## Emerging Adults' Religious Motivation and Psychological Well-

Being: The Moderating Role of Gender

Dissertation Completed By

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Emerging Adults' Religious Motivation and Psychological Well-Being: The Moderating

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## **DEDICATION**

"The worship of G-d, Reb Mendl of Kotzk seemed to say, was not in finding the Truth but, rather, in an honest search for it."—R. Dr. Abraham. J. Heschel, *The Passion for Truth* 

To my grandmother, Mrs. Honey Goodman *A"H*. You served as an inspiration and a moral compass both prior to and during this journey. I miss you. Our thought-provoking and character-building conversations are sprinkled throughout these pages.

I dedicate this to my in-laws for your support throughout this project and, especially to my mom and dad, who have supported me on this journey since long before I knew it began. Thank you for cultivating an environment rich with intellectual, religious and spiritual *questing*, and showing Atara and me how to find comfort in Judaism. Maya, Atara, and I could not have made it through this without all of you.

If not for my *ezer* I may not have had the courage to continue this project, and if not for my *kenegdo*, I may not have been completed it. I dedicate this to you: my life partner, Atara.

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#### **ABSTRACT**

Studies have found that levels of emerging adults' psychological well-being vary depending on participants' level of religious motivation (Cohen & Johnson, 2016) or gender (Abo-Zena & Ahmed, 2014). Researchers have linked changes in psychological well-being during the transition to emerging adulthood; however, findings have been mixed (McLean & Breen, 2009). This study examined the relation between religious motivation (intrinsic, extrinsic, and quest) and emerging adults' psychological wellbeing, including the moderating variable of gender (male/female) while statistically accounting for global religiousness. Participants were 6,005 college-attending adults (ages 18-25) from 30 undergraduate institutions across the United Stated living away from home. Participants self-reported on their demographics, religious activities, and psychological well-being. Partial-order correlations revealed that psychological wellbeing was negatively related to intrinsic, and positively related to extrinsic and quest religious motivations. A hierarchical regression model where gender served as a moderator of the relation between psychological well-being and religious motivation revealed significant interactions for extrinsic x gender and quest x gender. A simple slopes analyses of these significant interactions were investigated using PROCESS macro (Hayes, 2014), and demonstrated the positive relation between extrinsic and quest religious motivations and psychological well-being was stronger for women than men. Implications are explored with specific regard to the clinical importance of religion and spirituality during the developmental stage of emerging adulthood, competent clinical practice for psychotherapists, university counseling centers, and informed practice for psychotherapists, university counseling centers, and local and college-based clergy.

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## **CHAPTER I**

### Introduction

Prior to early adulthood young people pass through a newly identified developmental stage during the ages of 18-25, called emerging adulthood (Arnett, 2000). This stage is most prominent in highly industrialized societies, such as the United States of America, where people delay the onset of adult roles like marriage and financial self-sufficiency, often to pursue higher education (Arnett, 2000, 2007). Moreover, it is a time period wrought with instability, including changes in residence, work, and relationships, and also heightened faith and identity development (Arnett, 2012). Therefore, it is perhaps not surprising that high prevalence of risk exists for internalizing symptomatology like depression, anxiety, and stress among the emerging-adult population (American Psychiatric Association, 2013; Bayram & Bilgel, 2008).

Despite this apparent increase in psychopathological incidents, empirical evidence suggests there is an increase in overall well-being during emerging adulthood (e.g., Schulenberg & Zarrett, 2006; Smith & Snell, 2009). Well-being is a multidimensional concept that includes both a hedonic well-being, such as life satisfaction and happiness (Diener, 2000), and the eudaimonic tradition of psychological well-being, which focuses on human development and psychological functioning (Ryff, 1989b). The current study focused on only the eudemonic dimension of well-being, also known as psychological well-being, since it is based on developmental theories and appears to best capture an objective and global perspective of well-being (Ryff, 2014). Psychological well-being has been found to increase from adolescence to emerging adulthood (Bauer & McAdams, 2010; Buhl, 2007; Smith & Snell, 2009). Psychological well-being also has been

positively associated with individuals' ability to make meaning sor make sense of experiences in their lives (Aflakseir, 2012). Additionally, psychological well-being has been associated with higher levels of religiousness (Koenig, McGue, & Iacono, 2008) and varying levels of intrinsic, extrinsic, and quest religious motivations (Genia, 1996; Knox, Langehough, Walters, & Rowley, 1998).

For many emerging adults in the U.S., religion has been associated with positive outcomes in their lives such as higher levels of well-being and happiness and lower levels of risky behavior (Yonker, Schnabelrauch, & DeHaan, 2012). Indeed, in a survey of religious beliefs and practices, 56% of adults ages 18 - 64 in the U.S. reported that they believe or admit that religion is "very important" and an additional 26% report that religious is "somewhat important" in their lives (Pew Forum on Religion & Public Life, 2008). Religiousness, in particular religious involvement, has been associated with positive physical health and well-being (Maltby, Lewis, & Day, 1999; Pargament, Mahoney, Exline, Jones, & Shafranske, 2013; Worthington, Kurusu, McCollough, & Sandage, 1996), and also has been associated with lower levels of internalizing symptomatology, such as anxiety and depression (Dein, 2013). Further, empirical support demonstrates that varying associations between intrinsic, extrinsic and quest religious motivation, dimensions of religiousness, have been associated with psychological wellbeing among adolescents and emerging adults (Cohen & Johnson, 2016). Among the emerging-adult population, individuals who reported higher levels of religious motivation generally tend to demonstrate higher levels of psychological well-being (Smith & Snell, 2009). Since gender norms and roles are integral aspects of emerging adults' sociocultural context (Abo-Zena & Ahmed, 2014), these dimensions may be important in

explaining the relation between religious motivation and psychological well-being. Intrinsic, extrinsic and quest religious motivation may predict psychological well-being differently based on one's gender. For example, in one study, women's spirituality was positively related to psychological well-being while men's spirituality was negatively related to psychological well-being (Vosloo, Wissing, & Temane, 2009). Thus, the current study focused on the role of these specific expressions of religion (i.e., intrinsic, extrinsic and quest religious motivations) and their association with emerging adults' psychological well-being, as well as how this relation was potentially moderated by gender.

#### **Review of the Literature**

Well-being. Dating back to the times of Aristotle, many definitions of well-being have been proposed (Dodge, Daly, Huyton, & Sanders, 2012; Guttman & Levy, 1982). While Aristippus proclaimed that a person's life should revolve around maximizing pleasure and committing pleasurable activities, Aristotle argued that pleasurable activities may not necessarily contribute to a person's well-being (Ryff & Singer, 2008). On the other hand, Aristotle believed that people should pursue personal fulfillment and actualize their potential. These theories serve as the foundation for the current conceptions of well-being, namely, hedonic and eudaimonic well-being (Keyes, Shmotkin, & Ryff, 2002).

The hedonic elements of well-being have been conceptualized as the subjective evaluation of how well one's life is progressing (Argyle, 2001) with specific focus on happiness and pleasure (Chen, Jing, Hayes, & Lee, 2013). Scholars identified a cognitive aspect of hedonic well-being (Andrews & McKennell, 1980) and ultimately introduced

life satisfaction as a component to hedonic well-being (Diener, 1984). Bradburn (1969) initially established another affective dimension, hypothesizing that the experience of positive or negative affect, as a result of societal changes during day-to-day life situations, influenced people's well-being. This affective dimension of well-being had been understood as a single, bipolar dimension consisting of either pleasant or unpleasant affect (Andrews & McKennell, 1980), and was operationalized as the balance between scores on a measure of positive and negative affect (Bradburn, 1969), However, Diener and Emmons (1985) discovered a significant inverse relation between negative and positive affect displaying that they grew gradually more independent from one another as time increased over a six-week span. As an example, these findings demonstrate that an individual may report high levels of sadness or anger while simultaneously reporting high levels of happiness. Diener and Emmons suggest that happiness may be comprised of two affective dimensions which are evaluated separately from one another. Given these findings, hedonic well-being was ultimately established to consist of the affective (i.e., both positive and negative affect) and the cognitive (i.e., satisfaction with life) dimensions (Diener, Suh, Lucas, & Smith, 1999). For the purposes of this paper, the hedonic concept of well-being was known as subjective well-being.

Indeed, affect influences the relation between people's perceptions of their own quality of life and their well-being (Schwartz, Zamboanga, Luyckx, Meca, & Ritchie, 2013). Since people's experiences are subjective, life satisfaction and subjective well-being varies across situations, cultures and people. For example, in some cultures that tend to be more individualistic, personal emotions predicted life satisfaction, while in more collectivistic cultures, individuals may not judge their life satisfaction based solely

on their emotions and well-being (Suh, Diener, Oishi, & Triandis, 1998). Additionally, some people might report that being happy creates distress, and some people may be satisfied with being sad or in a state of anxiety (Akin, 2008). Subjective well-being refers to the subjective experience of happiness (Bradburn, 1969; Diener, 1984) but does not necessarily refer to long-standing satisfaction with life. As a result, it is not the most accurate and effective analysis of well-being investigated in the current study, whereas a multidimensional evaluation according to one's own standards of meaning, purpose, progress towards one's goals and life choices has been shown to be a more valid measure of well-being (Keyes et al., 2002). Therefore, the current study investigated eudaimonic well-being instead of solely hedonic, or subjective, well-being.

Eudaimonic and psychological well-being. The concept of eudaimonic well-being "was not based on the level of subjective pleasure experienced, but on enacting a number of specific qualities reflecting how one 'ought' to live" (Waterman et al., 2010, p. 42). In this manner, eudaimonic well-being focuses on the potential and future expectations of oneself, including the subjective experience of satisfaction, from reaching that potential. A person with higher levels of eudaimonic well-being is more concerned with psychological maturity and how one integrates complex aspects of life (Bauer & McAdams, 2010). The emphasis of this domain of well-being is not merely the pleasure and satisfaction of life but on meaning, personal growth and development of a narrative identity (Bauer, McAdams, & Pals, 2008). Ultimately, a multidimensional structure of psychological well-being was established stemming from the eudaimonic approach to well-being (Ryff, 1989b; Ryff & Keyes, 1995). This theory encompasses a compilation of developmental and clinical theories of positive functioning and lifespan development.

For the purposes of consistency throughout this paper, *eudaimonic well-being* is referred to under the umbrella term *psychological well-being*. Additionally, while reviewing the literature, the term *well-being* is used to refer to research regarding general aspects of well-being including *both* eudaimonic and hedonic.

There are six factors to psychological well-being (Ryff, 1989a, 1989b), (a) *self-acceptance*, one's general attitudes toward one's self including, skills, talents, past experiences and poor qualities; (b) the quality of relations with others, known as *positive relations with others*, (c) *environmental mastery*, the ability to master one's life within one's external environment, (d) *autonomy*, the drive for independence and self-as-reference for evaluation, (e) the desire for continued growth, i.e., *personal growth*, and (f) the sense of purpose and meaning in one's life, i.e., *purpose in life*. These six components involve one's personal experience throughout life. While describing these theories, terms such as fully functioning person, self-actualized, maturity, and psychological development for example, are used as synonymous with the term psychological well-being.

