a faith concept referring to a search for the sacred" (pg. 4) (Harris et al., 2018). Thus, the current study adopts this broad and flexible definition of spirituality while also noting differences in the definition of spirituality across the psychological literature.

Prior research indicates that dimensions of spirituality likely differ across race and gender. Specifically, prior research examining prayer, which is often conceptualized as a dimension of spirituality, indicates that Black/African Americans endorse praying more often and being more immersed in prayer than their White/European American counterparts (Krause,

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2012). Similarly, a study examining differences in spirituality/religiosity across races and ethnicities using a nationally representative sample indicated that Black/African Americans were more likely to self-identify as spiritual than their White/European American counterparts (Chatters, Taylor, Bullard, & Jackson, 2010). This same study also revealed that women were more likely than men to self-identify as spiritual (Chatters et al., 2010). Relatedly, a study examining differences in spirituality in a nationally representative study of older adults found that women reported higher levels of spirituality than men (Bailly, Martinet, Ferrand, & Agli, 2018). Although researchers have examined differences in spirituality across race and gender among adult samples, the literature examining these potential differences among young adults is quite limited (Yonker et al., 2012).

A significant body of research, however, has examined the relationship between spirituality and a variety of physical and mental health outcomes (Cotton, McGrady, & Rosenthal, 2010; Harris et al., 2018). This research indicates that spirituality is associated with positive overall well-being (Magyar-Russell, Deal, & Brown, 2014), greater self-esteem (Yonker et al., 2012), lower levels of risky behaviors (Magyar-Russell et al., 2014; Yonker et al., 2012), and better mental health (Magyar-Russell et al., 2014; Yonker et al., 2012). However, it is unclear if and how these relationships differ across race and gender among young adults (Yonker et al., 2012).

Religiosity

Although religiosity, like spirituality, has many different definitions in the research literature, these definitional differences appear to be less controversial than those pertaining to spirituality (Harris et al., 2018; Zimmer et al., 2016). As revealed by a definitional content review and analysis of studies of religiosity, this term typically refers to beliefs and practices

associated with G-d[1], a higher power, and/or an organized religion (Harris et al., 2018; Zimmer et al., 2016). Religiosity is also often conceptualized as one's participation in or commitment to religious institutions, doctrines, and practices (Hill & Pargament, 2003). Prior research examining religiosity in the psychological literature has primarily focused on attendance at religious activities, religious affiliation, engagement in religious practices (e.g., prayer), and religious coping (George, Ellison, & Larson, 2002). In addition, prior research has also underscored the importance of examining multiple dimensions of religiosity (i.e., beyond solely examining attendance at religious activities) in order to capture a more complete picture of religiosity (Harris et al., 2018)

Fairly recent research utilizing nationally representative data sets indicates that religiosity likely differs across gender and race. Specifically, research has revealed that women attend religious services more frequently, pray more often, and affiliate more strongly with their religious tradition as compared to men (Schnabel, 2015). Other research examining differences across race and ethnicity revealed that Black/African Americans report greater organizational religious participation and attend more religious services than their White/European American counterparts (Chatters, Taylor, McKeever, & Jackson, 2009). Although researchers have examined differences in religiosity across race and gender among adult samples, literature examining how religiosity may differ across race and gender among young adults (ages 18-25) is sparse (Yonker et al., 2012).

Similar to spirituality, a significant body of research has examined associations between religiosity and a range of physical and mental health outcomes among young adults (Yonker et al., 2012). This research found that higher levels of religiosity were associated with: greater

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[1] In accordance with the first author's religious beliefs, the name of G-d will not be written out in this publication. The complete name was used in the survey administered to participants.

sense of meaning and purpose (Chan et al., 2015), fewer depressive symptoms (Chan et al., 2015; Yonker et al., 2012), fewer risk behaviors (Yonker et al., 2012), less substance use (Yonker et al., 2012), and greater self-esteem (Yonker et al., 2012) among young adults. However, how and if these relationships may differ across race and gender in young adults remain unclear (Yonker et al., 2012).

Spirituality and Religiosity

Researchers have yet to reach a consensus regarding the conceptual entanglement of spirituality and religiosity (Harris et al., 2018; Moore, 2017). While some researchers propose that spirituality and religiosity are inextricably intertwined, others contend that these concepts are qualitatively and quantitively distinct (Harris et al., 2018). This debate is somewhat complicated by prior research indicating that "secular" or non-religiously-affiliated individuals likely experience similar levels of spirituality as compared to religiously-affiliated individuals (Miller & Thoresen, 2004). The debate regarding the entanglement of spirituality and religiosity and related research findings has led to calls for research utilizing multiple dimensions of both spirituality and religiosity in order to present a more complete picture of the young adult experiences of these phenomena (Kimball, Cook, Boyatzis, & Leonard, 2016; Yonker et al., 2012).

Much of the prior research examines spirituality and religiosity, both singularly and concurrently, from variable-centered analytic approaches. Such approaches do not incorporate a multidimensional understanding of spirituality and religiosity given the focus is on variables rather than individuals. Limited research has addressed these shortcomings in the literature by examining spirituality and religiosity using person-centered approaches—approaches that examine how individuals may experience dimensions of spirituality and religiosity in similar

ways. Research using person-centered approaches has revealed heterogeneity across dimensions of spirituality and religiosity. For example, prior research examining spirituality and religiosity among adolescents from person-centered approaches revealed multiple patterns of religiosity (Salas-Wright, Vaughn, Hodge, & Perron, 2012) and religiosity/spirituality (Lyon, Kimmel, Cheng, & Wang, 2016; Park et al., 2013). Similarly, research with young adults from a person-centered approach has also revealed multiple patterns across spiritual dimensions (Barton & Miller, 2015). Barton and Miller (2015) examined patterns of spiritual dimensions and positive psychology constructs among emerging adults from an online sample. Results revealed patterns characterized by high spirituality and high positive psychology, low spirituality and low positive psychology, low spirituality and high positive psychology, and medium spirituality and medium positive psychology. Although such research expands upon prior variable-centered and singular examinations of spirituality and religiosity, this research also has limitations. For example, this area of research has yet to examine such patterns of spirituality/religiosity with non-university attending young adults and has only examined such patterns with limited spirituality dimensions (Barton & Miller, 2015). Thus, the limited research in this area highlights the need for a person-centered and multidimensional approach when examining spirituality and religiosity among young adults. Research examining profiles of spirituality and religiosity among non-university young adults is needed to address this gap in the literature.

Spirituality/Religiosity and Negative Outcomes

Although a significant amount of literature suggests that spirituality and religiosity are associated with positive physical and mental health outcomes across the lifespan, research also suggests that spirituality and religiosity may sometimes be associated with negative outcomes. For example, research examining religious coping among Israeli women survivors of intimate

partner violence revealed that while negative religious coping was strongly associated with negative outcomes (i.e., depressive symptoms, anxiety, loneliness, and poor perceived physical health), positive religious coping was not associated with these outcomes (Abu-Raiya, Sasson, Palachy, Mozes, & Tourgeman, 2017). Such results led the authors to posit that religious coping may be unique in its strong relationship with negative outcomes in this context. Other research suggests that spirituality and religiosity may be associated with negative physical and mental health outcomes. A systematic review examining spirituality and religiosity among individuals living with HIV revealed that spirituality is sometimes associated with negative outcomes, including worse mastery over HIV-related care (Oji et al., 2017). Similarly, among adolescents living with HIV, negative spiritual/religious beliefs (i.e., "HIV is a punishment from G-d") are associated with lower adherence to HIV medication treatment (Lyon et al., 2014). Research conducted by Lyon et al. (2016) indicated that social health-related quality of life was highest among the most religious/spiritual adolescents, but emotional health-related quality of life was highest among the least religious/spiritual adolescents. This and related research thus suggests that spirituality and religiosity are not uniformly associated with positive outcomes and may even be associated with negative outcomes among certain populations. Such research highlights the importance of examining spirituality, religiosity, and related outcomes among a variety of populations to clarify these relationships.

Spirituality/Religiosity Among Young Adults

A sizeable amount of research has examined spirituality and religiosity (Yonker et al., 2012); however, several researchers have pointed out that the vast majority of research examining these constructs has been conducted among older adults and adolescents (Chan et al., 2015; Shek, 2012). The fact that young adulthood is often characterized by increased spiritual

and religious exploration (McNamara et al., 2010) highlights the need for researchers to focus more intently on this age group (Barry & Abo-Zena, 2014). Indeed, prior qualitative research indicates that spirituality and religiosity may contribute to "narrative turning points" in the lives of young adults (McLean & Pratt, 2006, p. 715). Young adults may utilize their religious and spiritual beliefs to inform and challenge their self-understanding and goals for the future (Kimball et al., 2016; McLean & Pratt, 2006). Young adulthood may well be a unique developmental period regarding spirituality and religiosity. Exploration of new and different faith traditions might occur organically as part of other types of exploration prevalent during this period of the life course (Smith & Snell, 2009). Young adults may also experience increased salience and stability of their childhood religious and spiritual beliefs (Stoppa & Lefkowitz, 2010). The saliency of spirituality and religiosity is likely not limited to young adults who identify with a specific religious or spiritual tradition. Prior research among emerging adults who identify as atheists (e.g., individuals who do not believe in G-d, god, or gods) (Nielsen, 2013) indicates that spirituality and religiosity remain salient constructs and are associated with psychological well-being (Sedlar et al., 2018). Thus, spirituality and religiosity are salient constructs for young adults that are worth exploring.

The current research literature examining spirituality and religiosity among young adults is limited in several key aspects. First, the majority of this research has been conducted with university samples (Yonker et al., 2012), and thus has limited generalizability to young adults not enrolled in college. This limitation has led several researchers to stress the important of focusing more attention to these constructs in non-university young adult samples (Chan et al., 2015; Sedlar et al., 2018). Second, prior research examining these constructs has been conducted chiefly with White/European American samples (Yonker et al., 2012). This limitation has also

led several researchers to call for an increased focus on these constructs among more racially and ethnically diverse young adults henceforth (Howell & Miller-Graff, 2014; Sedlar et al., 2018). Finally, much of the prior research examining spirituality and religiosity among young adults has adhered to a unidimensional perspective. This research approach is not consistent with other research indicating that spirituality and religiosity likely co-occur and are multidimensional (Harris et al., 2018). Thus, researchers have emphasized the critical need for future research to examine spirituality and religiosity from a multidimensional perspective that incorporates multiple measures of these constructs (Kimball et al., 2016; Yonker et al., 2012).

Spirituality/Religiosity and Meaning-Making among Young Adults

Prior theoretical and quantitative research suggest a strong link between spirituality/religiosity and meaning-making. Meaning-making can be briefly defined as "the extent to which people comprehend, make sense of, or see significance in their lives" (Steger, 2009, p. 682). Meaning-making is a salient construct among young adults given prior research indicating that meaning-making is associated with positive affect (Hicks, Cicero, Trent, Burton, & King, 2010) and lower anxiety (Steger, 2012) among this population. Similarly, other research indicates that meaning-making is associated with lower depression (Steger, 2012) and higher overall psychological well-being among adult samples (Steger & Kashdan, 2013). Thus, meaning-making is likely an important construct across the lifespan and among young adults. Relatedly, spirituality/religiosity are associated with meaning-making among young adults, (Chan et al., 2015), late stage adolescents (Krok, 2015), and university students, (Park, 2005). Other research also indicates that certain aspects of spirituality/religiosity may also be associated with poor meaning-making. For example, Ellison, Fang, Flannelly, and Steckler (2013) found religious questioning and other aspects of "religious struggle" to be associated with less

meaning-making among religiously-affiliated individuals. Thus, research suggests that spirituality/religiosity and meaning-making may be salient and related constructs, such that aspects of spirituality/religiosity may be positively or negatively associated with meaning-making.