Self-acceptance. Self-acceptance is the most common theme in the literature connected to well-being (Ryff, 1989a). It refers to a "kind of self-evaluation that is long term and involves awareness, and acceptance of, both personal strengths and weaknesses" (Ryff & Singer, 2008, p. 20–21). For example, Maslow (1968) observed that acceptance of oneself was necessary to achieve self-actualization, while Allport (1961) attributed self-acceptance as an integral component to maturity. Furthermore, Jahoda (1958) deemed self-acceptance as one of the main criteria for healthy levels of mental health. Indeed, this domain, including the focus on acceptance of past and current

experiences appears to resemble common definitions of the positive affect dimension within subjective well-being (Neugarten, Havighurst, & Tobin, 1961; Ryff, 1989a). Thus, having a positive attitude toward oneself, including one's good and bad characteristics, is an essential aspect of well-being.

Positive relations with others. Previous theorists also attributed social interest and positive relations with others as helpful to self-actualization (Maslow, 1968), as well as functioning fully (Rogers, 1961) and maturely (Allport, 1961). The capacity for love, friendship, intimacy, and the ability to be empathetic and maintain interpersonal relationships are also aspects of positive mental health functioning (Jahoda, 1958). Indeed, interpersonal engagement is a core component to well-being and healthy development. Thus, the ability to have high quality relations with others is a key factor in psychological well-being (Ryff & Keyes, 1995; Ryff & Singer, 2008). In the initial establishment of the construct of psychological well-being, positive relations with others was the only factor where women scored significantly higher than men (Ryff & Keyes, 1995).

Environmental mastery. In addition to relating with others, theories have identified the ability to interact with and control the environment as another component of positive psychological well-being (Maslow, 1968). It refers to the ability to "manipulate and control complex environments, particularly in midlife, as well as the capacity to act on and change the surrounding world through mental and physical activities" (Ryff & Singer, 2008, p. 22). Jahoda (1958) identified environmental mastery, or the ability to adapt to, create with, or modify one's surrounding environment as fundamental to well-being. Similarly, in an evaluation of life satisfaction during early and

middle adulthood, Bühler (1935) classified the notion of progressing and developing the world as a natural stage during the evolution of a psychologically healthy life. Thus, early lifespan developmental theorists identify environmental mastery as another key ingredient to psychological well-being.

Autonomy. Attention to independence and autonomy is also a significant attribute of psychological well-being. That is, one's ability to withstand social conformity and approval while possessing independent and personal standards. Rogers coined this idea as having an internal locus of evaluation, and it served as one of the key aspects to a fully functioning person (Rogers, 1961) and positive mental health (Jahoda, 1958). The ability to be free from social influence and pressure has been found to reflect the personality change that comes with age (Neugarten et al., 1961). People that are autonomous look within to establish personal standards and not without, which early developmental theorists "emphasize qualities of self-determination, independence and the regulation of behavior from within" (Ryff & Singer, 2008, p. 23) as integral to psychological well-being.

Purpose in life. Purpose in life is similar to Frankl's conceptualization of purpose in Man's Search for Meaning (Frankl, 1959), such that it refers to "people finding meaning and purpose in their life travails and suffering" (Ryff & Singer, 2008, p. 22). According to Erikson (1968) answering questions about purpose, beliefs and making contextual meaning are essential to achieving well-being and maturity. Acquiring meaning, purpose and direction in life are important existential aspects of a fully functioning person (Rogers, 1961), and are key characteristics to the development of maturity (Allport, 1961). Establishing meaning enables integration and balance of the

different aspects, and pressures, of the other components of psychological well-being. Further, the positive feelings associated with an individual's belief of a direction in their life and the ability to integrate different traits and characteristics of oneself comprise another key part to positive mental health (Jahoda, 1958; Ryff, 1989a).

Personal growth. Continued development within and synthesizing of the aforementioned five areas of well-being demonstrates the difference between basic psychological development and ultimate psychological functioning (Ryff, 1989a). The essence of psychological well-being is the consistent development of a person, which may result in the persistent attempts to achieve one's ultimate potential (i.e., self-actualization). A certain level of openness to experience is required to maintain personal change in a constantly evolving and emerging world (Rogers, 1961). Personal growth in an ever-evolving world establishes and aggregates the make-up of psychological well-being (Jahoda, 1958). Of all the six factors of psychological well-being, personal growth appears mostly to resemble Aristotle's initial depiction of eudaimonia (Ryff & Singer, 2008).

Psychological well-being during emerging adulthood. Literature has demonstrated mixed findings regarding self-reported psychological well-being among emerging adults. Psychological well-being has been found to be both high and low during emerging adulthood (Buhl, 2007; Smith & Snell, 2009). The mixed findings need to be understood within the developmental context of emerging adulthood. Emerging adulthood ranges from the ages of 18-25 and is marked by greater independence than any other developmental stage, significant changes in social networks and residence, and pressure to establish life-long occupations (Arnett, 2000). Given the complexity of

developmental tasks concerning identity, it follows that psychological well-being may fluctuate across this time period as emerging adults navigate this period, with varying degree of success. In a longitudinal study of 145 emerging adults on a college campus, Bauer and McAdams (2010) found that over the course of three years, emerging adults' personal growth goals predicted eudaimonic growth, defined as a combination of psychosocial maturity and psychological well-being. The results of this study showed that psychological well-being was initially low at the onset of emerging adulthood and increased gradually throughout that decade of life (Bauer & McAdams, 2010).

Additionally, in a sample of 3,518 college students in the U.S. aged 18 – 26,
Schulenberg, Bryant, and O'Malley (2004) found that most participants reported a continuous increase in well-being from age 18 until peaking at age 26.

However, there is also evidence demonstrating a decrease in psychological well-being during emerging adulthood. In the above-mentioned study, Schulenberg et al. (2004) discovered a small group of participants who reported a decrease in well-being. To explain these findings, the authors discovered that these participants also reported having difficulties in adjusting to various developmental tasks such as relationship and work-related stress. Identity development is heightened during this developmental period (Arnett, 2007); thus, one reason psychological well-being may decrease during emerging adulthood for some, and increase for others, is due to different approaches for examining the self and identity. For example, certain identity exploration styles (e.g., informational and normative styles) that include personal growth and overcoming obstacles have been related positively to psychological well-being, while others (e.g., diffuse-avoidant style) have been related negatively to psychological well-being (Schwartz et al., 2013).

Researchers have investigated the role of identity formation in both adolescent samples (e.g., Milevsky & Levitt, 2004), and studies with emerging-adult samples with suggest that identity formation is more salient for emerging adults (Arnett, 2007). One important component of identity is religiousness, which will be considered next.

Religion and religiousness. Scholars have articulated several ways to understand and define religion in recent years, all of which reflect the multidimensional nature of religion (Pargament et al., 2013; Peet, 2005). First, the word religion stems from the Latin word *religio*, which refers to a connection between people and a more powerful and greater being. (Hill et al., 2000). To define religion, Peet (2005) explored the difficulty in isolating one definition that could characterize the perspectives of all the world religions. Ultimately, scholars have agreed that religion is best explained as a set of attitudes, beliefs, practices, or values concerning a higher power that are institutionalized and regulated by individuals themselves (Hill et al., 2000; Miller & Thoresen, 2003; Peet, 2005). Furthermore, religion serves as a "meaning system for people, by which people interpret their experience and their existence" (Steger et al., 2010, p. 207).

Global religiousness refers to "the degree to which a person adheres to his or her religious values, beliefs, and practices and uses them in daily living" (Worthington et al., 2003, p. 85), which encompasses many of the aforementioned variables in this section. Given that the literature has identified a relation between religiousness and many outcome variables, including psychological well-being, researchers have investigated the interaction of global religiousness with variables measuring more proximal aspects of religiousness (Hill, Francis, & Robbins, 2005; Magyar-Russell, Deal, & Brown, 2014). For example, in a review of the studies and literature investigating emerging adulthood,

Smith and Snell (2009) found that generally emerging adults reported higher levels of psychological well-being when they reported higher levels of religious motivations and religious commitment. Areas of global religiousness such as religious beliefs (Koenig & Larson, 2001) and involvement (Maltby et al., 1999) have also been found to be associated positively with psychological well-being, in addition to religious motivation. To reflect the multidimensionality of religion above and beyond basic and global levels of religiousness, scholars have identified the need to account for global religiousness statistically when investigating mental health outcome variables (Hill & Pargament, 2008). For example, Rosmarin, Pargament, Mahoney (2009) proposed that global religiousness may not capture the complexities of all other forms of religiousness (e.g., religious motivation, in the proposed study's case), and the association between these other forms of religiousness and psychological well-being. Because of the relation between global religiousness and psychological well-being and the emerging trend of researchers accounting for global religiousness when investigating mental health outcome variables, the current study statistically accounted for global religiousness in order to examine the unique relation between religious motivations and psychological well-being. Next, the literature on the specific dimension of religiousness, religious motivation, in relation to psychological well-being will be reviewed.

The literature has identified different expressions of religiousness such as positive and negative religious coping (looking toward spiritual resources to aid in coping with stressful life events or out of anger or fear; Pargament, 1997), religious motivation, (the purpose that religion serves in one's life; Allport & Ross, 1967), and religious commitment (including the frequency of prayer, meditation, study of religious text, and

services attendance; Worthington, 1988). While there is nuance between the various expressions of religion within the religious practices, beliefs, motivations, and affiliations, for the purposes of this study this construct was referred to under the umbrella term religiousness, unless otherwise noted. Indeed, religiousness is defined broadly as "any attitude, belief, motivation, pursuit, or behavior involving spiritual or religious content or processes" (Smith et al., 2003, p. 617). Thus, religion has been characterized as an institutionalized and social phenomenon, and religiousness generally refers to an individual's expression of that religion.

Religiousness v. spirituality. An attempt at understanding how religiousness and spirituality are interrelated is necessary for the purposes of this study because elements of spirituality may be incorporated in aspects of religiousness. Spirituality, introduced to research in the 19<sup>th</sup> century, has been referred to as the intrinsic and personal experiences related to that which transcends physicality, whether it is inside or outside of religious confines (Miller & Thoresen, 2003). Eventually, general attitudes toward religion and spirituality became polarized, such as religion was institutionalized, and spirituality was more individualized. Following the 1960's and 1970's popularization of spirituality, religion was believed by the general public to be a closed-minded entity and more focused on the institutional elements alone. More personal experiences of transcendence and the individualized definitions of what is spiritual or sacred have been typically associated with the term spirituality (Hill & Pargament, 2008; Pargament et al., 2013). However, while many people have defined religion and spirituality as different concepts, it has been found that people who scored high on measures of religiousness tended to score high on measures of spirituality (Zinnbauer et al., 1997). Furthermore, according to

many researchers, religion and spirituality are actually overlapping concepts (Zinnbauer et al., 1999). Therefore, the personalized pursuit associated with spirituality is included in the practices and beliefs within organized religion like prayer, church attendance, and reading of sacred texts (Hill et al., 2000).

A more theoretical interpretation of "search for the sacred" and the function of religious pursuits may lessen the dichotomous perception between religion and spirituality (Pargament et al., 2013). In reference to psychological outcomes of religiousness and spirituality, Zinnbauer et al. (1997) stated that "those who find the whole of life to be sacred, there is little difference between the two processes" (p. 911). Conceptually, according to Pargament (2007), the "sacred is the heart and soul of spirituality" (p. 32), and thus what is "spiritual" and what is "sacred" are synonymous. Anything one holds as precious in their life, such as music, art, nature, or football, can be deemed sacred if that item or concept contains divine attributes or is used as a vehicle in the search for the sacred (Hill et al., 2000). The "sacred" can be formed because of a personal revelation, experience, or achievement within or without religion. On the other hand, within religious traditions, the sacred often refers to God or a higher power, or any part of life that a religion identifies as divine and sacred (Pargament & Mahoney, 2005). Indeed, as Pargament, Mahoney, Exline, Jones, and Shafranske (2013) explain, traditional religion serves as the framework for the search for and the process toward discovery of the sacred. Thus, spirituality is what is deemed sacred and religion is the "search for significance in ways related to the sacred" (Pargament, 2007, p. 32). While religion may have initially meant to foster people's search for the sacred, nowadays this may not be the case (Hill & Pargament, 2008; Pargament et al., 2013). The quest for an

individualized and personalized journey and "search for the sacred," commonly understood to be lacking in religion, is perhaps what attracted many to seek out using alternative methods in non-religious contexts (Zinnbauer, Pargament, & Scott, 1999). Consequently, the current study focused on an area of religion, (i.e., religious motivations), which may capture one's individual experience in the journey toward the sacred and spirituality within the religious framework.

**Religious motivation**. Religious motivation, also known as religious orientation, is one area of religiousness that refers to the different motivations that people have for being religious. "Religious motivation emerges from a developmental process that involves the internalization of relational experiences, including religious beliefs and practices" (Jankowski et al., 2015, p. 1969). Religious motivation consists of extrinsic religiousness, intrinsic religiousness (Allport & Ross, 1967), and quest religiousness (Batson, Denton, & Vollmecke, 2008). While researchers generally refer to these dimensions equally as either *motivations* or *orientations*, this paper used the term religious motivation. Individuals pursuing religion motivated by interests other than for the religion or God are understood to be extrinsically orientated in that the religion provides them with a social group or community or identifies them with a particular social or political status. On the other hand, persons motivated intrinsically to be religious are those who subordinate their needs for the perceived religious belief and philosophy and live their lives according to the way their religion dictates. This *intrinsic* religious motivation connotes the extent to which individuals perceive life and understanding through their internal religious lens. To sum, "the extrinsically motivated person uses his

religion, whereas the intrinsically motivated lives his religion' (Allport & Ross, 1967, p. 434).

Initially, *intrinsic* and *extrinsic* religious motivations were understood by Allport and Ross (1967) as inversely related to each other. However, more recently both *intrinsic* and extrinsic religious motivations are treated as two separate but related constructs, not as a single construct on a continuum (Donahue, 1985). Furthermore, some scholars view religion as a path (or quest) that allows people to question meaning in life and provide sources from which individuals may or may not find answers to their doubts and uncertainties (Steger et al., 2010). Similar to spiritual struggle (interpersonal, intrapsychic or divine struggle related to an individual's spritual quest; Pargament, Murray-Swank, Magyar-Russell, & Ano, 2005), the conflict and doubt that arises for many religious individuals is often part of the developmental process of religious maturity. Thus, Batson et al. (2008) added a third dimension of religious motivation, *quest*, since these researchers theorized that intrinsic and extrinsic motivation did not tap into people's internal drive to seek out answers to religious questions in an open-minded fashion (see also Batson & Schoenrade, 1991a; Batson & Ventis, 1982). The open-mindedness of quest motivation and the importance placed upon the journey toward discovery and significance in ways related to the sacred may resemble the aspect of religion that is spirituality (Pargament et al., 2005). Furthermore, individuals with high levels of quest religious motivation need not subscribe to a particular religious affiliation because the quest dimension is focused on search, doubt, and questioning, and not the adherence to specific religious activities, as with intrinsic and extrinsic religious motivation (Genia, 1996).

Researchers have demonstrated that the three religious motivations are independent from one another, address three different expressions of religiousness (Tiliopoulos, Bikker, Coxon, & Hawkin, 2007), and together help to understand how people integrate religion in their lives (Osborne, Milojev, & Sibley, 2016). Religious motivations are not religion-specific and have been shown to be better at detecting universal religious experiences than religious commitment or observance (Ghorbani, Watson, & Mirhasani, 2007; Kamble, Watson, Marigoudar, & Chen, 2014). As a result, in the current study religious motivations were examined.

Religiousness during emerging adulthood. The manifestation of religion through religious activities, beliefs, practices, and motivations develops throughout the lifespan (Hill et al., 2000) and promotes faith development and in turn identity development (Fowler, 1995). Researchers have pointed to developmental factors (biological/cognitive, and psychosocial) that undergird why religiousness is so salient to many emerging adults. Each of these elements highlight the development of complex thinking that occurs during emerging adulthood. First, because of brain development during emerging adulthood, significant cognitive advances occur during emerging adulthood in which people begin to change their thinking to more abstract concepts. These cognitive advances, which are not seen in adolescence, contribute to emerging adults' open-minded, rational, and abstract thinking and, they, in turn, experience increased changes in perspectives and views (Labouvie-Vief, 2006). The cognitive advances in combination with identity exploration often results in emerging adults' intellectual exploration to find the truth, wherein, thus, they may turn to a higher power as a guide for life (Arnett & Schwab, 2012).

Second, psychosocial influences continue to shape the salience of religiousness for emerging adults. Naturally, it seems that as emerging adults leave the comfort and consistency of their homes they begin to question what they previously accepted, such as their religious practices and beliefs (Smith & Snell, 2009). Yet, the religious foundation provided for them serves as a point from which to begin a closer examination of the religious attitudes and behaviors that were established during childhood (Fowler, 1995). With examination and increasing autonomy, emerging adults also find themselves viewing their parents differently, and in turn their relationships with their parents also changes (Lefkowitz, 2005). For example, in a recent poll of over 1000 adults age 18-29 (Arnett & Schwab, 2012), 50% of the participants reported living with their parents at the onset of emerging adulthood compared to 15% by age 29. They also found that most participants reported having improved relationships with their parents than when they were adolescents. The autonomy that emerging adults experience allows them to make their own decisions in their life regarding political, professional, social, and especially religious identities.

Therefore, the relation that emerging adults have with religion becomes more complex than for adolescents, and as a result, there tends to be changes and different manifestations of their religiousness (Lefkowitz, 2005). The aforementioned factors that contribute to the changes that occur during emerging adulthood may also contribute to the emergence or decline of religiousness during emerging adulthood. Indeed, people reflect on religious beliefs and practices during the late stages of adolescence and early stages of emerging adulthood, eventually concretizing and personalizing their religious beliefs during late adulthood (King, Ramos, & Clardy, 2013). Thus, it is noteworthy to

investigate religiousness during the developmental period of emerging adulthood (Cook et al., 2014; Schwartz et al., 2013), which coincides with the emergence of personal exploration (Erikson, 1959). Furthermore, the development of one's religious identity, particularly during emerging adulthood, could have implications for mental health outcome measures, such as psychological well-being (Smith & Snell, 2009). What follows is a review of the literature involving religiousness and religious motivations, as they relate to psychological well-being during emerging adulthood.

Religiousness and psychological well-being. While there is research studying the association between religiousness and poor mental health such as obsessive observance and behaviors (e.g., Abramowitz, Huppert, Cohen, Tolin, & Cahill, 2002), the current study focused on the role of religiousness on positive mental health outcomes. People who are religiously observant tend to demonstrate higher levels of self-regulation, such as lower alcohol and tobacco use (Argyle, 2001). McCullough and Willoughby (2009) suggest that an individual's level of self-control is associated with religion, which may increase their levels of well-being. Indeed, prevalence of religious behaviors and rituals have been found to be associated with emotional stability (McCauley & Lawson, 2002), and religious involvement in the form of prayer has been positively related to psychological well-being (Maltby et al., 1999).

Aspects of religiousness have been found to be associated positively with psychological well-being. In a systematic review of approximately 100 studies, Koenig and Larson (2001) found that most of the literature provided evidence that people with higher levels of religious beliefs reported greater psychological well-being than did those with lower levels of such beliefs. In a study of Muslim college students aged 18 – 28

years old, positive associations among psychological well-being, religiousness, and meaning were found (Aflakseir, 2012). The authors reason that participants who are religiously observant tend to perceive life through their religious lens and derive meaning and obtain well-being from this approach. Furthermore, one area of religiousness in particular that literature has demonstrated to be positively associated with psychological well-being is religious motivation.

Religious motivations and psychological well-being. Research has generally found a significant and positive relation between intrinsic religious motivation and psychological well-being, and a negative relation between quest religious motivation and psychological well-being. However, literature has been somewhat mixed concerning the relation between extrinsic religious motivation and psychological well-being. What follows is a breakdown of the relevant literature investigating the associations between the religious motivations and psychological well-being. First, people who report being happier and having higher levels of psychological well-being also report higher levels of intrinsic religious motivation, as well as, religious attendance, a factor of global religiousness (Diener et al., 1999; Steenwyk, Atkins, Bedics, & Whitley Jr., 2010). Intrinsic religious motivation has also been found to be related negatively to stress (Palmer & Sebby, 2003) and positively to self-regulation, subjective well-being, and psychological well-being (Knox et al., 1998). In a study by Genia (1996) investigating 211 college students, intrinsic religious motivation was found to be positively associated with psychological well-being while quest religious motivation was found to be negatively associated with psychological well-being. In another study of 254 college students aged 18-25 investigating the associations among psychological well-being,

hopelessness, religious motivation, and participants' reported relationship with God, Steenwyk et al. (2010) found psychological well-being to be related positively to intrinsic religious motivation, while accounting for other religiousness factors. A positive association between intrinsic religious motivation and psychological well-being was also found in a study of 530 college students (Bravo, Pearson, & Stevens, 2016). As such, in the current paper a positive relation hypothesized between intrinsic religious motivation and psychological well-being among emerging adults, regardless of gender identification.

In contrast to the positive associations between intrinsic religious motivation and psychological well-being, findings regarding the association between extrinsic religious motivation and psychological well-being are somewhat mixed. In one study, emerging adults aged 18 – 25 who scored higher on intrinsic and extrinsic religious motivations reported higher levels of psychological well-being in comparison to emerging adults who reported lower levels of these two religious motivations (Knox et al., 1998). Another study of undergraduate and graduate students, found that extrinsic religious motivation was positively associated with psychological well-being, but to a lesser degree than the association between intrinsic religious motivation and psychological well-being (Milevsky & Leh, 2008). Due to these mixed findings, in the current study an association was hypothesized between extrinsic religious motivation and psychological well-being among emerging adults, regardless of religious affiliation and gender identification, without specific predictions about the direction of this association.