Prior research indicating a conceptual and quantitative link provided impetus for the meaning making model as conceptualized by Park (2013). This model posits that several factors, including spirituality/religiosity, help individuals make sense of potentially distressing events or circumstances (Park, 2010, 2013). Accordingly, individuals may utilize specific spiritual/religious beliefs or resources to appraise sensibility or "meaning" to life circumstances. The model posits that meaning-making requires or encourages effortful coping that results in improved adjustment and well-being (Park, 2010, 2013). This theory and prior findings regarding the relationship between spirituality/religiosity and meaning-making highlight the potential salience of these constructs among young adults given that this developmental stage is characterized as a critical time period of development. Researchers have identified several limitations to work examining the relationship between spirituality/religiosity and meaning-making, including the use of convenient university student and online samples (Steger, 2012) and majority White/European American samples (Holmes & Hardin, 2009). Research examining the relationship between spirituality/religiosity and meaning-making is also plagued by unidimensional conceptualizations of spirituality/religiosity and variable-centered analyses. Thus, future research is needed to address these identified limitations.

Spirituality/Religiosity and Well-Being among Young Adults

Given that young adulthood is a critical time period of development (Wood et al., 2017), it is pivotal to explore associations with positive outcomes, such as psychological well-being,

among this population. As reviewed above, spirituality/religiosity is often positively associated with aspects of psychological well-being. Similarly, research has found significant associations between spirituality/religiosity and well-being across Black/African American women (Reed & Neville, 2014), Black/African American women from low-income backgrounds (Wilson, Lamis, Winn, & Kaslow, 2014), and young adult gay and bisexual men (Meanley, Pingel, & Bauermeister, 2016). Indeed, longitudinal research among youth suggests that religious involvement is associated with better well-being over time (Petts, 2014). However, findings from this research should be tempered by other research indicating that spirituality/religiosity is sometimes associated with aspects of poor psychological well-being. The presence of such conflicting findings in the research literature provide impetus for research examining spirituality/religiosity and well-being from a multidimensional perspective. In addition, researchers have acknowledged limitations to research examining the relationship between spirituality/religiosity, including lack of research across young adult samples (Petts, 2014) and the use of convenience samples (Migdal & MacDonald, 2013). Researchers have also highlighted the need for future research that examines this relationship across secular contexts (i.e., not overly religiously-affiliated) (Freeze & DiTommaso, 2015). Thus, research is needed to address these identified limitations.

Current Study

The purpose of the current study was to examine patterns of spirituality/religiosity using latent profile analysis in a sample of racially diverse young adults who were not enrolled in college. Given prior research examining relationships among spirituality, religiosity, and positive outcomes, this study also examined how spirituality/religiosity profiles relate to positive outcomes, including meaning-making and well-being. Lastly, this study aimed to determine if

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gender, race, and ethnicity predict class membership in the spirituality/religiosity profiles. Given prior research, we hypothesize that: 1) several distinct typologies of spirituality and religiosity will emerge, such that typologies will be characterized by differing levels of spirituality and religiosity; 2) spirituality/religiosity classes characterized by high levels of spirituality/religiosity will be significantly and positively associated with psychological well-being and meaning-making; and 3) identifying as a man and identifying as White/European American will predict membership in classes characterized by lower spirituality/religiosity.

Method

Participants

Participants included 199 young adult students between the ages 18 to 25 years ($M =$ 19.68, $SD = 1.91$) recruited from a federally-funded job-preparedness program in the MidSouth[2]. In order to attend the job-preparedness program, students needed to be within the ages of 16-24, have documented citizenship, earn or be a dependent of a household with "low-income," and exhibit few or no "behavioral problems." According to the National Eligibility Requirements for this federally-funded job-preparedness program, "low income" is defined as receiving or being a member of a family that receives one of the following in the past six months: supplemental nutrition assistance program under the Food and Nutrition Act of 2008, block grants to States for temporary assistance for needy families program under party A of Title IV of the Social Security Act, or the supplemental security income program established under Title XVI of the Social Security Act (Department of Labor, 2016a). In addition, "low income" is also defined as individually receiving or as a member of a family receiving a total income during the past six months that is not higher than the poverty level as established by the Department of Health and Human Services (Department of Labor, 2016a). According to National Eligibility Requirements for this federally-funded job-preparedness program, exhibiting few or "no behavioral problems" is defined as the absence of legal documentation indicating one or more of the following instances: physical altercation requiring medical treatment, threatened assault with intent to do bodily harm with or without the use of a weapon, possession or selling of a gun or illegal weapon, forced unwanted sexual contact on another individual, purposeful destruction of property, or theft of property (Department of Labor, 2016b).

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[1]As part of an agreement to conduct research at this institution, this institution asked that they remain unnamed in any research publications. To align with their request, the name of this institution is withheld from the current study.

In order to be eligible for the current study, participants needed to be 18 years or older and a current student at this job-preparedness program. There were no exclusion criteria. Participants were recruited and participated in the study from September 2017 to May 2018. Of the 199 participants, one was excluded due to missing data on all of the primary variables of interest. The sample comprised of primarily young adults of color. Specifically, 74.5% ($n = 148$) self-identified as Non-Hispanic Black, 11.1% ($n = 22$) self-identified as Non-Hispanic White, 10.6% ($n = 21$) self-identified as Multiracial, 2% ($n = 4$) self-identified as Hispanic, and 1.5% ($n = 3$) self-described as "Other." Of the sample, half self-identified as male (50%, $n = 99$) and about half self-identified as female (49%, $n = 97$), with 1% ($n = 2$) self-identifying as Transgender. Of note, the two participants who self-identified as Transgender were removed from analyses given the small sample sizes. Thus, the final sample size for the study was 196 participants.

Procedures

Following approval from the University of Memphis Institutional Review Board (Appendix A) and with approval from the administration of the job-preparedness program, students were recruited and enrolled into this study. Participants were recruited via announcements during orientation sessions at the program. Upon choosing to participate in the study, participants provided written consent (Appendix B) and demographic information. They then completed several questionnaires via Qualtrics on electronic devices (lasting approximately one hour; see Appendix C for questionnaires). As compensation, participants were offered one item from a "goodie bag," which included novelty pens, stress balls, and fidget spinners. Upon completion of the study participants received information regarding mental and physical health services at the job-preparedness program and in the local community (Appendix D). The current

study was part of a larger study examining well-being and mental health at this site using funds acquired from a grant from Division 36 of the American Psychological Association (PI: Kaufman).

Measures

Demographics [Predictors of Class Membership and Distal Outcomes]— The demographics questionnaire was designed to ascertain basic background information, including: age, gender, race, and ethnicity.

Daily Spiritual Experience Scale (DSES) [Class Variable] – The DSES (Underwood, 2002) is a 16-item self-report measure of perceptions of daily experiences with the divine and the role of such experiences in everyday life. The DSES includes major dimensions of spirituality, such as personal intimacy with G-d (e.g., "I feel G-d's presence"), strength and comfort (e.g., "I find strength in my religion or spirituality"), perceived divine love (e.g., "I feel G-d's love for me directly"), inspiration or discernment (e.g., "I ask for G-d's help in the midst of daily activities"), transcendence (e.g., "During worship, or at others times when connecting with G-d, I feel intense joy which lifts me out of my daily concerns"), and internal integration (e.g., "I feel deep inner peace and harmony"). Fifteen of the 16 items are assessed on a five-point Likert scale from 1 (*many times a day*) to 5 (*never*). The remaining item, which assesses the closeness of one's relationship with G-d, is assessed on a four-point Likert scale from 1 (*not close at all*) to 4 (*as close as possible*). Total scores on the DSES range from 16 to 79 and scores were reverse coded such that higher scores indicated greater spirituality. The DSES has high internal consistency reliability, with alpha coefficients of .95 to .96 among young adult samples (Creech, Handal, Worley, & Pashak, 2013; Lace & Handal, 2017) and adequate test-retest reliability (Underwood & Teresia, 2002). Construct and discriminant validity were established in the original validation

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study via correlations with related variables (e.g., quality of life, perceived stress, perceived social support, and optimism) and mean scale scores across demographics subgroups (Underwood, 2002). Internal consistency in our sample was α = .95.

Spiritual Transcendence Scale (STS) [Class Variable]—The STS (Piedmont, 1999) is a 24-item self-report measure of spiritual transcendence (i.e., ability to view existence from a spiritual perspective that focuses on unity across all living beings and connectedness with the divine). The STS was created to assess spiritual transcendence that is discriminant from both personality and religiosity using the NEO Personality Inventory-Revised, which includes items assessing both personality and religiosity (Costa & McCrae, 1992). The STS measures spiritual transcendence across three subscales: Universality (9-items) (e.g., "All life is interconnected"), Prayer Fulfillment (9-items) (e.g., "I mediate and/or pray so that I can reach a higher spiritual plane of consciousness"), and Connectedness (6-items) (e.g., "I am a link in the chain of my family's heritage, a bridge between past and future"). Items are assessed on a five-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Scores on the Universality and Prayer Fulfillment subscales range from 9 to 45 and scores on the Connectedness subscale range from 6 to 30, with higher scores indicating greater Universality, Prayer Fulfillment, and Connectedness. The STS has high internal consistency reliability, with alpha coefficients of .86 to .87 among college samples (Piedmont, 1999; Piedmont, Ciarrochi, Dy-Liacco, & Williams, 2009). Construct and discriminant validity were established using a personality questionnaire (NEO Personality Inventory-Revised), as well as measures of mental health, perceived social support, prosocial behaviors, and locus of control (Piedmont, 1999). The test-retest reliability of the STS has yet to be examined (Monod, Brennan, Rochat et al., 2011). In our sample, internal consistency for Universality, Prayer Fulfillment, and Connectedness was as following, α = .80, α = .80, and α

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= .85.

Religiosity Measure [Class Variable]—The Religiosity Measure (Rohrbaugh & Jessor, 1975) is an 8-item self-report assessment of the importance of religion in daily life. The Religiosity Measure was created to assess religious involvement using Glock (1959) conceptualization of religiosity across four dimensions: Ritual, Consequential, Ideological, and Experiential. Seven of the eight items contain five-point Likert scale response options from 0 to 5 with varying anchors. For example, one item reads, "How much of an influence would you say that religion has on the way you choose to act and the way you choose to spend your time each day?" with response options: "A large influence," "A fair amount of influence," "Some influence," "A small influence," and "No influence." The eighth item asks participants to indicate the number of religious services they have attended in the last year and is not included as part of the score total. Scores on items 1-7 of the Religiosity Measure range from 0 to 35. Items were reverse coded such that higher scores indicated higher religiosity. The internal consistency reliability of the Religiosity Measure includes alpha coefficients of .89 (Stoppa & Lefkowitz, 2010) to .92 (Lefkowtiz, Wesche, & Leavitt, 2018) among young adult samples. This measure also demonstrates adequate test-retest reliability among young adults (Gutierrez & Park, 2014). Construct and discriminant validity were established using measures of religious environment, religious involvement, personality, and perceived social support (Rohrbaugh & Jessor, 1975). In our sample, internal consistency was α = .84.

Brief RCOPE [Class Variable]—The Brief RCOPE (Pargament, Fueille, & Burdzy, 2011) is a 14-item measure of religious coping with life stressors. The Brief RCOPE is an abbreviated version of the full RCOPE (Pargament & Koenig, 2000). The RCOPE and Brief RCOPE were developed using Pargament (1997) theory of religious coping, which purports that individuals use

their conceptualization of the "sacred" to understand and cope with life stressors. The Brief RCOPE assesses religious coping across two subscales: positive religious coping (PRC, 7-items) (e.g., "Asked forgiveness for my sins" and negative religious coping (NRC, 7-items) (e.g., "Wondered whether G-d had abandoned me"). Participants rate their agreement with items using a four-point Likert scale from 1 (*not at all*) to 4 (*a great deal*). Scores on the Brief RCOPE range from 7 to 28 for the PRC and 7-28 for NRC subscales; there is no overall score for the Brief RCOPE. The internal consistency reliability of the Brief RCOPE is a median alpha coefficient of .81 across studies (Pargament et al., 2011). This measure has been shown to demonstrate adequate test-retest reliability (Sajatovic & Ramirez, 2012). Construct, discriminant, and predictive validity were established using measures of spiritual well-being, social well-being, mental health, and adjustment (Pargament et al., 2011). In our sample, internal consistency for the PRC subscale was $\alpha = .96$ and for the NRC subscale was $\alpha = .87$.

Well-Being [Distal Outcome]—The Schwartz Outcome Scale (SOS-10) (Blais et al., 1999) is a 10-item measure of psychological health. Although the SOS-10 was originally developed for use in research and clinical settings examining the efficacy of psychological treatment, the SOS-10 has also been utilized in research examining well-being among emerging adults (Abraham & Stein, 2013; Weisskirch, 2016). As defined by the authors, the SOS-10 represents a single and broad dimension of psychological health or well-being (e.g., "I have peace of mind" and "I am often interested and excited about things in my life"). Participants indicate their agreement with items on a 7-point Likert scale from 1 (*Never*) to 6 (*All of the time or nearly all of the time*). Scores on the SOS-10 range from 10 to 70, with higher scores indicating greater well-being or psychological health. The SOS-10 has alpha coefficients greater than .90 across inpatient, outpatient, and community settings and demonstrates adequate test-retest reliability (Blais et al.,

1999). This measure demonstrates discriminant validity with measures of psychopathology, hopelessness, fatigue and negative affect, as well as convergent validity with measures of life satisfaction, desire to life, positive self-esteem, positive affect, and sense of coherence (Blais et al., 1999). In our sample, internal consistency was $\alpha = .93$

Meaning Making [Distal Outcome]—The Integration of Stressful Life Experiences Scale (ISLES) (Holland, Currier, Coleman, & Neimeyer, 2010) is a 16-item measure of the degree to which individuals have made meaning of stressful life experiences. The ISLES assesses meaning-making by examining the extent to which individuals have accommodated a stressful event into their worldview (e.g., "My previous goals and hopes for the future don't make sense anymore since this event"), as well as the extent to which individuals have assimilated a stressful event into their meaning-making structures (e.g., "I have difficulty integrating this event into my understanding of the world"). Participants indicated their agreement with items on a 5-point Likert scale from 1 (*Strongly Agree*) to 5 (*Strongly Disagree*). Scores on the ISLES range from 16 to 80. One item on the ISLES is reverse coded so that higher scores indicate greater meaning-making. The ISLES was developed with a young adult university sample. The ISLES has high internal consistency, with an alpha coefficient of .92 in the validation study and also demonstrates adequate test-retest reliability (Holland et al., 2010; Trujillo & Servaty-Seib, 2018). This measure demonstrates adequate construct and discriminant validity with measures of the centrality of stressful events, general psychiatric distress, and complicated grief (Holland et al., 2010). In our sample, internal consistency was $\alpha = .94$.

Data Analytic Strategy

First, data were first examined for missingness and normality using the following procedures. Residual scatterplots of data were examined visually in IBM's Statistical Package

for the Social Science (SPSS) 25.0 to check for homoscedasticity, normality, and non-multicollinearity, with all assumptions being met. No outliers were identified when assessed using Mahalanobis distances and z-scores. Missing data patterns were examined and tested using Little's Missing Completely At Random (MCAR) test (Little & Rubin, 2014). This test indicated that the data were missing at random. One participant was removed from analyses for missing all items on the scales making up the latent profiles. Finally, missing data for variables making up spirituality/religiosity classes and distal outcomes (e.g., well-being and meaning-making) were addressed in MPlus 8.2 using Robust Full Information Likelihood Ratio Estimation (Asparouhov and Muthén, 2005).

Analyses were conducted using MPlus 8.2. An LPA was conducted to derive patterns of spirituality/religiosity based on the following scores: organizational religiosity, positive and negative religious coping, spiritual transcendence (across three subscales of: connectedness, prayer fulfillment, and universality), and daily spiritual experiences. LPA first utilized all observations associated with the dependent variables and then performed with maximum likelihood estimation to form classes (Little & Rubin, 2014). The flexibility of LPA analyses accounts for the possibility that there is uncertainty in class membership by allowing prediction of the probability of membership in a group and, simultaneously, estimating the classes (Berlin, Parra, & Williams, 2014; Berlin, Williams, & Parra, 2013). This allows each individual's probability of class membership to be estimated such that each person may be classified in the most appropriate class (Hill, Degnana, Calkins, & Keane, 2006). In our analyses, we used the Bayesian information criterion (BIC) (Schwartz, 1978), sample-size adjusted Bayesian information criterion (SSAB), and Akaike's information criterion (AIC) (Akaike, 1973) to evaluate model fit with lower values indicative of a better fitting model. Additionally, we also

used the Lo-Mendall-Ruin (LMR) (Lo, Mendell, & Rubin, 2001; Vuong, 1989) and the

Bootstrapped Likelihood Ratio Test (BLRT), which assesses improvement between neighboring

class models. Per research standards, significant LMR and BLRT values are indicative of better

fitting models (Lo, Mendell, & Rubin, 2001; Vuong, 1989). We also used univariate entropy as

an indicator of how well the model classified individuals, with values close to 1 indicating better

classification. Classes were added iteratively to determine the best model fit for the data

according to statistical and interpretative methods. LPA assumes a simple parametric model and

uses the observed data to estimate parameter values for the model (Mplus, Version 8.2).Next, we

conducted a manual Bolck, Croon, Hagenaars (BCH) method (Bolck, Croon, & Hagenaars,

2004), as determined by Asparouhov and Muthén (2014), to examine whether class membership

significantly predicted well-being and meaning-making and also if gender, race, and ethnicity

predicted class membership or well-being and meaning-making across and within classes.

Results

The means, standard deviations, and correlations across all study continuous variables are presented in Table 1.

Table 1 *Means, Standard Deviations, and Correlations of Continuous Study Variables*

	DSES	STS_U	STS_PF	STS_C	RM	PRC	NRC	SOC	ISLES
DSES	58.54 (19.80)	-.13	-.13	-.05	.74***	.73***	.18*	.25***	-.12
STS_U		25.44 (7.49)	.68***	.67***	-.03	-.09	-.08	.11	.07
STS_PF			25.27 (6.66)	.58***	.06	-.03	-.14	.18*	.22**
STS_C				17.13 (4.74)	.02	-.04	-.10	.16*	.10
RM					23.64 (6.63)	.76***	.11	.19*	.05
PRC						1.90 (1.01)	.28***	.27***	-.04
NRC							1.11 (0.83)	-.24***	-.51***
SOC								35.58 (15.14)	.22*
ISLES									51.80 (13.61)

Note. Diagonal of table provides means (and standard deviations) for continuous variables. DSES = Daily Spirituality Experience Scale; STS_U = Universality subscale of the Spiritual Transcendence Scale; STS_PF = Prayer Fulfillment subscale of the subscale of the Spiritual Transcendence Scale; STS_PF = Prayer Fulfillment subscale of the Spiritual Transcendence Scale; RM = Religiosity Measure; PRC = Positive Religious Coping Subscale of the Brief RCOPE; NRC = Negative Religious Coping Subscale of the Brief RCOPE; SOC = Sense of Coherence Scale; and ISLSES = Integration of Stressful Life Experiences Scale. * Indicates a difference of $p < .05$, ** indicates a difference of $p < .01$, and *** indicates a difference of $p < .001$.

Fit Statistics.

Several latent class models were tested that specified a varying number of classes (1-7). As displayed in Table 2, the 2-class model's significant LMR and BLRT values indicated that the 2-class model had better fit than the 1-class model. This better fit was corroborated by lower AIC, BIC, and SSAB values, as well as a high Entropy value. The 3-class model also demonstrated to have better fit than the 2-class model given its significant BLRT value, lower AIC, BIC, and SSAB values, as well as an acceptable Entropy value. The 4-class model appeared to have better fit than the 3-class model given its lower AIC, BIC, and SSAB values, as well as a marginally higher Entropy value than the 3-class model. Although the 5-class model's AIC, BIC, and SSAB values were lower than the 4-class model, the BLRT and LMR values were insignificant ($p > .05$). In addition, the Entropy value decreased in the 5-class model. The 6- and 7-class models had lower AIC and SSAB values than the 5-class model, indicating better fit. However, the 6- and 7- class models also had insignificant BLRT and LMR, indicating that that the overall of fit of the 6- and 7- class models was not better than the 5-class model. Thus, the 4-class model was chosen as the best-fitting model given its higher Entropy value than the 5-, 6-, or 7- class models, as well as acceptable AIC, BIC, and SSAB values.

Notably, the 4-class model did not converge due to limited variance of the Positive Religious Coping (PRC) Scale. This problem was resolved by constraining the variance of the PRC across Class 2, Class 3, and Class 4 of the 4-class model. Constraining the variance of the PRC did not substantially change the profiles of the classes, as demonstrated by visual inspection of class models, and led to a converging model. In addition, this constrained 4-class model

Table 2.

Comparison of Model Fit for Each Latent Class Analysis of Spirituality/Religiosity

Classes per model	AIC	BIC	SSAB	Entropy	Sample Size of Smallest Class	*p* Value for Lo-Mendell-Rubin Test	*p* Value for Bootstrap Likelihood Ratio Test
1	7748.65	7794.54	7750.19	N/A	196	N/A	N/A
2	7436.06	7531.13	7439.26	0.997	27	0.00	0.00
3	7248.19	7392.42	7253.04	0.92	25	0.04	0.04
4	7147.42	7340.82	7153.92	0.93	33	0.12	0.13
4b	**7163.98**	**7350.83**	**7170.26**	**0.94**	**27**	**0.01**	**0.01**
5	7058.14	7300.72	7066.29	0.91	25	0.07	0.07
6	7019.35	7310.10	7029.16	0.92	18	0.58	0.58
7	6985.54	7326.46	6997.00	0.91	18	0.56	0.57

AIC = Akaike Information Criterion, BIC = Bayesian Information Criterion, SSAB = Sample-Size-Adjusted BIC

Note. The bolded 4b-class model with variance constrained across Classes 2, 3, and 4 was chosen as the final model. This model is labeled as 4b given that it is comprised of four classes but also included constrained variance.

demonstrated better fit than the 4-class model as evidenced by a higher Entropy value, as well as significant LMR and BLRT values. Three authors individually evaluated the fit of the various models. Authors came to a consensus that the 4-class model was the best-fitting model. Thus, the 4-class model with constrained variance was used as the final model.

Description of Spirituality/Religiosity Classes.

The means for each of the classes and distal outcome means across classes are displayed in Table 3. Analyses predicted outcome values at average sample demographics. In addition, the conditional means across classes are displayed in Figure 1.

Table 3.