Regarding quest religious motivation, Genia (1996), found an association between psychological well-being and quest, such that emerging adults with higher levels of quest, or people who are "high questers" were associated with lower levels of psychological

well-being. Pargament (1997) proposed that religious coping, as an answer in response to spiritual struggle, serves as a theoretical framework for the understanding the complex associations between religious motivation and well-being. Within the framework of religious faith, people actively search for answers to their existential questions, (known as religious quest; Batson & Ventis, 1982), which can be beneficial and positive to people's well-being. Religious questing is considered normative, especially when it is within the confines of one's faith. However, if the questing and doubt is prolonged, known as spiritual struggle, it can be met with elevated levels of psychological distress (Pargament et al., 2005). In the above-mentioned study by Genia (1996) where "higher questors" were associated with lower psychological well-being, the results may have been due to the distress associated with the prolonged doubt and lack of successful questing. The association between normative religious questing and well-being may be especially true among people who are actively searching for meaning-making experiences as they transition into emerging adulthood (Arnett, 2000; Erikson, 1959; Park, 2013). Indeed, the most common aspect of identity development found among emerging adults is the search for meaning (Bauer et al., 2008). On the other hand, research indicates that people searching for meaning within religion may not be comforted in their uncertainty (Batson et al., 2008), which has been associated with reduced psychological well-being (Steenwyk et al., 2010). In a study of over 3,000 college students from around the United States, Bryant and Astin (2008) found that participants with higher levels of spiritual quest, which the authors report as identical to quest motivation, demonstrated lower levels of psychological well-being and self-esteem than did those with lower levels of spiritual quest. Additionally, the study by Bravo, Pearson, and Stevens (2016) found a

significant negative relation between quest religious motivation and psychological well-being. Considering this research and, specifically, the distinction between spiritual struggle and normative questing, in the current study a negative relation was hypothesized between quest religious motivation and psychological well-being among emerging adults, regardless of gender identification.

*Gender as a potential moderator of the relation between religious motivations* and psychological well-being. Gender socialization may create norms that drive men and women to develop particular religious beliefs, feelings and motivations (Mattis, 2014). Indeed, the socialization of women that they be responsible and submissive, for example, is universal to nearly all cultures and religions (Beit-Hallahmi & Argyle, 1997). Thus, Milevsky and Leh (2008) suggest that women tend to aspects of religion for reasons like social demands and abiding by established social norms, which are extrinsically oriented. Since gender norm development, according to Beit-Hallahmi and Argyle, begins at birth and ceases during the early years of emerging adulthood, men and women likely confront their innate beliefs toward socialization of gender roles during emerging adulthood (Milevsky & Leh, 2008). Consequently, gender norms are both a result of religious contexts and may contribute to the development of religious beliefs, practices, and motivation, and potentially contribute to the psychological functioning of men and women. Therefore, it seemed appropriate to investigate the literature documenting the relation between gender and religiousness, especially about potential outcome variables, such as psychological well-being.

Studies also have demonstrated that the relation between well-being variables and religiousness vary based on the participant's gender. For instance, in the above mentioned

study conducted by Knox et al. (1998), women, who reported higher levels of intrinsic religious motivation and religious practices than men, were also found to report higher levels of self-esteem, a well-being variable. Gender differences have been found with the relation between extrinsic religious motivation and death anxiety among college students, such that women had higher levels of extrinsic religious motivation and higher levels of death anxiety than did men (Pierce, Cohen, Chambers, & Meade, 2007). Additionally, gender has also been found to be related to outcome variables such as self-worth and well-being, which maintain the importance of religiousness to women's well-being and development more so than for men (Barry et al., 2010). In discussing their findings, Barry et al. (2010) suggest the importance of gender differences in the development of religious identities, such as religious motivation, and the potential repercussions on outcome variables, including psychological well-being. Indeed, women may rely on their faith and turn to God to find purpose and make meaning of their lives, more than men, and in turn maintain their psychological well-being (Roothman, Kirsten, & Wissing, 2003).

While previous researchers have demonstrated the relation between religious motivation and psychological well-being may be different for men and women, gender may also moderate this relation (Stolz et al., 2013). Further, the cultural context that emerges within each religion determines the role of religion in people's lives, which includes prescribed gender norms and socialization of participants' gender (Abo-Zena & Ahmed, 2014; Barry et al., 2010). Scholars have investigated gender by statistically accounting for it or documenting how certain constructs, such as religious motivation and psychological well-being, vary by gender. However, gender interacting between relation of religious motivation and psychological well-being has yet to be thoroughly explored

(Abo-Zena & Ahmed, 2014; Stolz et al., 2013). In one study investigating emerging adults, gender moderated the relation between spirituality and psychological well-being (Vosloo, Wissing, & Temane, 2009), such that women's spirituality was positively related to psychological well-being, whereas men's spirituality was negatively related to psychological well-being. These scholars recommend further research investigating other cultural and contextual factors that may moderate gender and spirituality. Thus, studies have shown that the relation between religiousness and well-being may differ for men and women. Additionally, researchers have demonstrated that gender interacts with the relation between emerging adults' spirituality and psychological well-being (e.g., Vosloo et al., 2009). Given that religiousness involves spirituality, albeit within an institutional framework (e.g., Hill et al., 2000), it appeared reasonable to explore gender as a moderator for emerging-adult religious motivation and psychological well-being.

## **Statement of the Problem**

The purpose of the current study was to examine whether there is a relation between religious motivation and psychological well-being, and how gender may moderate the relations among these variables in an emerging-adult sample. Investigating this developmental period may provide unique findings since emerging adulthood is most often signified by a developmental period of relative instability (Arnett, 2000). This lack of stability may be due in part to changes in residence, new and more varied social networks, and heightened self-exploration (Arnett, 2012) and due to biological (Newberg & Waldman, 2009), cognitive (Fowler, 1995), and psychosocial (Barry & Nelson, 2005; Smith & Snell, 2009) changes. These different forms of instability exist across social class, age, religious affiliation, religious motivation, and among both industrialized and

developing societies. Perhaps due to the instability during this period, some scholars found that emerging adults increase in their levels of psychological well-being across this third decade of life (Bauer & McAdams, 2010; Galambos, Barker, & Krahn, 2006), while others found a decrease in psychological well-being during this decade (Schulenberg et al., 2004; Schwartz et al., 2013). While literature appears to show mixed findings regarding well-being during emerging adulthood (McLean & Breen, 2009), further research investigating the relation between psychological well-being and other variables such as religious motivation during emerging adulthood may help to develop a better understanding of emerging adults' experiences and development.

Emerging adults need effective coping skills to navigate through the changing landscapes from childhood to adulthood (Arnett, 2012). Some use organized religion as an effective coping mechanism (Yonker et al., 2012), while others explore alternate forms of religious doctrine (Arnett, 2007), or turn to spirituality and spiritual experiences outside of the confines of formal religion. For many emerging adults, their religiousness can be a vehicle for meaning-making (Barry & Abo-Zena, 2014), which in turn may help to promote their well-being (Wulff, 1997). However, to better identify how religion is related to mental health, it would be advantageous to investigate both global religiousness and a specific religious construct. One particular aspect of religiousness, religious motivation, has been found to be associated with psychological well-being during emerging adulthood (Knox et al., 1998; Smith & Snell, 2009). Furthermore, most of past research has examined religious service attendance and strength of religious beliefs in relation to risk behaviors or health indicators (Smith et al., 2003), but more research can be conducted to understand the relation between religious motivation and the various

aspects of well-being (Mattis, 2014). Additionally, research addressing specific aspects of religiousness, above and beyond global religious variables, is warranted to understand further the complex impression that religion has on individuals (Magyar-Russell et al., 2014; Rosmarin et al., 2009) and to understand the role of religion in emerging adults' well-being more systematically and directly (Barry et al., 2010).

Therefore, as suggested by the literature (Hill & Pargament, 2008), the proposed study sought to contribute to the field on emerging adults' religiousness and psychological well-being, while accounting for global religiousness. Using a large and diverse emerging-adult sample, the proposed study was designed to shed some light on the complex relation between religion and psychological well-being while investigating specific religiousness variables, religious motivations. Since the three religious motivations, intrinsic, extrinsic and quest are distinct motivations of religion (Tiliopoulos et al., 2007), and research has found each of these motivations to be related to psychological well-being (e.g., Cohen & Johnson, 2016), they were hypothesized as independent predictors of psychological well-being. Furthermore, since global religiousness has been found to be related to psychological well-being, it was important to account for, to assure the unique relation between the three religious motivations and psychological well-being.

Lastly, religion like any surrounding culture, can influence the development of many people (Abo-Zena & Ahmed, 2014). As part of religious culture, gender roles are socialized (Loewenthal et al., 2002; Mattis, 2014). Furthermore, gender socialization begins at birth and ceases during the early years of emerging adulthood (Beit-Hallahmi & Argyle, 1997), the same time that an increase in faith and identity development occurs for

people (Arnett, 2012; Erikson, 1959). Not surprisingly, many emerging adults challenge their upbringing and religious beliefs during this same time period (Milevsky & Leh, 2008), and it was, therefore, important to explore this relation further. The relation observed between gender with psychological well-being (Barry et al., 2010) and gender with the three religious motivations (Sullins, 2006), has led to two studies investigating gender as a moderator for the relation between religiousness (Stolz et al., 2013) or spirituality (Vosloo, Wissing, & Temane, 2009) and psychological well-being. Therefore, in the current study an interaction was hypothesized between gender and intrinsic, extrinsic, and quest religious motivations on psychological well-being.

### **Statement of the Hypotheses**

- 1. This study examined how emerging adults' levels of religious motivation would be related to their psychological well-being. Statistically accounting for global religiousness, it was hypothesized that religious motivation would uniquely predict psychological well-being, such that:
  - a. intrinsic religious motivation would be positively related to psychological well-being.
  - extrinsic religious motivation would be related to psychological wellbeing. Specific predictions were not made as this is an exploratory hypothesis.
  - quest religious motivation would be negatively related to psychological well-being.
- 2. This study also examined how emerging adults' levels of religious motivation would be related to their psychological well-being, and the possible moderating

effect of gender on this relation. Statistically accounting for global religiousness, it was hypothesized that gender would moderate the relation between religious motivation and psychological well-being, such that:

- a. the relation between intrinsic religious motivation and psychological wellbeing. Specific predictions were not made as this is an exploratory hypothesis.
- the relation between extrinsic religious motivation and psychological wellbeing. Specific predictions were not made as this is an exploratory hypothesis.
- c. the relation between quest religious motivation and psychological wellbeing. Specific predictions were not made as this is an exploratory hypothesis.

#### **CHAPTER II**

#### Method

## **Study Design and Participants**

The study will use a previously collected dataset at part of the Multi-Site University Study of Identity and Culture (Weisskirch et al., 2013). The purpose of the MUSIC study was to facilitate national collaboration among researchers and to collect data targeting issues of diversity, including identity, culture, and ethnicity (Weisskirch et al., 2013). Participants were 9,505 college-attending adults aged 18-25 from 30 universities across the United Stated of America ( $M_{\rm age} = 19.78$ ,  $SD_{\rm age} = 1.61$ ). Missing data were statistically accounted for in the current study and with the final sample size being 6,005 participants. Participants were 72.5% female, 27.4% male, and less than 1% did not give a response when questioned for their gender. Gender identity was limited to male and female. Of these participants, 34.2% were freshman, 23.0% were sophomores, 20.7% were juniors, and 12.9% were seniors. Participants were also asked to indicate their ethnicity, choosing from six of the most popular ethnicities and one "other" category. Frequency distributions still yielded a well-represented ethnically diverse sample population of Caucasian (58.0%), Hispanic (12%), Asian American (12%), African American (7%), Mixed Race (9%) and other (1%) ethnic groups (see Table 1). Since the present study targeted participants' personal and spiritual experience within religion, participants who identified with a religious affiliation were included in the sample, as well as participants who did not identify with a particular religion or identified as atheist or agnostic. Regarding religious affiliation, 38.4% identified as Mainline Protestant, 28.8% as Roman Catholic, 2.6% as Evangelical Christian, 2.6% as Jewish,

2.2% as Mormon, 0.9% as Muslim, 0.8% as Hindu, 1.3% as Buddhist, 0.5% as all other religions (i.e. Jehovah's Witnesses, Native Americans and 'Other'), 6.8% as Agnostic, 2.9% as Atheist, and 12.2% as no religious affiliation.

Table 1

Descriptive Statistics of Demographics (N = 6005)

| Variable   | N    | %    |  |  |
|------------|------|------|--|--|
| Gender     |      |      |  |  |
| Male       | 1621 | 27.4 |  |  |
| Female     | 4323 | 72.5 |  |  |
| Ethnicity  |      |      |  |  |
| Black      | 420  | 7.6  |  |  |
| White      | 3482 | 58.3 |  |  |
| Asian      | 720  | 12.1 |  |  |
| Mixed Race | 540  | 9    |  |  |
| Hispanic   | 708  | 11.8 |  |  |
| Other      | 60   | .01  |  |  |

# Measures

For the purposes of this study, scales determining demographics including gender and religious affiliation (Appendix A), psychological well-being (Appendix B), religious motivation (Appendix C) and global religiousness (Appendix D) were utilized.

**Demographic information.** Demographic information for each participant was obtained using an unstandardized questionnaire that consisted of 29 questions covering a variety of information (see Appendix A). These questions request information from participants including their age, gender (male, female), ethnic identification, religious

identification, sexual orientation, and other personal information such as living conditions, physical characteristics and scholastic performance. Participants also provided similar information about their parents and romantic partners, particularly their ethnicity and alcohol use. For some information, such as ethnic identity, questions were both close ended. Participants were asked to provide their religious preference selecting from either the religions provided, denying a religious affiliation or other.

Scales of Psychological Well-Being. This 18-item measure (Ryff & Keyes, 1995) was adapted based on a previous 84-item measure of Psychological Well-Being (SPWB; Ryff, 1989a). It reflects the six-factor model identified by Ryff (1982, 1989b), specifically self-acceptance, environmental mastery, positive relations, purpose in life, personal growth, and autonomy. Item responses on the SPWB range on continuum of a 6-point Likert scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). Examples of the items include, "When I look at the story of my life, I am pleased with how things have turned out," and "For me, life has been a continuous process of learning, changing, and growth." About half the items are reverse coded. A composite score of the SPWB is created by summing the results of the items across six subscales (C. Ryff, personal communication, July 15, 2016). Scores are summed and range from 18 to 108, with higher scores representing higher levels of psychological well-being.

Psychometric properties of the initial 84-item scale SPWB were mostly positive (Ryff, 1989b). The 84-item measure had been initially normed using a large sample (N = 1,108) aged 25 or older ( $M_{\rm age} = 45$ ). Reliability also was strong on the original scale as internal consistency ranged from .86 to .93 and test-retest reliability from .81 to .88. Low to moderate convergent levels of validity to the original scale was found, with

coefficients ranging from .25 to .73, as compared to other well psychometrically demonstrated measures of well-being, such as the Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965) and the Life Satisfaction Index, (LSI; Neugarten et al., 1961). Concerning discriminant validity, the SPWB was correlated to the Self-Rated Depression Scale at low to moderate levels (r's = -.30 to -.60; Zung, 1965). The 18-item version of the SPWB demonstrated relatively poor levels (r = .60) of internal consistency (Ryff, 1989b); in the current study, Cronbach's alpha was 0.81, which indicates a good level of internal consistency with emerging adults.

**Religious Life Inventory (RLI).** The Religious Life Inventory is a scale that measures three dimensions of one's religious experience: intrinsic, extrinsic, and quest religious motivations. The intrinsic and extrinsic religious motivation subscales of the RLI were established by Allport and Ross (1967), as part of the Religious Orientation Scale, and the religious *quest* subscale of the RLI was established by Batson and Ventis (1982). They have been combined to form the Religious Life Inventory, which includes three subscales for extrinsic religious motivation (e.g., "One of the main reasons why I'm interested in religion is because I can spend time with people I know at my church, temple, mosque, etc.") intrinsic religious motivation (e.g., "It is important for me to spend periods of time in private religious thought and meditation.") and the quest dimension (e.g., "I have been driven to ask religious questions out of a growing awareness of the tensions in my world and in my relation to my world."). The RLI was chosen because it is the most widely-used self-report questionnaire that measures all three of these constructs (Hill et al., 2005). The RLI initially consisted of 66 questions but the current study utilized the shorter version, the Revised Religious Life Inventory (RLI-R;

Hill et al., 2005) since there were numerous other questionnaires for participants to complete. It is a 27-item self-report questionnaire with response choices on a Likert-type scale ranging from 1 (not applicable) to 5 (strongly agree), with 11 questions assessing the extrinsic and quest motivations and 5 questions assessing intrinsic motivation. Four questions are reverse-coded. Scoring is established by adding up all the scores within each of the three subscales. Inspection of the dataset revealed a sizeable percentage of participants who responded with a "0," despite it being impossible given the aforementioned range of scores. These have been attributed as a potential error in the administration of the survey and were recoded along with the response option "1" (not applicable) as "missing variables" (S. Hardy, personal communication, February 16, 2017). Thus, ranges of scores for the extrinsic and quest subscales can be between 11 and 44 each, and between 5 and 20 for the intrinsic subscale, with higher scores on these tests reflecting a higher expression within each dimension. For the purposes of this study, scaled scores for each motivation subscale were then computed by averaging across items. Thus, subscale scores could range from 1 to 5 with higher scores reflecting higher levels of the respective religious motivation.

The RLI has yielded reliable test scores. Batson and Schoenrade (1991b) found internal consistency alpha levels between .65 and .75 for the extrinsic subscale, between .75 and .85 for the intrinsic subscale, and between .72 to .82 for the quest subscale demonstrating sufficient levels of internal consistency. Correlations between the subscales such as intrinsic-extrinsic (r = .20), intrinsic-quest (r = .49), extrinsic-quest (r = .48), were also significant. Scores on the quest scale were found to correlate positively with a previous scale assessing cognitive complexity in religious questions (r = .36).

Additionally, the items on the quest were found to be highly correlated (between .85 and .90) with a previously established measure assessing quest (Batson & Schoenrade, 1991a, 1991b). An item comparison by Hill, Francis, and Robbins (2005) of the RLI-R utilized in this study with the original scale found strong correlations between the intrinsic (r = .93), extrinsic (r = .89), and quest (r = .96) scales. Additionally, the RLI-R short version demonstrated strong internal consistency for each of the intrinsic (r = .93), extrinsic (r = .84), and quest (r = .89) scales. In the current study, the Cronbach's alpha for each of the dimensions of the RLI was 0.94 for intrinsic, 0.66 for extrinsic, and 0.80 for quest, which indicates an acceptable to good level of internal consistency with emerging adults. Lastly, these studies demonstrated the use of the RLI-R with undergraduate students, a similar age-range for the current study (Hill et al., 2005).

Global Religiousness. The assessment of global religiousness was assessed using items from various common and validated measures of religious commitment and involvement established by Hill and Hood (1999). This 4-item scale measures three aspects of religious involvement: public, private, and global evaluations. All four items are assessed using a 5-point Likert scale with different response options varying to their respective question. Please see Appendix D for more details. There are no reverse-coded items. Scores range from 4 to 20, which higher scores representing higher levels of global religiousness. For the purposes of this study, scores were summed and averaged to create scaled scores; thus, scores could range from 1 to 5, with higher scores reflecting higher levels of global religiousness. Cronbach's alpha for the current study was 0.79, which indicates an acceptable level of internal consistency with emerging adults.

Since this measure was compiled for this project, and only one study has been published using this measure to date (see Jankowski et al., 2015), psychometric information on this measure is minimal. In another study using the same Jankowski et al. measure, this 4-item scale demonstrated strong levels of internal consistency ( $\alpha = .78$ ). Other aspects of validity have yet to be addressed with this measure.

### **Procedures**

Researchers from each participating university collected participants utilizing either one of the following methods; advertisement or course credit. Using the first method, psychology departments advertised the internet-based study either through electronic mail (e-mail) or through printed fliers. Alternatively, students from classes such as psychology, business, sociology, education, human nutrition or family studies courses were encouraged to participate in the study as part of a course requirement or extra credit. For students that did not wish to participate in the study they were offered alternative ways to obtain credit for their class requirement. Each student was required to sign an informed consent (see Appendix E) and was appropriately debriefed following participation. For each recruitment method, students were told to participate by utilizing the electronic link to the website that contained the MUSIC survey. No financial compensation was offered for participation of this survey other than two universities who offered a raffle of an iPod for their participating students. Every participant took the survey in the same order, which took approximately one to two hours to complete. Due to the length of the survey, participants were able to take breaks when they needed. The actual survey consisted of 57 scales on various constructs measuring identity, personality, religiousness, sensation-seeking, emotional regulation, interpersonal and familial

relationships, internalizing symptomatology (e.g., depression, anxiety, and posttraumatic stress disorder), externalizing symptomatology, and risky behaviors such as sexual misconduct, risky driving and substance use. Of the MUSIC dataset, a sample was analyzed based on participants who responded as being between the ages of 18 and 25 years old, also known as emerging adults.

### **Design and Analysis**

**Preliminary Analysis.** Prior to testing each hypothesis, a preliminary analysis of the data was conducted to ensure that the assumptions for multiple regression were met, including assumptions of homogeneity of variance, bivariate normality, linearity and multicollinearity of residuals. As part of the preliminary analyses, zero-order correlations between religious motivations and psychological well-being were calculated, as well as partial-order correlations religious motivations and psychological well-being.

Main analysis. The present study assessed one moderating variable, gender, and one control variable, global religiousness. The predictor variables were the levels of intrinsic, extrinsic, and quest religious motivation, measured by the RLI. The criterion variable was psychological well-being, assessed with the SPWB. Since the present study was correlational in nature, no variables were manipulated during this process.

*Multiple regression analysis*. For the first three hypotheses, multiple regression analyses were calculated to investigate the relations between all three religious motivations (intrinsic, extrinsic, and quest) and psychological well-being.