Spirituality/Religiosity Means and Meaning-Making and Well-Being Means Across Classes

Class	DSES	STS_U	STS_PF	STS_C	RM	PRC	NRC	ISLES	SOC
	M (SD)	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*
Class 1; *n* = 111 (AHNRC)	58.95 (1.74)	25.31 (0.59)	25.27 (0.53)	17.12 (0.38)	23.43 (0.48)	1.88 (0.08)	1.31 (0.09)	51.84 (1.38)	32.05 (1.42)
Class 2; *n* = 29 (HRMS)	77.72 (1.65)	17.59 (1.69)	17.90 (1.38)	13.06 (1.33)	27.97 (0.58)	2.85 (0.04)	1.45 (0.16)	44.12 (2.26)	40.15 (2.50)
Class 3; *n* = 27 (LRLTAS)	28.64 (2.27)	27.56 (1.80)	26.53 (1.49)	17.70 (1.07)	12.49 (0.94)	0.04 (0.02)	0.41 (0.13)	52.36 (3.01)	33.28 (3.19)
Class 4; *n* = 29 (HLNRC)	74.20 (2.27)	32.06 (1.86)	31.66 (1.93)	20.84 (1.06)	30.67 (0.76)	2.87 (0.03)	0.69 (0.12)	59.07 (2.27)	46.01 (3.40)

Note. Diagonal of table provides means (and standard deviations) for continuous variables. AHNRC = Average S/R, Higher Negative Religious Coping; HRMS = High Religiosity, Mixed Spirituality; LRLTAS = Low Religiosity, Low to Average Spirituality; HLNRC = Highest S/R and Lower Negative Religious Coping; DSES = Daily Spirituality Experience Scale; STS_U = Universality subscale of the Spiritual Transcendence Scale; STS_PF = Prayer Fulfillment subscale of the subscale of the Spiritual Transcendence Scale; STS_PF = Prayer Fulfillment subscale of the Spiritual Transcendence Scale; RM = Religiosity Measure; PRC = Positive Religious Coping Subscale of the Brief RCOPE; NRC = Negative Religious Coping Subscale of the Brief RCOPE; SOC = Sense of Coherence Scale; and ISLSES = Integration of Stressful Life Experiences Scale.
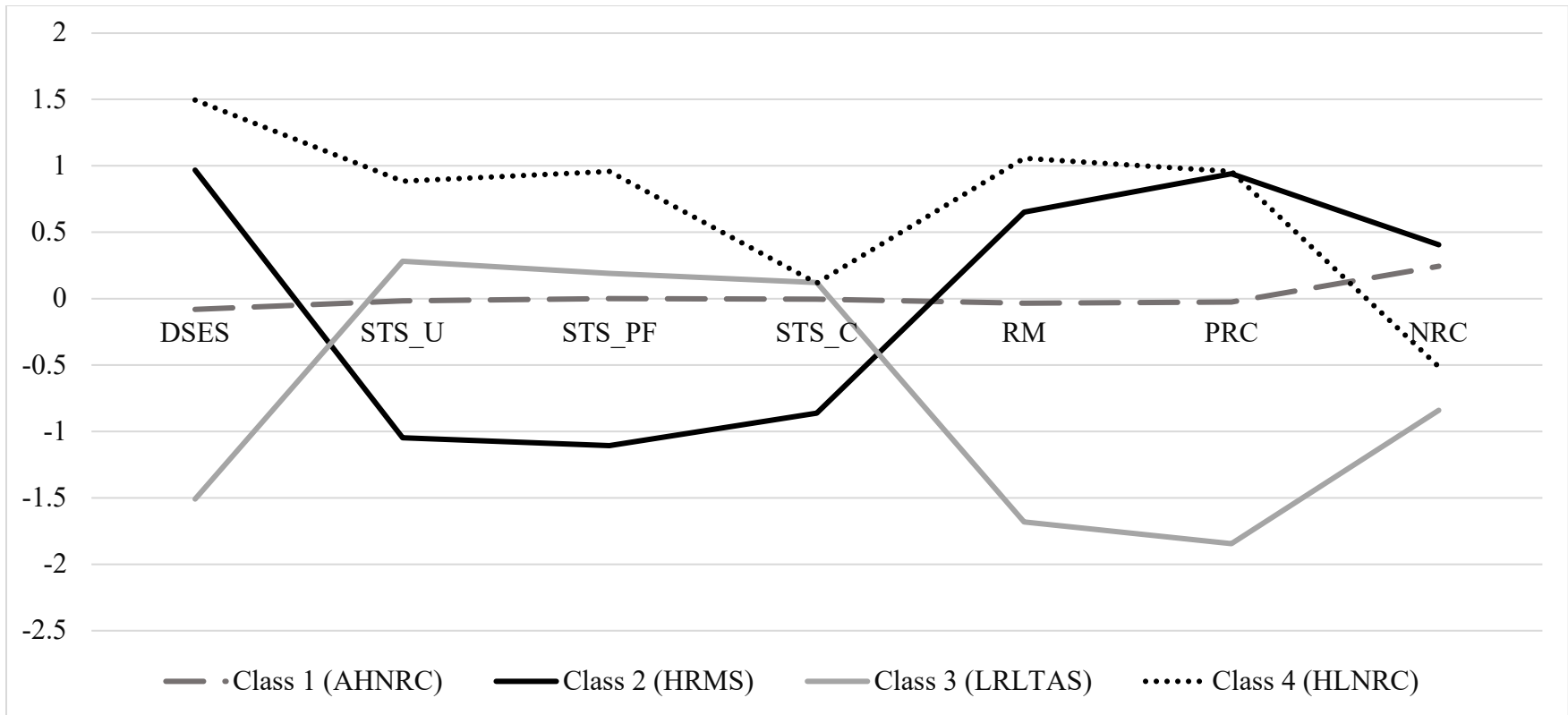
Figure 1. *Four Class Latent Profile Analysis Plot of Z-Scores for Spirituality/Religiosity Scales and Subscales*

Note. AHNRC = Average S/S, Higher Negative Religious Coping; HRMS = High Religiosity, Mixed Spirituality; LRLTAS = Low Religiosity, Low to Average Spirituality; HLNRC = Highest S/R and Lower Negative Religious Coping; DSES = Daily Spirituality Experience Scale; STS_U = Universality subscale of the Spiritual Transcendence Scale; STS_PF = Prayer Fulfillment subscale of the subscale of the Spiritual Transcendence Scale; STS_PF = Prayer Fulfillment subscale of the Spiritual Transcendence Scale; RM = Religiosity Measure; PRC = Positive Religious Coping Subscale of the Brief RCOPE; NRC = Negative Religious Coping Subscale of the Brief RCOPE; SOC = Sense of Coherence Scale; and ISLSES = Integration of Stressful Life Experiences Scale

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Class 1. Average S/R, Higher Negative Religious Coping (AHNRC). This class ($n = 111$, 56.63%) was characterized by conditional means on measures of religiosity and spirituality across prayer fulfillment, universality, connectedness, and daily spiritual experience that were similar to the overall group average. This class was also characterized by having a conditional mean on the measure of negative religious coping that was higher than the overall group average.

        Within Class Associations with Distal Outcomes. Within this class, identifying as White/European American was associated with significantly lower well-being ($\beta = -8.51$, $p < .05$) as compared to identifying as Black/African American. Gender was not significantly associated with the distal outcome of well-being. Within this class, gender, race, and ethnicity, were not significantly associated with the distal outcome of meaning-making.

        Class 2. High Religiosity, Mixed Spirituality (HRMS). This class ($n = 29$, 14.8%) was characterized by conditional means on measures of religiosity and positive and negative religious coping that were higher than the overall group average. This group was also characterized by the highest conditional mean on the measure of daily spiritual experience and the lowest conditional means on measures of spiritual transcendence across prayer fulfillment, universality, and connectedness.

        Within Class Associations with Distal Outcomes. Within this class, gender, race, and ethnicity were not significantly associated with the distal outcomes of well-being or meaning-making.

        Class 3. Low Religiosity, Low to Average Spirituality (LRLTAS). This class ($n = 27$, 13.8%) was characterized by the lowest conditional means across measures of religiosity and positive and negative religious coping. The group was also characterized by the lowest conditional mean on the measure of daily spiritual experiences; however, the group had average

conditional means on the measures of spiritual transcendence across prayer fulfillment, universality, and connectedness.

Within Class Associations with Distal Outcomes. Within this class, gender, race, and ethnicity were not significantly associated with the distal outcomes of meaning-making or well-being.

Class 4. Highest S/R and Lower Negative Religious Coping (HLNRC). This class ($n =$ 29, 14.8%) was characterized by the highest conditional means on measures of religiosity and spirituality across prayer fulfillment, universality, and connectedness, and the measure of positive religious coping. In addition, this class was characterized by a conditional mean on the measure of daily spiritual experience that was higher than the overall group average and a conditional mean on the measure of negative religious coping that was lower than the overall group average.

Within Class Associations with Distal Outcomes. Within this class, gender, race, and ethnicity were not significantly associated with the distal outcomes of meaning-making or well-being.

Demographic Predictors of Spirituality/Religiosity Class Membership.

Class 1 (AHNRC). Results indicated that men were more likely to be members of this class than the Class 4 (HLNRC) (OR = .45, $p < .05$) as compared to women. Results were not significant for differences in class membership across race and ethnicity.

Class 2 (HRMS). Results were not significant for differences in class membership across gender, race, and ethnicity.

Class 3 (LRLTAS). Results indicated that White/European American participants (vs. Black/African American) (OR = .08, $p < .001$) and men (vs. women) (OR = 0.13, $p < .001$) were more likely to be members of this class than members of Class 4 (HLNRC).

Class 4 (HLNRC). Results indicated that men were more likely to be members of Class 1 (AHNRC) or Class 3 (LRLTAS) than this class and White/European American participants were more likely to be members of Class 3 (LRLTAS) than this class.

Associations with Distal Outcomes Across Classes.

Statistical differences in distal outcomes for meaning-making and well-being are displayed in Figures 2 and 3, respectively.

Class 1 (AHNRC). Participants in this class reported significantly higher meaning-making ($M = 51.84$, $SD = 1.38$) than participants in Class 2 (HRMS) ($M = 44.12$, χ^2 [1] $= 8.14$, $p < .01$). Participants in this class also reported significantly lower meaning-making than participants in Class 4 (HLNRC), $M = 59.07$, χ^2 [1] $= 6.99$, $p < .001$. Meaning-making did not significantly differ between this class and Class 3 (LRLTAS), $M = 52.36$, χ^2 [1] $= 0.03$, $p > .05$.