*Moderation analysis*. It was additionally hypothesized that a direct effect would be found between the religious motivations and psychological well-being, and that this relation would differ based on the presence of participants' reported gender. Continuous

predictor variables (intrinsic, extrinsic, and quest religious motivation) were mean-centered prior to being entered into the regression analysis. To study these final three hypotheses, the examiner utilized a hierarchical multiple regression with psychological well-being as the outcome variable. The procedure was as follows: gender and global religiousness (Step one), mean-centered intrinsic, extrinsic, and quest religious motivations (Step two), and mean-centered interaction terms (Intrinsic Religious Motivation x Gender, Extrinsic Religious Motivation x Gender, and Quest Religious Motivation x Gender; Step three). Steps one and two were forced entry, while step three was forward entry. To assess the strength and direction of the relation between each predictor and outcome variable at both levels of the moderator variable, a test of simple slopes was completed for all significant interaction terms. To test these simple slopes, a macro called PROCESS was downloaded from Hayes' website (Hayes, 2014) and added to SPSS 22. The alpha level was .05 and a two-tailed test was performed.

**Power Analysis.** A power analysis was conducted using G\*Power to determine the number of participants required (Faul, Erdfelder, Lang, & Buchner, 2007). The power analysis was computed about the gender moderation analysis since it is the most complex level analysis of the proposed hypotheses. All analyses assumed an alpha of .05. To yield a power of .80, a sample size of 344 was needed to detect a small effect size ( $f^2 = .02$ ), a sample of 52 is needed to detect a medium effect size ( $f^2 = .15$ ) and a sample of 24 was needed to detect a large effect size ( $f^2 = .35$ ). Consequently, the MUSIC data, given its very large size easily detected a small effect size for even the most complex proposed hypothesis.

### **CHAPTER III**

### **Results**

# **Preliminary Analyses**

Prior to hypotheses testing, demographics results and frequencies were examined. Missing data were statistically accounted for in the current study and, analyses were completed with listwise deletion, with the final sample size being 6,005 participants. The reason for the missing data was due to a potential error in administration of the religious motivation and psychological well-being scales, as some participants were able to use a response option (i.e., 0) that was not possible since numbering for these scales began at 1 (S. Hardy, personal communication, February 16, 2017). Table 2 displays the means and standard deviations for the outcome variable, psychological well-being, as well as the predictor variables, intrinsic, extrinsic, and quest religious motivation, global religiousness and gender used in the present study.

Table 2

Means and Standard Deviations for Psychological Well-Being, Religious Motivations,

Global Religiousness and Gender

| Variable                       | M     | SD    |
|--------------------------------|-------|-------|
| Psychological Well-Being       | 80.38 | 11.09 |
| Intrinsic Religious Motivation | .06   | .87   |
| Extrinsic Religious Motivation | 01    | .59   |
| Quest Religious Motivation     | 01    | 1.00  |
| Global Religiousness           | 2.29  | .83   |
| Gender                         | 1.74  | .44   |

*Note.* N = 6005.

Next, zero-order correlations were run to understand the basic relations among variables prior to controlling for global religiousness (see Table 3). As shown in Table 3, all three religious motivations were positively and significantly related to psychological well-being, with quest motivation having the strongest relation to psychological well-being. Global religiousness was positively and significantly related to intrinsic and quest religious motivation, but negatively and significantly related to extrinsic religious motivation. Lastly, gender was related positively and significantly to intrinsic and quest religious motivation, as well as psychological well-being.

Table 3

Bivariate Correlations among Variables of Interest

|                                   | 1      | 2        | 3       | 4      | 5      | 6 |
|-----------------------------------|--------|----------|---------|--------|--------|---|
| Psychological Well-Being          | -      |          |         |        |        |   |
| 2. Intrinsic Religious Motivation | 0.04*  | _        |         |        |        |   |
| 3. Extrinsic Religious Motivation | 0.07** | - 0.45** | _       |        |        |   |
| 4. Quest Religious Motivation     | 0.13** | 0.12**   | -0.10** | _      |        |   |
| 5. Global Religiousness           | 0.09** | 0.75**   | -0.45** | 0.19** | _      |   |
| 6. Gender                         | 0.14** | 0.04*    | -0.02   | 0.04** | 0.09** | _ |

*Note.* N = 6,005.

### **Correlational Analyses**

Prior to conducting the regression analyses, partial-order correlations were run to test Hypothesis 1, see Table 4. It was hypothesized that, after controlling for global religiousness, intrinsic religious motivation would be positively associated with

<sup>\*</sup> Correlation is significant at p < .05 (1-tailed); \*\* Correlation is significant at p < .001 (1-tailed).

psychological well-being, quest religious motivation would be negatively associated to psychological well-being, and extrinsic religious motivation was expected to be related to psychological well-being, without specific predictions. As shown in Table 4, the results of the data were the reverse, such that extrinsic (r = .131, p < .001, two-tailed) and quest religious motivation were (r = .111, p < .001, two-tailed) correlated positively with psychological well-being, while intrinsic religious motivation was correlated negatively with psychological well-being (r = .048, p < .001, two-tailed). For the three religious motivations, extrinsic and intrinsic religious motivations were negatively correlated (r = .182, p < .001, two-tailed), while quest and intrinsic religious motivation were negatively correlated (r = .028, p = .028, two-tailed). No significant correlation was found for the relation between extrinsic and quest religious motivations (r = .021, p = .106, two-tailed).

Table 4

Partial-Order Correlations among Variables of Interest

|                                   | 1       | 2        | 3     | 4 |
|-----------------------------------|---------|----------|-------|---|
| 1. Psychological Well-Being       | _       |          |       |   |
| 2. Intrinsic Religious Motivation | -0.05** | _        |       |   |
| 3. Extrinsic Religious Motivation | 0.13**  | - 0.18** | _     |   |
| 4. Quest Religious Motivation     | 0.11**  | 03*      | -0.02 | _ |

*Note.* N = 6.005.

For a more complete analysis of Hypothesis 1, a hierarchical regression analysis on psychological well-being was conducted with gender (Step 1, forced entry), the three

<sup>\*</sup> Correlation is significant at p < .05 (1-tailed); \*\* Correlation is significant at p < .001 (1-tailed).

mean-centered religious motivations (intrinsic, extrinsic, and quest) on Step 2 (forced entry), and three gender x religious motivation interaction terms on Step 3 (forward entry), see Table 5. Concerning Hypothesis 1, Models 1 and 2 are of interest, and were found to be significant, F(2, 6002) = 80.881, p < .001,  $r^2 = .03$  (Model 1), and F(5, 5999) = 69.546, p < .001,  $r^2 = .06$  (Model 2). As shown in Table 5, after statistically accounting for global religiousness and gender, extrinsic and quest religious motivations were significantly and positively related to psychological well-being, but intrinsic religious motivation was not significantly related to psychological well-being. As noted with the partial correlations, these results were the opposite of what was hypothesized.

### **Moderation Analyses**

The moderation effect of gender for Hypothesis 2 was tested in Models 3 and 4 of the hierarchical regression analyses, see Table 5. In Model 3, Extrinsic Religious Motivation x Gender was added as a significant predictor on psychological well-being and that overall model was significant, F(6, 5998) = 58.85, p < .05,  $r^2 = .06$ , with the Extrinsic Religious Motivation x Gender interaction associated with less than 1% of the variance in psychological well-being. Then in Model 4, Quest Religious Motivation x Gender was added as a significant predictor on psychological well-being, again with that overall regression model significant, F(7, 5997) = 51.03, p < .05,  $r^2 = .06$ . Here again, the Quest Religious Motivation x Gender interaction was associated with less than 1% of the variance in psychological well-being. Given the large sample size it is preferable to treat only findings with .001 as significant, even though both findings were statistically significant at .05 level. Note that Intrinsic Religious Motivation x Gender was not a significant predictor.

Table 5

Moderation Model for Gender on Religious Motivation and Psychological Well-Being, Statistically Accounting for Global Religiousness

|                      |      | Model 1 |        | Model 2 |      |        | Model 3 |      |        | Model 4 |      |        |
|----------------------|------|---------|--------|---------|------|--------|---------|------|--------|---------|------|--------|
| Variable             | B    | SEB     | β      | B       | SE B | β      | B       | SEB  | β      | B       | SE B | β      |
| Global Religiousness | 1.06 | 0.17    | 0.08** | 1.90    | 0.26 | 0.14** | 1.88    | 0.26 | 0.14** | 1.87    | 0.26 | 0.14** |
| Gender               | 3.40 | 0.05    | 0.02** | 3.23    | 0.32 | 0.13** | 3.24    | 0.32 | 0.13** | 3.21    | 0.32 | 0.13** |
| Intrinsic            |      |         |        | -0.32   | 0.25 | -0.03  | 33      | 0.25 | -0.03  | -0.31   | 0.25 | -0.02  |
| Extrinsic            |      |         |        | 2.66    | 0.27 | 0.14** | 4.58    | 0.89 | 0.24** | 4.63    | 0.89 | 0.25** |
| Quest                |      |         |        | 1.23    | 0.14 | 0.11** | 1.21    | 0.14 | 0.10** | 2.29    | 0.56 | 0.21** |
| Extrinsic x Gender   |      |         |        |         |      |        | 1.15    | 0.51 | 0.11*  | 1.19    | 0.51 | 0.11*  |
| Quest x Gender       |      |         |        |         |      |        |         |      |        | 0.62    | 0.32 | 0.10*  |

*Note.* Some variable names have been shortened; Intrinsic = Intrinsic Religious Motivation; Extrinsic = Extrinsic Religious Motivation; Quest = Quest Religious Motivation.

*p* < .05; \* *p* < .001\*\*

To interpret both significant interactions (i.e., Extrinsic Religious Motivation x Gender and Quest Religious Motivation x Gender) on psychological well-being, a simple slopes analysis was conducted using the PROCESS procedure (Hayes, 2014) for SPSS21. Further exploration of the interaction indicated that while higher levels of extrinsic religious motivation was associated with higher levels of psychological well-being, that women's psychological well-being ( $t = 7.16 \, p < .001$ ), benefitted even more from higher levels of extrinsic religious motivation than did men's (t = 6.61, p < .001), see Figure 1. Thus, higher levels of extrinsic religious motivation were associated with higher levels of psychological well-being for emerging adults of both genders, but the change of psychological well-being that was observed was greater for women than for men.

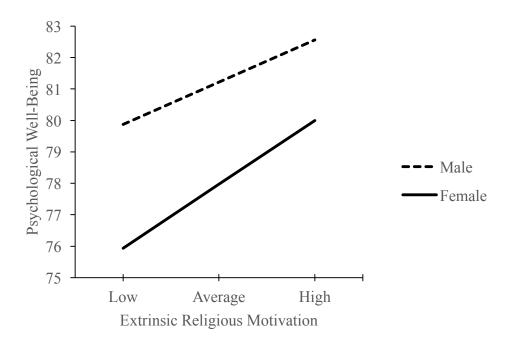


Figure 1. Extrinsic Religious Motivation and Psychological Well-Being Moderated by Gender.

Further exploration of the interaction indicated that higher levels of quest religious motivation was associated with higher levels of psychological well-being, and

this was especially true for women (t = 5.50, p < .001) more than men (t = 6.50, p < .001), see Figure 2. Thus, higher levels of quest religious motivation are associated with higher levels of psychological well-being for emerging adults of both genders, but the change of psychological well-being that was observed was greater for women than for men.