Participants in this class reported significantly lower well-being ($M = 32.05$, $SD = 1.42$) than participants in Class 2 (HRMS) ($M = 40.15$, χ^2 [1] $= 7.68$, $p < .01$) and participants in Class
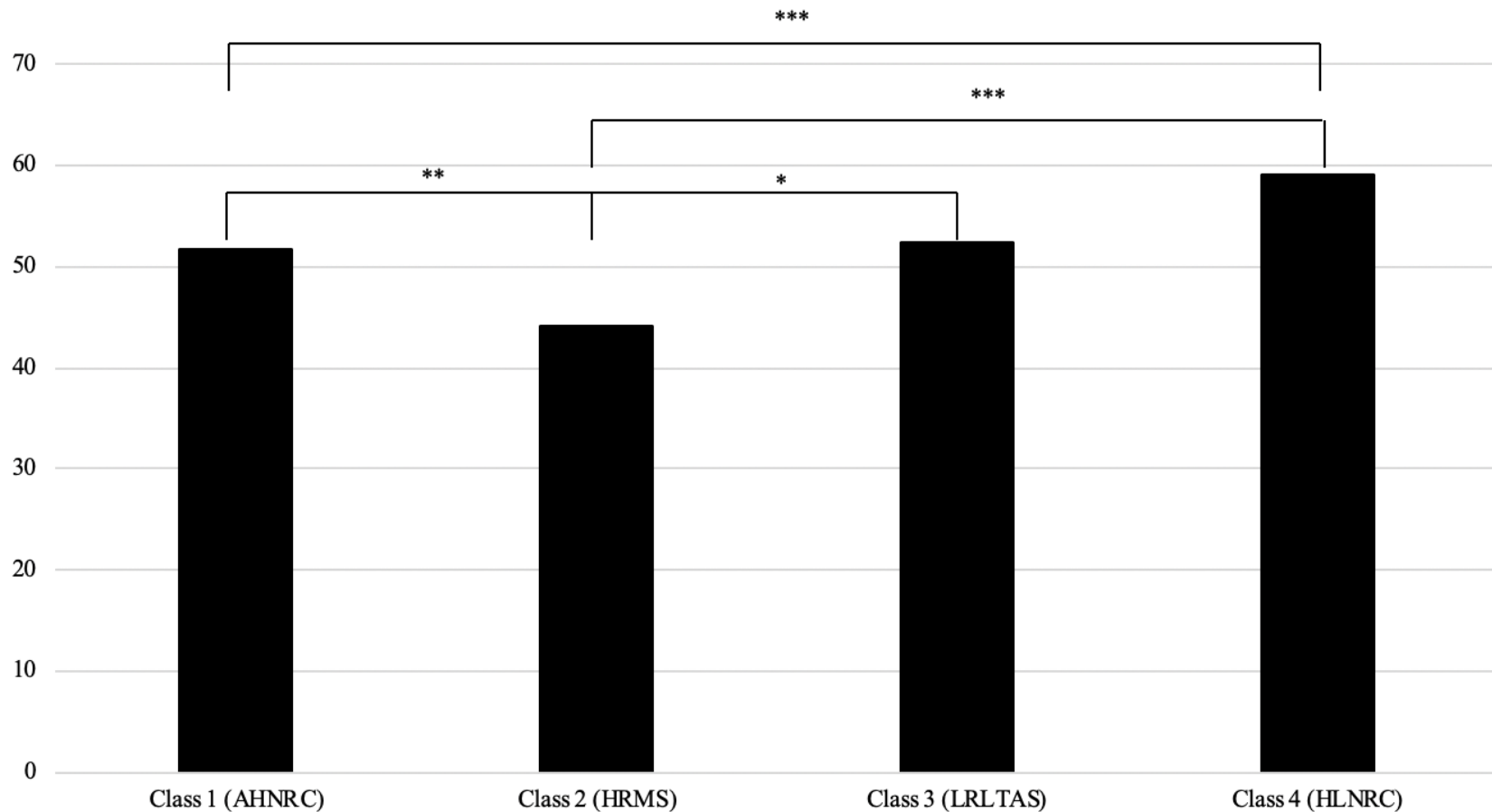
Figure 2. *Meaning-Making Across Spirituality/Religiosity Classes*
Note. AHNRC = Average S/R, Higher Negative Religious Coping; HRMS = High Religiosity, Mixed Spirituality; LRLTAS = Low Religiosity, Low to Average Spirituality; HLNRC = Highest S/R and Lower Negative Religious Coping. * Indicates a difference of $p < .05$, ** indicates a difference of $p < .01$, and *** indicates a difference of $p < .001$.
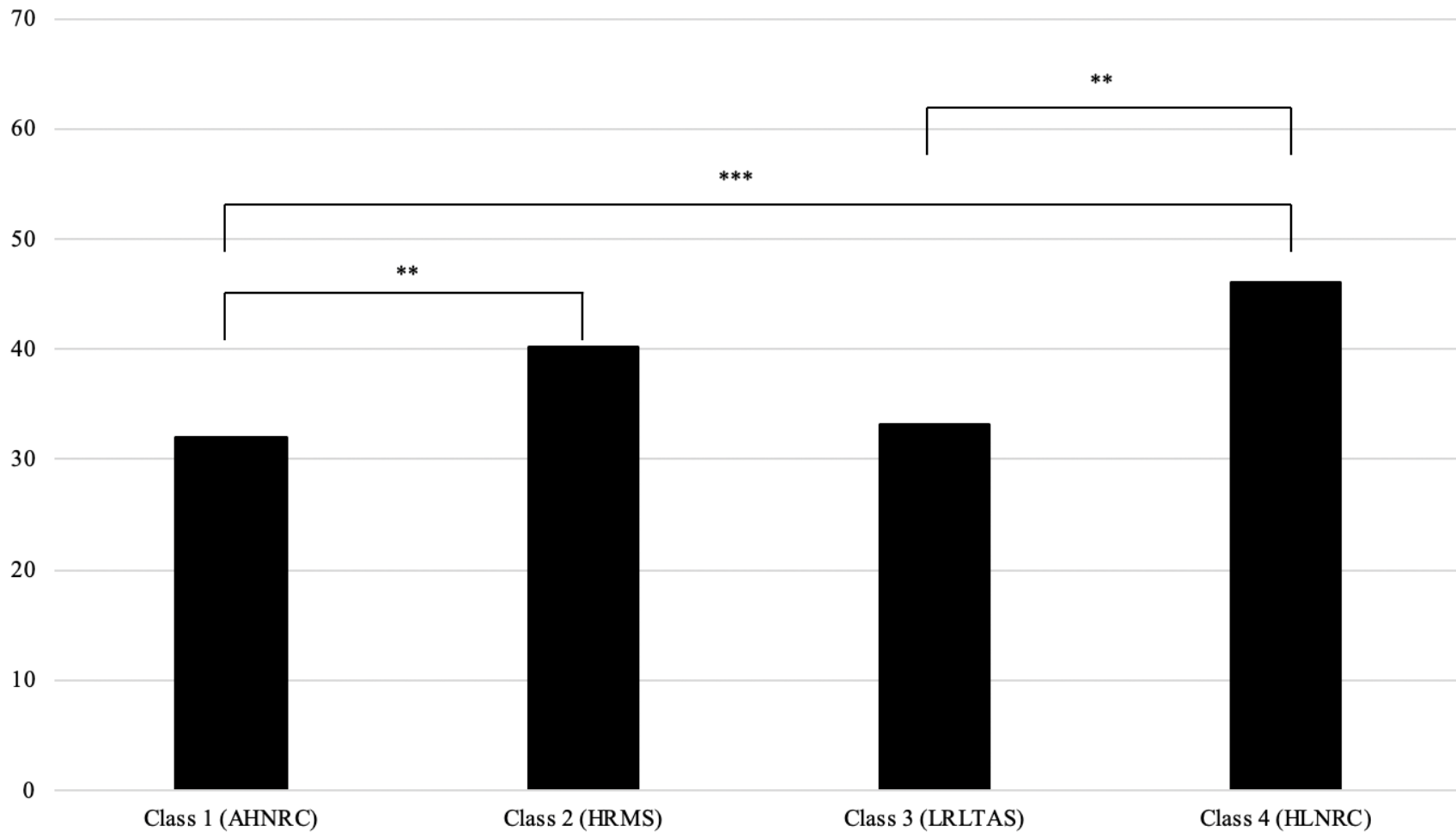
Figure 3. *Well-Being Across Spirituality/Religiosity Classes*
Note. AHNRC = Average S/R, Higher Negative Religious Coping; HRMS = High Religiosity, Mixed Spirituality; LRLTAS = Low Religiosity, Low to Average Spirituality; HLNRC = Highest S/R and Lower Negative Religious Coping. * Indicates a difference of p < .05, ** indicates a difference of p < .01, and *** indicates a difference of p < .001.

4 (HLNRC), $M = 46.01$, χ^2 [1] = 13.69, $p < .001$. Well-being did not significantly differ between this class and Class 3 (LRLTAS), $M = 33.28$, χ^2 [1] = 0.12, $p > .05$.

Class 2 (HRMS). Participants in this class reported significantly lower meaning-making ($M = 44.12$, $SD = 2.26$) than participants in Class 3 (LRLTAS) ($M = 52.36$, χ^2 [1] = 4.78, $p < .05$) and participants in the Class 4 (HLNRC), $M = 59.07$, χ^2 [1] = 21.47 , $p < .001$. Participants in this class reported significantly lower meaning-making than participants in Class 1 (AHNRC).

These participants reported significantly higher well-being ($M = 40.15$, $SD = 2.50$) than participants in the Class 1 (AHNRC). Well-being did not significantly differ between this class and the Class 3 (LRLTAS) ($M = 33.28$, χ^2 [1] = 2.88, $p < .05$) or Class 4 (HLNRC), $M = 46.01$, χ^2 [1] = 1.90, $p > .05$.

Class 3 (LRLTAS). Participants in this class reported significantly higher meaning-making ($M = 52.36$, $SD = 3.01$) than participants in Class 2 (HRMS). Meaning-making did not significantly differ between this class and Class 1 (AHNRC) or Class 4 (HLNRC), $M = 59.07$, χ^2 [1] = 3.17, $p < .05$.

Participants in this class reported significantly lower well-being ($M = 33.28$, $SD = 3.19$) than participants in the Class 4 (HLNRC), $M = 46.01$, χ^2 [1] = 7.44, $p < .01$. Well-being did not significantly differ between this class and Class 1 (AHNRC) or Class 2 (HRMS).

Class 4 (HLNRC). Participants in this class reported significantly higher meaning-making ($M = 59.07$, $SD = 2.27$) than participants in Class 1 (AHNRC) and Class 2 (HRMS). Meaning-making did not significantly differ between this class and Class 3 (LRLTAS).

Participants in this class reported significantly higher well-being ($M = 46.01$, $SD = 3.40$) than participants in Class 3 (LRLTAS) and Class 1 (AHNRC). Well-being did not significantly differ from Class 2 (HRMS).

Demographic Predictors of Distal Outcomes Across Classes.

Across classes, gender, race, and ethnicity were not significantly associated with either well-being or meaning-making.

Discussion

Our present study design and findings extend the current literature and answer a direct call from researchers to examine spirituality/religiosity among racially diverse, non-university attending young adults using a multidimensional perspective of spirituality/religiosity with person-centered analyses. In addition, study findings add to a significant body of literature examining positive outcomes (i.e., meaning-making and well-being) in the context of spirituality/religiosity. This study highlights the importance and salience of examining relations between spirituality/religiosity and positive outcomes in this population, given that young adulthood is a critical time period of development (Wood et al., 2017). Thus, overall, our study extends the current literature by examining relationships between spirituality/religiosity profiles and meaning-making and well-being among racially diverse, non-university attending, young adults.

On average, participants reported well-being that was similar to other young adult samples (Young, Waehler, Laux, McDaniel, & Hilsenroth, 2003). While no clinical cut-off scores have been developed for the measure of well-being, the SOS-10, prior research suggests that clinical populations tend to report scores lower than 42 (Blais et al., 2012). Given our sample's average of 35.43 ($SD = 15.5$) it appears that our sample is experiencing psychological well-being at levels similar to clinical populations. On average, participants also scored 51.70 ($SD = 13.57$) on the measure of meaning-making, the ISLES, which was similar to scores in other samples of young adults (Trujillo & Servaty-Seib, 2018).

Spirituality/Religiosity Classes.

Given prior research (Barton & Miller, 2015; Lyon et al., 2013; Salas-Wright et al.,

2012), we hypothesized that several distinct patterns of spirituality/religiosity would emerge and be characterized by differing levels of spirituality/religiosity. Our results were consistent with our hypotheses. Specifically, analyses resulted in four distinct spirituality/religiosity classes: Class 1 (Average S/R, Higher Negative Religious Coping; AHNRC), Class 2 (High Religiosity, Mixed Spirituality; HRMS), Class 3 (Low Religiosity, Low to Average Spirituality; LRLTAS), and Class 4 (Highest S/R and Lower Negative Religious Coping; HLNRC). Results revealed heterogeneity in the levels of dimensions of spirituality and religiosity across and within classes. Over half the sample comprised ($n = 111$, 56.6%) comprised Class 1 (AHNRC). The distribution across this class indicates that the majority of young adults experienced average spirituality and religiosity and also experienced higher negative religious coping (i.e., above average negative religious coping). Notably, the rest of the sample was split similarly across the remaining three classes, Class 2 (HRMS; $n = 29$, 14.8%), Class 3 (LRLTAS; $n = 27$, 13.8%), and Class 4 (HLNRC; $n = 29$, 14.8%). This relatively even split suggests patterns of heterogeneity in spirituality/religiosity in this population.