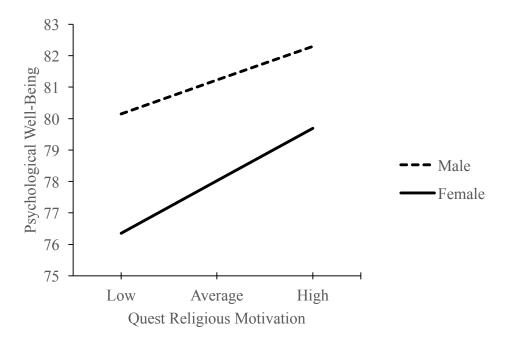


Figure 2. Quest Religious Motivation and Psychological Well-Being Moderated by Gender.

### **CHAPTER IV**

#### **Discussion**

The purpose of the study was to utilize a more nuanced approach to investigate the link between psychological well-being and levels of religious motivation during emerging adulthood. In general, it was hypothesized that for emerging adults, intrinsic religious motivation would be positively correlated with psychological well-being, and quest religious motivation would be correlated negatively, both of which were not supported by the current study. There was no specific hypothesis about the relation between extrinsic religious motivation and psychological well-being. Finally, it was hypothesized that the relation between religious motivations and psychological well-being would be moderated by gender, specifically that this relation would be stronger for women than men. The results of these findings are explored in greater detail below.

# Psychological Well-Being, Global Religiousness, and Religious Motivation

Intrinsic religious motivation. Contrary to the hypotheses, intrinsic religious motivation was associated negatively with psychological well-being, after statistically accounting for global religiousness. It is important to recognize that intrinsic religious motivation and global religiousness were highly correlated (r = .75, p = .001); thus, the partial correlation between intrinsic religious motivation and psychological well-being (after statistically accounting for global religiousness) was significant statistically, but nearly 0 (r = -.05, p < .001). In other words, the aspects of intrinsic religious motivation that do not overlap with global religiousness only accounted for .25% ( $R^2$ ) of the variance in psychological well-being. Much of the past research on the relations between these variables did not account for global religiousness (c.f., Milevsky & Leh, 2008). Thus, this

finding adds to the literature by understanding the large overlap between global religiousness and intrinsic religious motivation. Moreover, much of the previous literature's documented relation between intrinsic religious motivation and psychological well-being was driven by global religiousness (albeit often not assessed). Thus, future research may not need to investigate intrinsic religious motivation separately when investigating individual's global religious activities.

Extrinsic religious motivation. For extrinsic religious motivation, the current study did not develop specific hypotheses. It is useful to note that although both intrinsic and extrinsic religious motivation were positively associated with global religiousness, extrinsic religious motivation was only moderately associated with global religiousness. Thus, when partial correlations were run relative to intrinsic religious motivation, extrinsic religious motivation was correlated positively with psychological well-being, after statistically accounting for global religiousness (r = .13, p < .001). Extrinsic religious motivation, which unlike intrinsic religious motivation, is utilizing religion as a means to an end, and where participants of religious practices are motivated by social norms and demands that are more self-serving than intrinsic religious motivation. Since emerging adults on average are less motivated to participate in religious activities (Arnett, 2000), and when these extrinsically-religiously motivated persons do participate, perhaps it is mostly driven by hoping to get something out of such participation, which might range from gaining approval from others (e.g., family, community) or for social benefits (e.g., spend time with friends, meet a potential romantic partner), which in turn may result in higher levels of psychological well-being. Indeed, social support and community, which are key aspects of positive religious coping (Pargament, 1997), and

also are categorized as extrinsic religious motivation, can also contribute to higher psychological well-being from participating in religious activities. Therefore, it is logical that participants who are motivated to pursue religious activities with extrinsic intentions may be more likely to do so if they experience heightened psychological well-being. In turn, they may stop pursuing religious activities with extrinsic motivations once they cease to experience these positive feelings, which may posit a reasoning for the relatively recent increase in emerging adults' abandoning of religion altogether (America's Changing Religious Landscape, 2015). Still, it is possible that an individual who joins a religious community for extrinsic motivations may eventually develop intrinsic motivations as well (Cohen & Johnson, 2016). In sum, individuals with higher levels of extrinsic motivation tended to report higher levels of psychological well-being.

Quest religious motivation. Lastly, the findings herein regarding the positive association between quest religious motivation and psychological well-being (after statistically accounting for global religiousness) are contrary to the hypotheses and prior findings (e.g., Bryant & Astin, 2008; Pargament et al., 2005). In this study, global religiousness and quest religious motivation, though significantly correlated, demonstrated the greatest divergent validity compared to the other two religious motivations, yet was not correlated quite as strongly with psychological well-being as extrinsic religious motivation. Previous findings indicated that quest religious motivation was associated negatively with overall well-being (Cohen & Johnson, 2016). In considering this discrepancy, it is necessary to consider the aforementioned difference between normative questing, where one is pursing truth and answers to their existential and religious doubt and questing that is prolonged to the point that it breeds

psychological distress and lower psychological well-being for some (Genia, 1996; Pargament et al., 2005). Thus, questing is normative for those at the beginning of emerging adulthood, as they explore meaning-making and develop their individual identity (Arnett, 2012), but may not be considered as normative throughout the decade of emerging adulthood. This discrepancy between normative questing and questing that is prolonged to the point of struggle might not be true for all religions and genders (Cohen & Johnson, 2016). As mentioned elsewhere, one reason that emerging adults may pursue and continue participating in religious practices and explorations is due to their prosocial motivations, reinforcement of their individual identity, and when their personal values are encouraged (Arnett, 2012; Milevsky & Leh, 2008). For instance, young adult programs with many religious communities provide formal and informal opportunities to engage with age mates and discuss theological teachings (e.g., Whitney & King, 2014). Emerging adults' religious observance without questioning their religious beliefs is not particularly prosocial activity during emerging adulthood and, more so, on college campuses (Milevsky & Leh, 2008). Searching and abandoning one's upbringing, whether it be religious, social or otherwise, is a hallmark characteristic of many individuals during emerging adulthood in the United States.

However, once questing becomes prolonged, emerging adults in the U.S. may disengage and pursue other religions, existential philosophy, or maladaptive behaviors such as alcohol or drug abuse (e.g., Jankowski et al., 2015) as a means of repressing, ignoring, or reconciling their doubts. It is possible that when exploring religion for these truths becomes challenging for individuals' psychological well-being to the point that they abandon religion altogether. This may provide further reasoning to the increase in

the Spiritual, but Not Religious identifications and Buddhist affiliations in the U.S. in recent years, coinciding with the decline in formalized religions such as Mainline Protestant and Roman Catholic (America's Changing Religious Landscape, 2015).

Given these results and the changing landscape of religiousness among emerging adults (including the lower levels of religious practices and departure from childhood religious affiliations), perhaps the individuals that still affiliate with a religion, utilize their religion as a means for normative questing and spiritual searching, in turn, increase their psychological well-being. Thus, individuals who are still considering themselves religiously observant in the current study, and have heightened levels of religious questing, are questing in the normative sense and experiencing relatively high psychological well-being may despite not participating in religious practices. This provides evidence to the value of questioning and doubting religious beliefs and practices in a safe environment, as will be discussed further below.

Moderating effects of gender. In the current study, gender was also predicted to moderate the relation between religious motivations and psychological well-being, without making specific hypotheses. Similar to the previous hypotheses, these were investigated while statistically accounting for global religiousness in an effort to highlight further the uniqueness role of religious motivations. Further research should be done to explore this relation in the future to determine if it was supported merely due to the unequal number of men and women in the sample.

The study found that gender interacted with relation between extrinsic and psychological well-being, and the quest religious motivation x gender interaction on psychological well-being was significant (albeit at the .05 level). In both cases the

relation between each religious motivation (extrinsic and quest) and psychological wellbeing was stronger for women than men. The samples used in the existing literature on religious motivation and gender have varied from adolescents to adults. In one study across adults age 18-65, compared to men women tended to display higher levels of psychological well-being variables such as life satisfaction and happiness across multiple spirituality variables (Vosloo, Wissing, & Temane, 2009). Another study found differences between religious motivations among preadolescent and adolescent girls and boys, such that girls had higher religious expression, especially for intrinsic religious motivation (Milevsky & Levitt, 2004). However, yet another study did not find any gender differences in an emerging adult-sample (Milevsky & Leh, 2008). Thus, the results of this study demonstrated that psychological well-being benefits women more than men when women report higher levels of extrinsic and/or quest religious motivation. This is perhaps not surprising given that countless studies show that women tend to report higher levels of religiousness throughout the lifespan than do men (e.g., Knox et al., 1998; Sullins, 2006)). In the case of quest, emerging-adult women whose religious motivations are likely normatively questing are acting in a developmentally typical manner, and then report greater levels of psychological well-being. For extrinsic, emerging-adult women who use religion in an outward way amidst while living in a developmental period that is dense with respect to social networks and potential for peer pressure also report a psychological benefit from this approach to using religion.

The results of the study indicated that gender did not moderate the relation between intrinsic religious motivation and psychological well-being. Indeed, this provides further evidence that intrinsic religious motivation may not predict psychological well-being above and beyond global religious practices. However, perhaps gender did not interact with the relation between intrinsic religious motivation and psychological well-being due to the changing landscape of societal and cultural norms for women in the United States. Culture and societal norms, which begin at birth and shift during emerging adulthood for all religious affiliations (Beit-Hallahmi & Argyle, 1997), may contribute to different connections that men and women cultivate throughout their religious motivations and practices (Stolz et al., 2013). These societal and gender norms developed in religious upbringing that may be challenged during emerging adulthood (Sullins, 2006). Further, cultural norms regarding women's religious identities have been challenged in recent years to be more inclusive of women in religious practices (America's Changing Religious Landscape, 2015). Thus, the current study did not find a difference between women and men's psychological well-being based on their intrinsic religious motivation. Additionally, the results of the current study provide suggest additional research on gender as a moderator of this relation would be useful.

# **Limitations and Suggestions for Future Research**

The current study has several limitations to consider. First, while this study obtained data from a large sample of emerging adults across the United States of America, it was limited to college students. While young adults generally develop more open-mindedness and adopt increasingly liberal views and experiences during emerging adulthood (Smith & Snell, 2009), this is especially true among college students (Peterson, 2001). Since the current study consisted of a college student sample, these emerging adults are likely to maintain more liberal mindedness and openness to change than the full emerging-adult population in the U.S., and the results herein may not apply to all

emerging adults. Further research should be conducted on a sample of emerging adults in other countries or people not affiliated with a college or university to gain a fuller understanding of the relations among the variables in this study in other subgroups of emerging adults.

Second, the design of the current study was correlational, not experimental. Thus, the causality between the predictor variables and psychological well-being is undetermined. While the study posited that religious motivations predicted psychological well-being, it is entirely possible that, the opposite direction may be possible: emerging adults' psychological well-being may frame their religious motivation and their religious observance. Indeed, religious people who experience increasingly lower levels of happiness and well-being may seek another religion or abandon their religion altogether to improve their well-being (Cohen & Johnson, 2016; Mochon, Norton, & Ariely, 2011).