Our findings regarding the number and structure of spirituality/religiosity classes confirm prior research indicating that spirituality/religiosity is a multidimensional concept (Park et al., 2013). Findings highlight that dimensions of spirituality/religiosity do not uniformly hang together in this sample. Such findings indicate that it is possible for young adults in our sample to experience relatively high levels of certain dimensions and also relatively low levels of other dimensions of spirituality/religiosity. Thus, findings underscore the importance of assessing multiple dimensions of spirituality/religiosity in order to gain a full, nuanced understanding of these constructs. Given our findings, it cannot be assumed that non-university young adults uniformly experience multiple dimensions of spirituality/religiosity.

The obtained results also highlight the salience of spirituality/religiosity among this population of racially diverse non-university attending young adults. For example, over 30% of the sample comprised classes characterized by above average religiosity and positive religious coping (i.e., Classes 2 and 4) and over 30% of the sample comprised classes that were characterized by above average spiritual transcendence (i.e., Classes 3 and 4). Thus, findings are consistent with prior research indicating that spirituality/religiosity are salient among young adults (Barry & Abo-Zena, 2014; Kimball et al., 2016 McLean & Pratt, 2006; McNamara et al., 2010). Findings also expand upon previous research on the salience of religiousity/spirituality among White/European American, university attending young adults by illustrating how these constructs are also salient among racially diverse non-university attending young adults.

Findings regarding the structure and number of profiles are more complex to situate within existing research examining profiles of religiosity, spirituality, or spirituality/religiosity given that this study uniquely assessed multiple dimensions of spirituality and religiosity among an understudied sample. Of note, the unique nature of our study population and findings should be considered a strength of the study given that spirituality/religiosity are underexamined among racially diverse, low-income young adults (Chan et al., 2015; Kimball et al., 2016; Sedlar et al., 2018; Yonker et al., 2012). Prior research, such as that conducted by Barton and Miller (2015), Lyon et al. (2016), and Park (2013) examining spirituality/religiosity profiles, revealed profiles characterized by uniform spirituality/religiosity dimensions. In the current study, a range of scores across dimensions of both spirituality and religiosity emerged. Thus, participants in the current study sample may have experienced greater heterogeneity in their spirituality/religiosity. This discrepancy between our findings and those from Barton and Miller (2015), Lyon et al. (2106), and Park (2013) highlights the novelty of the current study's sample. Such discrepancies

between our study findings and those of previous authors highlight the importance of conducting spirituality/religiosity research across diverse samples of young adults.

The current study findings are aligned with previous research, conducted by Salas-Wright et al. (2012), examining religiosity profiles among adolescents. Salas-Wright et al.'s (2012) findings revealed five profiles characterized by heterogenous levels of religiosity across attendance, engagement, influence on decisions, and importance of friends sharing beliefs. Similarly, the current study findings also revealed multiple patterns of spirituality and religiosity with heterogeneity across dimensions. The current study goes further as it includes both spirituality and religiosity in the same analyses. Overall, findings regarding the spirituality/religiosity classes highlight the salience of spirituality/religiosity among this population and suggest heterogenous experiences across dimensions of spirituality/religiosity among this sample.

Associations Between Spirituality/Religiosity Profiles and Distal Outcomes.

Meaning-Making. Given prior research examining spirituality/religiosity's relationship with meaning-making (Chan et al., 2015; Park 2010, 2013), we hypothesized that spirituality/religiosity classes characterized by high levels of spirituality/religiosity would be significantly and positively associated with meaning-making. Our hypotheses regarding the relationship between spirituality/religiosity profiles and meaning-making is in accordance with the Meaning Making Model, which posits that spirituality/religiosity may help individuals make sense of potentially distressing events or circumstances (Park 2010, 2013).

Study findings revealed that meaning-making was highest among the Class 4 (HLNRC) and that meaning-making in this class was significantly higher than meaning-making in Classes 1 (AHNRC) and 3 (LRLTAS). This finding was consistent with study hypotheses and also

supports the Meaning Making Model. This finding is also consistent with prior research indicating that spirituality/religiosity are associated with higher meaning-making among young adults (Chan et al., 2015; Park, 2005). Thus, results highlight the potential salience of the relationship between spirituality/religiosity and meaning making among diverse, non-university attending young adults.

Overall, results regarding the relationship between spirituality/religiosity profiles and meaning-making are in alignment with the Meaning Making Model, which posits that spirituality/religiosity can aide in the "sense making" of life circumstances (Park, 2010, 2013). Specifically, in the current study, the class characterized by the highest levels of spirituality and religiosity was associated with the highest levels of meaning-making and levels were significantly higher than other classes. In addition, classes characterized by low to average spirituality reported significantly higher mean-making than classes characterized by mixed spirituality across dimensions. Such findings may indicate that experiencing heterogeneity across dimensions of spirituality, in particular, may be associated with poorer meaning-making. This conclusion has support given prior research indicating that "religious struggle" is sometimes associated with poorer meaning-making (Ellison et al., 2013). Our findings, in the context of the Meaning Making Model, highlight the salience of spirituality/religiosity among young adults and the relationship with meaning-making.

Well-Being. Given prior research examining the relationship between spirituality/religiosity and well-being (Reed & Neville, 2014; Wilson et al., 2014), we hypothesized that classes characterized by higher levels of spirituality/religiosity would be associated with higher levels of well-being. Study findings were generally consistent with this hypothesis. Results revealed that well-being was highest among Class 4 (HLNRC) and that well-

being in this class was significantly higher than well-being in Classes 1 (AHNRC) and 3 (LRLTAS). Our findings are in alignment with prior research examining relationships between spirituality/religiosity profiles and aspects of psychological well-being. Specifically, research conducted by Park (2013) indicated that religious/spirituality profiles characterized as highly religious were the least like to report psychological distress in a sample of young adults. Interestingly, results from this study also revealed that psychological distress among participants in the minimally religious profile did not significantly differ from participants in the moderately and somewhat religious profiles. These results are moderately consistent with our findings that indicated non-significant differences in well-being across the Classes 2 (HRMS) and 4 (HLNRC). Findings, in the context of prior research, suggest that differences in well-being may be minimal at higher levels of religiosity.

Other findings regarding the relationship between spirituality/religiosity profiles and well-being is also moderately consistent with research conducted by Lyon et al. (2016) using single-items among adolescents. Our results revealed that the class characterized by the highest levels of spirituality/religiosity was significantly associated with the highest well-being. However, findings revealed by Lyon et al. (2016) indicated that higher well-being was found among adolescents who reported high religious engagement but low spirituality. Our findings suggest that both spirituality and religiosity were salient in the context of well-being for our sample. While participants in Lyon et al.'s (2016) study were somewhat demographically similar to our sample given that they were from the U.S. South and mostly Black/African American, the difference in age group (i.e., adolescents vs. young adults) may account for the nuanced differences across study findings. Overall, findings highlight the relationship between spirituality/religiosity and the importance of examining this relationship among young adults, as

a potentially unique group.

Meaning-Making and Well-Being. Study hypotheses predicted that spirituality/religiosity profiles characterized by higher levels of spirituality/religiosity would be uniformly associated with meaning-making and well-being. Notably, there were differences in the relationships between spirituality/religiosity profiles and meaning-making and well-being. For example, the Class 4 (HLNRC) reported the highest levels of both meaning-making and well-being. However, Class 4 (HLNRC) did not significantly differ from Class 3 (LRLTAS) for well-being and did not significantly differ from Class 2 (HRMS) for meaning-making. Such nuances suggest that spirituality/religiosity profiles characterized by higher levels of these constructs are not uniformly associated with positive outcomes among this population. In addition, comparisons in findings across profiles with meaning-making and well-being also indicated that while the Class 3 (LRLTAS) reported significantly higher meaning-making than Class 2 (HRMS), Classes 2 (HRMS) and 3 (LRLTAS) did not significantly differ on well-being. Relatedly, Class 2 (HRMS) reported the lowest meaning-making and was significantly lower than Classes 3 (LRLTAS) and 4 (HLNRC). However, Class 1 (AHNRC) reported the lowest well-being and was significantly lower than Classes 2 (HRMS) and 4 (HLNRC). Thus, findings again highlight the nuanced relationships between spirituality/religiosity profiles and positive outcomes. Findings suggest there is not a uniform relationship between profiles and positive outcomes. The lack of such uniform relationships limit generalizability of study findings to other positive outcomes not measured in this study. Such results suggest that researchers should be particularly thoughtful when examining relationships between spirituality/religiosity profiles and positive outcomes and avoid generalizing across multiple positive outcomes or constructs.

Given the identified associations between spirituality/religiosity profiles and the positive

outcomes of meaning-making and well-being, results highlight the salience of spirituality/religiosity in the context of meaning-making and well-being among racially diverse, non-university attending young adults. Findings are generally consistent with the Meaning Making Model (Park, 2010, 2013), which suggests individuals may use aspects of spirituality/religiosity to make meaning and sense of their lives. While our study findings should provide impetus for the design and implementation of interventions for this population with spiritual/religious elements, future research is also needed to examine mechanisms behind associations with spirituality/religiosity profiles and meaning-making and well-being. Such research will help clarify these relationships and illuminate mechanisms driving differences in membership likelihood across gender and race. Such research, in combination with our work, may inform clinical work and future interventions with spiritual and religious components for this population.

Demographic Predictors of Classes and Distal Outcomes. In order to answer the call for research examining differences in spirituality/religiosity across race, ethnicity, and gender (Yonker et al., 2012)., we examined demographic predictors of class membership. Given prior research examining the relationship between spirituality/religiosity and the demographics of race, ethnicity, and gender (Chatters et al., 2010; Krause, 2012), we hypothesized that identifying as a man or White/European American would predict membership in classes characterized by lower levels of spirituality/religiosity and would be associated with higher levels of well-being. Results revealed that men were more likely to be members of Class 1 (AHNRC) or Class 3 (LRLTAS) than Class 4 (HLNRC). Inconsistent with study hypotheses, gender did not predict membership in the other classes. Our findings are somewhat inconsistent with prior research indicating that women are more likely to identify as spiritual (Chatters et al., 2010), report higher

levels of spirituality (Bailly et al., 2018), and report higher religious engagement (Schnabel, 2015) as compared to their male counterparts. The discrepancy in our findings could be due to a variety of factors, including the unique nature of our sample and the multidimensional conceptualization of spirituality/religiosity in our study. The current study highlights the importance of examining the relationship between gender and spirituality/religiosity, particularly among young adults, given potential nuances in this relationship. Future qualitative research is needed to explore young adult experiences of spirituality/religiosity to elucidate differences across gender.

Consistent with study hypotheses, results indicated that race predicted class membership. White/European American participants were more likely to be members of Class 3 (LRLTAS) than Class 4 (HLNRC). This finding is consistent with prior research indicating that non-Black adults were more likely to be members of religiosity classes characterized by minimal religious involvement (Park et al., 2013) and other research indicating that African American adolescents were least likely to be members of classes characterized by religious disengagement (Salas-Wright et al., 2012). Thus, our findings are also well situated in the literature given that prior research indicates White/European Americans endorse lower prayer immersion and are less likely to identify as spiritual than their Black/African American counterparts (Krause, 2012). Albeit generally salient for young adults, our results suggest that spirituality and religiosity may be slightly less salient constructs among White/European Americans as compared to their counterparts of other racial and ethnic identities. However, future research is needed to explore these differences and elucidate potential mechanisms behind these relationships.

Across classes, gender, race, and ethnicity were not significantly associated with well-being or meaning-making. Thus, results suggest, that participants in our sample were able to

make meaning equally across these demographic differences.

Limitations

The present findings should be considered within the context of several limitations. The cross-sectional and non-experimental design of our study limits our ability to make temporal or causal statements about the relationship between spirituality/religiosity and meaning-making and well-being. For example, higher meaning-making or well-being may give rise to higher spirituality/religiosity. Alternatively, higher spirituality/religiosity may allow young adults to engage more closely with their spiritual/religious beliefs, practices, and experiences. Future longitudinal research among this unique population is needed to disentangle these relationships. Further, while participants completed study questionnaires with research staff who were available for support and questions during the study, concepts and questions on the study questionnaires may have been difficult for some participants to grasp. While reliability of the measures in our study was more than acceptable, future researchers could explore whether readability of measures impacts responses.

The present sample is limited in that it is comprised of young adults receiving job-preparedness education, thus it may not be representative of young adults who are not actively receiving services from a job-preparedness program or do not have access to a job-preparedness program. However, this should also be considered a strength of the study given that the majority of research examining spirituality/religiosity among young adults has been among majority White/European American university attending individuals (Chan et al., 2015; Kimball et al., 2016; Sedlar et al., 2018; Yonker et al., 2012). Lastly, our data was collected from a site located in the MidSouth of the United States with young adults from surroundings areas, this our findings may not be generalizable to young adults outside of this region. Also, given that the

MidSouth is located in the Bible-belt spirituality and religiosity may have been higher or more salient among our sample. Future research is needed to explore such profiles among racially diverse non-university attending young adults across other regions of the country. Such future research could explore spirituality/religiosity profiles and associations with positive outcomes among racially diverse non-university attending young adults to increase the external validity of our results.

Clinical Implications

Our findings have important implications for clinical work. First, given that our sample endorsed levels of well-being similar to those of clinical populations, facilities serving racially diverse non-university attending young adults should strongly consider assessing for well-being and psychological distress. Such assessments could identify young adults who are experiencing low well-being or significant psychological distress for intervention. Second, given that our results underscore the salience of spirituality/religiosity among young adults, health and mental health care providers for this population should consider asking about and assessing for spirituality/religiosity when working with this population. This practice would be consistent with calls from clinical researchers to assess for spirituality/religiosity in clinical settings (Rosmarin, 2018). Third, given the salience of spirituality/religiosity and associations with meaning-making and well-being, our results suggest clinical researchers should examine mechanisms behind these relationships and should explore whether interventions with spiritual or religious components would be culturally-responsive and efficacious among this population.

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Appendix A IRB Approval

PROFY2018-49
Renewal:
Approval Renewal
PI: Caroline Kaufman
CoInvestigator:
Advisor and/or CoPI:
Idia Thurston
Department: Psychology, Users loaded with unmatched Organization affiliation.
Study Title: Meaning and Mental Health among Young Adults (M&M Study)
IRB ID: PROFY2018-49
PI Name: Caroline Kaufman
Co-Investigators:
Advisor and/or Co-PI: Idia Thurston
Submission Type: Initial
Title: Meaning and Mental Health among Young Adults (M&M Study)
IRB ID : #PRO-FY2018-49

Expedited Approval: Sep 15, 2017
Expiration: Sep 15, 2018

Approval of this project is given with the following obligations:

1. This IRB approval has an expiration date, an approved renewal must be in effect to continue the project prior to that date. If approval is not obtained, the human consent form(s) and recruiting material(s) are no longer valid and any research activities involving human subjects must stop.

2. When the project is finished or terminated, a completion form must be submitted.

3. No change may be made in the approved protocol without prior board approval.
Thank you,
James P. Whelan, Ph.D.
Institutional Review Board Chair
The University of Memphis.

Consent Form
Consent to Participate in a Research Study
Meaning and Mental Health among Young Adults (M&M Study)
WHY ARE YOU BEING INVITED TO TAKE PART IN THIS RESEARCH?
You are being invited to take part in a research study about your experiences with spirituality and religiosity so we can understand how these experiences impact your identity, mental health, drug and alcohol use, experiences of potentially traumatic events, and resilience. If you volunteer to take part in this study, you will be one of about 200 people to do so.
WHO IS DOING THE STUDY?
The person in charge of this study is Caroline C. Kaufman, B.A. of The University of Memphis Department of Psychology She is supervised by Idia B. Thurston, Ph.D. of The University of Memphis Department of Psychology and Dr. Theresa Okwumabua, PhD. There may be other people on the research team assisting at different times during the study.
WHAT IS THE PURPOSE OF THIS STUDY?
The purpose of this study is to learn about your experiences with spirituality and religiosity so we can understand how these experiences impact your identity, mental health, drug and alcohol use, experiences of potentially traumatic events, and resilience.

By doing this study, we hope to learn more about the importance of spirituality for individuals and to better understand spirituality as a psychological concept to inform future research and treatment.
ARE THERE REASONS WHY YOU SHOULD NOT TAKE PART IN THIS STUDY?
You should not take part in this study if you are under 18 years of age or are not an English speaker,
WHERE IS THE STUDY GOING TO TAKE PLACE AND HOW LONG WILL IT LAST?
The study will take place in a private space at Benjamin L. Hooks Job Corps Academy. You will complete a series of questionnaires on paper or on a computer if it is available. It will take approximately 60 minutes to complete the questionnaires. Some people take longer, others may need a shorter amount of time to complete the study.
WHAT WILL YOU BE ASKED TO DO?
You will be asked to complete several measures with a number of questions about your spiritual and religious beliefs, general mental health, drug and alcohol use, potentially traumatic events, and well-being.

WHAT ARE THE POSSIBLE RISKS AND DISCOMFORTS?

To the best of our knowledge, the things you will be doing have no more risk of harm that you would experience in everyday life. You may find some questions we ask you to be upsetting or stressful. If so, we can tell you about some people who may be able to help with these feelings. In addition to the risks listed above, you may experience a previously unknown risk or side effect.

WILL YOU BENEFIT FROM TAKING PART IN THIS STUDY?

There is no guarantee that you will get any benefit from taking part in the study. You will receive an item from a "goodie bag" as compensation for your time. Some people may gain insight into their own spiritual, religious, or cultural identities, and may become aware of their own risk-taking behaviors and personal strengths. Please note that the University of Memphis does not have any funds budgeted for compensation for injury, damages, or other expenses

DO YOU HAVE TO TAKE PART IN THE STUDY?

If you decide to take part in the study, it should be because you really want to volunteer. You will not lose any benefits or rights you would normally have if you choose not to volunteer. You can stop at any time during the study and still keep the benefits and rights you had before volunteering. As a student at Job Corps, if you decide to or not to take part in this study, your choice will have no effect on your academic status or the services you receive from Job Corps.

IF YOU DON'T WANT TO TAKE PART IN THE STUDY, ARE THERE OTHER CHOICES?

If you do not want to be in the study, there are no other choices except not to take part in the study.

WHAT WILL IT COST YOU TO PARTICIPATE?

There are no costs associated with taking part in the study.

WILL YOU RECEIVE ANY REWARDS FOR TAKING PART IN THIS STUDY?

You will have the opportunity to get one item from our "goodie bag." Items available will include: stress balls, fidget spinners, colored pens, and small notepads.

WHO WILL SEE THE INFORMATION THAT YOU GIVE?
We will make every effort to keep private all research records that identify you to the extent allowed by law. To protect your privacy, electronic files containing identifying information will be password protected, and only approved study staff may access the password and files. The PI has set the online survey system Qualtrics to anonymize IP addresses.
Your information will be combined with information from other people taking part in the study. When we write about the study to share it with other people, we will write about the combined information we have gathered. You will not be personally identified in these written materials. We may publish the results of this study; however, we will keep your name and other identifying information private.

We will make every effort to prevent anyone who is not on the research team from knowing that you gave us information, or what the information is. Any personal information provided will be directly entered into the computer and only associated with your identification number that will not be traced back to you. We will keep private all research records that identify you to the extent allowed by law. However, there are some circumstances in which we may have to show your information to other people. For example, the law may require us to show your information

to a court to tell authorities if you report information about a child or elderly person being abused or if you pose a danger to yourself or someone else. Also, we may be required to show information which identifies you to people who need to be sure we have done the research correctly; these would be people from such organizations as the University of Memphis and the American Psychological Association.

CAN YOUR TAKING PART IN THE STUDY END EARLY?
If you decide to take part in the study you still have the right to decide at any time that you no longer want to continue. You will not be treated differently if you decide to stop taking part in the study.

ARE YOU PARTICIPATING OR CAN YOU PARTICIPATE IN ANOTHER RESEARCH STUDY AT THE SAME TIME AS PARTICIPATING IN THIS ONE?

You may take part in this study if you are currently involved in another research study.

WHAT IF YOU HAVE QUESTIONS, SUGGESTIONS, CONCERNS, OR COMPLAINTS?

Before you decide whether to accept this invitation to take part in the study, please ask any questions that might come to mind now. Later, if you have questions, suggestions, concerns, or complaints about the study, you can contact the investigator, Caroline C. Kaufman at cckufman@memphis.edu or either of her supervisors Dr. Idia B. Thurston at bthrston@memphis.edu or Dr. Theresa Okwumabua at kwumabuat@gmail.com. If you have any questions about your rights as a volunteer in this research, contact the Institutional Review Board staff at the University of Memphis at 901-678-2705.

WHAT IF NEW INFORMATION IS LEARNED DURING THE STUDY THAT MIGHT AFFECT YOUR DECISION TO PARTICIPATE?
If the researcher learns of new information in regard to this study, and it might change your willingness to stay in this study, the information will be provided to you. You may be asked to sign a new informed consent form if the information is provided to you after you have joined the study.

By signing below, you are confirming that you are at least 18 years old and are agreeing to be in the study. We will give you a copy of this consent form for your records and a copy will also be kept with the study records. You can contact the lead study investigator, Caroline C. Kaufman (cckufman@memphis.edu) with any questions you have now or at a later date.

_____
Printed Name of Participant

_____   _____
Signature of Participant   Date

As a representative of this study, I have explained the purpose, procedures, benefits, and the risks involved in this research study.

_____

Print Name of Person obtaining consent

_____   _____

Signature of Person obtaining consent   Date

Appendix C
Study Measures

Meaning and Mental Health among Young Adults (M&M Study)

Please answer and complete the following questionnaire that asks you about your identity, mental health, drug and alcohol use, experiences of potentially traumatic events, and resilience. Please notify study staff if you have any questions or concerns about the questions below or if you would prefer to have the questionnaire read aloud to you.

Demographics

Please write your age in years_____

What is your gender?

○ Male

○ Female

○ Transgender (MTF)

○ Transgender (FTM)

○ Transgender Other Specify Below _____

○ Other

Are you Spanish / Hispanic / Latino(a)?

○ No, not of Hispanic, Latino(a), or Spanish origin

○ Yes, of Hispanic, Latino(a), or Spanish origin

What is your race / ethnic heritage? (Please select all that apply.)

☐ American Indian or Alaskan Native

☐ African American/Black

☐ Asian

☐ Native Hawaiian or other Pacific Islander

☐ White

☐ Other (please indicate.) _____

Which one of the following best describes your feelings?

○ Completely heterosexual (attracted only to persons of the opposite sex)

○ Mostly heterosexual (mainly attracted to persons of the opposite sex and slightly attracted to persons of the same sex)

○ Bisexual (equally attracted to men and women)

○ Mostly homosexual (mainly attracted to persons of the same sex and slightly attracted to persons of the opposite sex)

○ Completely homosexual (gay/lesbian, attracted to persons of the same sex)

○ Not sure

○ Other (please describe) _____

What is your current relationship status?

○ Single (not having romantic partners)

○ Single (having one or more romantic partners without commitment)

○ In a committed relationship with one person

○ Engaged

○ Married

○ Separated

○ Divorced

○ Other (please specify): _____

To the best of your knowledge, what was the total income of the all the adults living in your home last year?

○ Less than $10,000

○ $10,001-$30,000

○ $30,001-$60,000

○ $60,001-$90,000

○ $90,001-$120,000

○ $120,001-$150,000

○ More than $150,000

○ Don't Know

Which of these phrases best describes your socioeconomic status?

○ I live very well.

○ I live comfortably.

○ I live from paycheck to paycheck.

○ I don't have a steady income.

○ I have no current income.

Do you receive financial support from your parents or other family members?

○ Yes

○ No

Please indicate your agreement with the following questions...

What is your religion or spiritual tradition?

○ None

○ Christianity

○ Islam

○ Judaism

○ Buddhism

○ Hinduism

○ Atheist

○ Agnostic

○ Other: _____

Spiritual Transcendence Scale: This questionnaire will ask you about various perceptions you hold about your view of the world and your place in it. Answer each question on the scale provided by choosing the label that best expresses your feelings. If you are not sure of your answer or believe that the question is not relevant to you, then mark the "Neutral" category.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. Although dead, images of some of my relatives continue to influence my current life	○	○	○	○	○
2. I mediate and/or pray so that I can reach a higher spiritual plan of consciousness	○	○	○	○	○
3. I have had at least one "peak" experience	○	○	○	○	○

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
4. I feel that on a higher level all of us share a bond	○	○	○	○	○
5. All life is interconnected	○	○	○	○	○
6. There is a higher plane of consciousness or spirituality that binds all people	○	○	○	○	○
7. It is important for me to give something back to my community	○	○	○	○	○

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
8. I am a link in the chain of my family's heritage, a bridge between past and future	○	○	○	○	○
9. I am concerned about those who will come after me in life	○	○	○	○	○
10. I have been able to step outside of my ambitions and failures, pain and joy, to experience a larger sense of fulfillment	○	○	○	○	○

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
11. Although individual people may be difficult, I feel an emotional bond with all of humanity	○	○	○	○	○
12. I still have strong emotional ties with someone who has died	○	○	○	○	○
13. I believe that there is a larger meaning to life	○	○	○	○	○
14. I find inner strength and/or peace from my prayers of meditations	○	○	○	○	○

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
15. I believe that death is a doorway to another plan of existence	○	○	○	○	○
16. I believe that there is a larger plan to life	○	○	○	○	○
17. Sometimes I find the details of my life to be a distraction from my prayers and/or meditations	○	○	○	○	○
18. When in prayer or meditation, I have become oblivious to the events of the world	○	○	○	○	○

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
19. I have experienced deep fulfillment and bliss through my prayers or meditations	○	○	○	○	○
20. I have had a spiritual experience where I lost track of where I was or the passage of time	○	○	○	○	○
21. The desires of my body do not keep me from my prayers or meditations	○	○	○	○	○

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
22. Although there is good and bad in people, I believe that humanity as a whole is basically good	○	○	○	○	○
23. There is an order to the universe that transcends human thinking	○	○	○	○	○
24. I believe that on some level my life is intimately tied to all of my humankind	○	○	○	○	○

Religiosity Measure:

1. How many times have you attended religious services in the last year?_____

2. Which of the following best describes your practice of prayer or meditation?

○ Prayer is a regular part of my daily life

○ I usually pray in times of stress or need, but rarely at any other time

○ I pray only during formal ceremonies

○ Prayer has little importance in my life

○ I never pray

3. When you have a serious personal problem how often do you take religious advice or teaching into consideration?

○ Almost always

○ Usually

○ Sometimes

○ Rarely

○ Never

4. How much of an influence would you say that religion has on the way you choose to act and the way that you choose to spend your time each day?

○ No influence

○ A small influence

○ Some influence

○ A fair amount of influence

○ A large influence

5. Which of the following statements comes closest to your belief about God?

○ I am sure that God exists and that God is active in my life

○ Although I sometimes question God's existence, I do believe in God and believe God knows of me as a person

○ I don't know if there is a personal God, but I do believe in a higher power of some kind

○ I don't know if there is a personal God or a higher power of some kind, and I don't know if I will ever know

○ I don't believe in a personal God or in a higher power

6. Which of the following statements comes closest to your belief about life after death (immortality)?

○ I believe in a personal life after death, a soul existing as a specific individual

○ I believe in a soul existing after death as a part of a universal spirit

○ I believe in a life after death of some kind, but I really don't know what it would be like

○ I don't know whether there is any kind of life after death, and I don't know if I will ever know

○ I don't believe in any kind of life after death

7. During the past year, how often have you experienced a feeling of religious reverence or devotion?

○ Almost daily

○ Frequently

○ Sometimes

○ Rarely

○ Never

8. How much do you agree with the following statement? Religion gives me a great amount of comfort and security in my life

○ Strongly disagree

○ Disagree

○ Uncertain

○ Agree

○ Strongly agree

Daily Spiritual Experience Scale: The next set of items may or may not fit with your life experiences. A number of items use the word 'God.' If this word is not a comfortable one for you, please use another that calls to mind the divine or holy for you.

	Many times a day	Every day	Most Days	Some days	Once in a while	Never
1. I feel God's presence.	○	○	○	○	○	○
2. I experience a connection to all of life.	○	○	○	○	○	○
3. During worship, or at other times when connecting with God, I feel joy, which lifts you out of your daily concerns.	○	○	○	○	○	○
4. I find strength in my religion or spirituality.	○	○	○	○	○	○
5. I find comfort in my religion or spirituality.	○	○	○	○	○	○
6. I feel deep inner peace or harmony.	○	○	○	○	○	○
7. I ask for God's help in the midst of daily activities.	○	○	○	○	○	○
	Many times a day	Every day	Most Days	Some days	Once in a while	Never
8. I feel guided by God in the midst of daily activities.	○	○	○	○	○	○

9. I feel God's love for me, directly.	○	○	○	○	○	○
10. I feel God's love for me, through others.	○	○	○	○	○	○
11. I am spiritually touched by the beauty of creation.	○	○	○	○	○	○
12. I feel thankful for your blessings.	○	○	○	○	○	○
13. I feel a selfless caring for others.	○	○	○	○	○	○
14. I accept others even when they do things I think are wrong.	○	○	○	○	○	○
15. I desire to be closer to God or in union with the divine.	○	○	○	○	○	○

16. In general, how close do you feel to God?

○ Not close at all

○ Somewhat close

○ Very close

○ As close as possible

Brief RCOPE: The following items deal with ways you coped with a significant trauma or negative event in your life. There are many ways to try to deal with problems. These items ask what part religion played in what you did to cope with this negative event. Obviously different people deal with things in different ways, but we are interested in how you tried to deal with it. Each item says something about a particular way of coping. We want to know to know to what extent you did what the item says. How much or how frequently. Don't answer on the basis of what worked or not-just whether or not you did it. Try to rate each item separately in your mind from the others. Make your answers as true FOR YOU as you can.

For the following, indicate how much or how frequently you did the following to cope with a significant trauma or negative event...

	Not At All	Very Little	Somewhat	A Great Deal
1. Looked for a stronger connection with God	○	○	○	○
2. Sought God's love and care	○	○	○	○
3. Sought help from God in letting go of my anger	○	○	○	○
4. Tried to put my plans into action together with God	○	○	○	○
5. Tried to see how God might be trying to strengthen me in this situation	○	○	○	○
6. Asked forgiveness for my sins	○	○	○	○
7. Focused on religion to stop worrying about my problems	○	○	○	○
8. Wondered whether God had abandoned me	○	○	○	○
9. Felt punished by God for my lack of devotion	○	○	○	○

	Not At All	Very Little	Somewhat	A Great Deal
10. Wondered what I did for God to punish me	○	○	○	○
11. Questioned God's love for me	○	○	○	○
12. Wondered whether my religious community had abandoned me	○	○	○	○
13. Decided the devil made this happen	○	○	○	○
14. Questioned the power of God	○	○	○	○

Integration of Stressful Life Experiences Scale: For the following questions, please think of a distressing or the most distressing event that has occurred in your life. For many individuals, this event may be the loss of a loved one or a traumatic event.

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1. Since this event, the world seems like a confusing and scary place	○	○	○	○	○
2. I have made sense of this event	○	○	○	○	○
3. If or when I talk about this event, I believe people see me differently	○	○	○	○	○
4. I have difficulty integrating this even into my understanding of the world	○	○	○	○	○
5. Since this event, I feel like I'm in a crisis	○	○	○	○	○

of faith					
6. This event is incomprehensible to me	○	○	○	○	○
7. My previous goals and hopes for the future don't make sense anymore since this event	○	○	○	○	○
8. I am perplexed by what happened	○	○	○	○	○
9. Since this event happened, I don't know where to go next in my life	○	○	○	○	○
10. I would have an easier time talking about my life if I left this event out	○	○	○	○	○

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
11. My beliefs and values are less clear since this event	○	○	○	○	○
12. I don't understand myself anymore since this event	○	○	○	○	○
13. Since this event, I have a harder time feeling like I'm part of something larger than myself	○	○	○	○	○
14. This event has made me feel less purposeful	○	○	○	○	○
15. I haven't been able to put the pieces of my life back together since this event	○	○	○	○	○

| 16. After this event, life seems more random | ○ | ○ | ○ | ○ | ○ |

Thank you for completing this questionnaire! Please alert study staff!

Appendix D
Debriefing Form

Meaning and Mental Health among Young Adults (M&M Study)

Debriefing Form

Thank you for your participation in this research project. The purpose of this research project is to learn about your experiences with spirituality and religiosity so we can understand how these experiences impact your identity, mental health, drug and alcohol use, experiences of potentially traumatic events, and resilience. As such, the current study used several questionnaires to help us understand your behaviors, experiences, beliefs, and identity across different areas.

The information provided by these questionnaires will help us understand how past, current, and future experiences and attitudes are related to each other. All of your questionnaire responses will remain strictly confidential.

If you have any further questions about this study, or would like to request the results of the study, please feel free to contact:

Graduate Researcher: Caroline C. Kaufman at cckufman@memphis.edu
(Faculty Advisor: Dr. Idia Thurston; Site Psychologist: Dr. Theresa Okwumabua)

In addition, if you are concerned about the study questions asked and wish to speak with a professional, please contact one of the following resources:

National Resources	Community Resources
National Alliance on Mental Illness (NAMI) Helpline 800-950-NAMI info@nami.org http://www.nimh.nih.gov	Shelby County Health Department 814 Jefferson Avenue Memphis, TN 38105 (901) 544-7600
National Suicide Prevention Lifeline 800-273-TALK 24 hrs/day; 7 days/week http://www.suicidepreventionlifeline.org	Memphis Sexual Assault Resource Center 1750 Madison Ave #102 Memphis, TN 38104 (901) 272-2020
	Planned Parenthood 2430 Poplar Avenue #100 Memphis, TN 38112 (901) 725-1717
	Memphis Crisis Center (901) 274-7477 http://memphiscrisiscenter.org/