Further, the current study did not utilize longitudinal data. That is, religious motivation and observance and people's psychological well-being was only assessed at one point during emerging adulthood and not during childhood or adolescence, time periods that those variables are developed. Perhaps the relation between psychological well-being and religious motivation increases or decreases over time. As an example, the negative correlation between intrinsic religious motivation and psychological well-being among Christians may be detected in adolescence or later adulthood and is not a phenomenon strictly during emerging adulthood. More notably, the positive correlation between quest religious motivation and psychological well-being may not be detected in these participants if it is prolonged and if detected during their middle adulthood. This study relied on a data set to examine the additional contributions of religious motivation

on psychological well-being (after accounting statistically for global religiousness) during the developmental period of emerging adulthood; longitudinal data with samples at the later ages of emerging adulthood or into middle or late adulthood may contribute to more definitive conclusions from this study. The average age of the participants in this study was approximately 20 years old ( $M_{\rm age} = 19.78$ ), which, according to Fowler (1995), is still an early stage of religious identity development. Longitudinal data may provide further confirmation of the moderating variables of gender, or evidence to the role of other moderating variables such as ethnicity, race, religious affiliation and geographic location.

Another limitation is that this study relied upon self-report data to assess emerging adults' psychological well-being, religious motivation and religious observance. Self-report data are convenient to obtain but also subjective, and participants' responses may be biased according to their perception of their experience at the time. Emerging adults may also overestimate their responses to their religious observance and/or psychological well-being depending on their state of mind at the time, e.g., to reduce their cognitive dissonance or in the pursuit of social desirability (Bowman & Hill, 2011). Furthermore, self-repot data were obtained by participants but not their religious leaders, such as rabbis, priests, or imams, which may disagree on their levels of religious observance. It may be more reliable to investigate participants' religious observance and motivation from the perspective of their religious leaders in addition to their own.

It should be noted that the focus of this study was on religious motivations. Future literature should explore the relation between other areas of religiousness, such as

religious coping, religious observance and religious salience, with psychological well-being. Further research should explore the relation between psychological well-being and both religious and spiritual motivations, especially given the increasing number of religiously-unaffiliated and/or spiritual emerging adults. Additionally, religious affiliations mostly consisted of Christian denominations, while other popular religious groups in America such as Islam, Judaism, and Eastern religions, represented less than 10% of the sample. As an example, quest religious motivation may be found to be associated with higher psychological well-being among Jewish participants, even if it is prolonged, due to Judaism's perspective of spiritual struggle (Rosmarin, Pargament, & Flannelly, 2009). Future research should expand beyond those in predominantly Christian religions and investigate those in minority religions (e.g., Muslim, Jewish, Hindu) to provide further depth into the nuanced association between religious motivation and psychological well-being.

Lastly, while the sample was large, as well as diverse in many respects, some demographics were underrepresented. Specifically, the study only investigated gender in a binary manner. Further research may also investigate the experience of participants with non-binary gender or gender fluid identifications. Similarly, cultural backgrounds contribute to religious and social identity development during childhood and adolescence and, in turn, can cultivate different motivations for religious affiliation and observance during emerging adulthood (Abo-Zena & Ahmed, 2014; Cohen, 2009). According to recent data, increasingly more immigrants from countries with religious backgrounds enter United States of America (America's Changing Religious Landscape, 2015).

Additionally, numerous ethnic and racial groups were represented in the sample;

however, the majority were White/Caucasian and a minority of the sample were of Asian or African descent. Indeed, African-Americans, for example, have a positive association between religiosity and well-being (Cohen, 2009), and may have different levels of religious motivation, which may contribute to higher levels of psychological well-being than other racial or ethnic groups. Therefore, the field would benefit from further research examining the interplay of religious motivations and cultural backgrounds, including ethnicity and race.

### **Implications**

Researchers may use this information to gain a better understanding of the expected development of religious motivation during emerging adulthood, which most likely varies based upon gender. The results of the current study yielded some findings that supported and some that were contrary to previous research regarding the association between religious motivation and psychological well-being among emerging adults. At the onset of the emerging adulthood, many people leave their home, attend college and become exposed to new social circles, including that of peers with differing religious upbringings, affiliations and values. These changes contribute to an increase in selfexploration, the development of personal and religious identity (Arnett, 2000) and heightened physical and emotional instability, as well as, a shift in religious preference and expression for many emerging adults (Lefkowitz, 2005). Individuals may be faced with challenges to their worldviews (including religiousness and spirituality). Additionally, the increased stress, social pressure, and environmental freedom from familial upbringing experienced during emerging adulthood can also create challenges to one's psychological well-being. While it may be difficult to determine causality, it is

clear that religious motivations are connected to emerging adults' psychological wellbeing.

The disparity in the results of this current study from that of previous findings potentially provide evidence to the vastly changing landscape in emerging adults' religiosity in the 21st century. The current study supported evidence that gender interacted with religious motivations to explain levels of psychological well-being. This contributes to the evidence that religious identity and expression is changing as societal norms regarding gender roles, and women's less traditional role in religion such as increased religious identity and participation in religious practices. Furthermore, this study provided evidence that religious motivation (namely intrinsic religious motivation) may not be a distinct construct from global religious practices. Future research should continue to statistically account for global religiousness, as it may ultimately be found to be a more significant religious predictor than other religiousness variables, which then may not need to be included in future research.

The findings of the current study also have implications for clinical work in consideration of overall well-being with emerging adults with religious backgrounds. As an example, psychotherapists working with individuals with decreased well-being may choose to explore their patients' religious beliefs, practices, and experiences as a mechanism for behavioral and cognitive change. Psychotherapists working with emerging adults (within or outside of university settings) may want to assess for religious questing to inform their clinical practice. Safety of the psychotherapy room can help emerging adults to engage in spiritual dialogue, especially as it may be necessary during their transition to adulthood, and for some, transition to a university setting.

Psychotherapists may also seek to understand the role of religion and spirituality in their clients' lives. One book that can help psychotherapists increase their cultural competence and integrate spirituality into their psychotherapy practices is, Spiritually Integrated Psychotherapy: Understanding and Addressing the Sacred (Pargament, 2011). This book provides guidance for a spiritual framework, assessment of clients' spirituality and methods for introducing the topic or religion or spirituality with patients, as well as, how to successful integrate spirituality into cognitive and behavioral therapies, if appropriate. The results of this study herein, namely, that religiousness was connected to many areas of individuals' lives, supports the claim that clients "do not leave their spirituality outside the therapy office" (Pargament, 2011, p. 175). Indeed, this study provides further evidence that psychotherapists should utilize interventions of spirituality suggested by Pargament such as assessment of spiritual/religious coping or identity during initial stages of therapy, or integrating their relationship with their religious community, their god or a higher being. More specifically, emerging adults, and most likely individuals of all ages, can benefit from discussing their spiritual and religious questing in psychotherapeutic spaces, since, as this study shows, safe and normative questing can contribute to increased well-being. Clinicians' awareness, assessment and effort towards integrating spirituality with psychotherapy in ways that Pargament (2011) suggests can also help to maintain a close eye on when clients' religious or spiritual struggle becomes prolonged to the point that it contributes to a negative impact on their well-being.

There are also implications for religious educators, university religious leaders, and student-life administrators, or religious families as their children begin college.

Students can prepare themselves for the potential religious and social challenges that they

may experience. College campus clergy can now be aware of these potential experiences that may occur for religious students and may prepare or assist accordingly. Campus counseling centers can adapt their therapeutic programming around religious activities or develop workshops that are more culturally competent. For example, universities can employ psychotherapists who are affiliated with multiple religious groups, or they can sponsor or create events that are associated with the campus religious institutions. Their programming and psychotherapy techniques can have more multicultural competence or be religiously affirming. Additionally, counseling centers can also participate in religious research or collaborate for their own studies, such as contribute to investigating a relation between psychotherapy, mental health and religiousness/spirituality, the data of which can inform their continued programming, and inform their campus religious clergy and student leaders. Lastly, religious families can prepare their children for potential challenges to their religious identity by seeking appropriate universities and ensuring that they are connected with on-campus clergy or religious leaders.

### Conclusion

In the recent 15-20 years, research investigating the protective and harmful factors of religion has expanded beyond religious affiliation. The results of the current study suggest that religiousness is a complex and multifaceted variable, with tangible and clinical implications for individuals' psychological well-being. The present study also provided additional support for existing research on the significance of religiousness and psychological adjustment during emerging adulthood. As individuals advance through emerging adulthood, exploration of their religious experiences is important, especially if

they are experiencing increased distress, discomfort or decreased psychological well-being.

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# APPENDIX A

Demographic Questionnaire

#### **Demographic Information Ouestionnaire**

|  |   | 8 1            |   |  |  |
|--|---|----------------|---|--|--|
| 1. Age:  |   |                |   |  |  |
| 2. Gender (check one):                               |   | Male           | Female  |  |  |
| 2 Mr.  | othnicity is (chasse  | ana):          |   |  |  |
| -  | ethnicity is (choose  | · ·            | C 11 DI 1 AC: O(I : (I: )                       |  |  |
|  | a. Black, African American, Afro-Caribbean, Black African, Other in this category.  |                |   |  |  |
|  | b. Caucasian, White, European American, White European, Other in this category.     |                |   |  |  |
| c.   | c. East Asian, Asian American, Amerasian, Asian-Caribbean, Other in this            |                |   |  |  |
|  | category.   |                |   |  |  |
| d.   | d. Latino/a, Hispanic, Spanish, Latin American, of Spanish speaking- South          |                |   |  |  |
|  | American/Caribbean heritage, Other in this category.                                |                |   |  |  |
| e.   | e. South Asian, South Asian American, of South Asian heritage, Other in this        |                |   |  |  |
|  | category.   |                | <u>-</u>  |  |  |
| f.   |   |                |   |  |  |
| g.   |   |                |   |  |  |
| υ  |   | ,              | <i>y</i> 1 <i>y y y y y y y y y y</i>           |  |  |
|  |   |                |   |  |  |
| 4. If vo   | 4. If you are Biracial/ Multiracial, please answer item 3 as best you can, and then |                |   |  |  |
| specify the racial/ethnic groups to which you belong |   |                |   |  |  |
| эрсс   | only the racial collins   | e groups to w  | , men yeu ereng                                 |  |  |
| 5 If you   | ı are Biracial/Multi  | racial which   | n group do you identify with most?              |  |  |
| 3. II you  | a are Braciar, war  | ruciui, wiiici | I group do you rachary with most.               |  |  |
|  | ·   |                |   |  |  |
| 6 The  | ethnicity of the ners   | on who took    | primary responsibility for raising me is (Same  |  |  |
|  | 1 ).  | on who took    | primary responsibility for ruising me is (built |  |  |

- choices as above):
  - a. Black, African American, Afro-Caribbean, Black African, Other in this category.
  - b. Caucasian, White, European American, White European, Other in this category.
  - c. East Asian, Asian American, Amerasian, Asian-Caribbean, Other in this category.
  - d. Latino/a, Hispanic, Spanish, Latin American, of Spanish speaking- South American/Caribbean heritage, Other in this category.
  - e. South Asian, South Asian American, of South Asian heritage, Other in this category.
  - f. Middle Eastern, Arab, Non-Black North African, Other in this category.
  - g. Coloured-South African, Khoi San, Cape Malay, Other in this category.
- 7. My mother's ethnicity is (Same choices as #3):
  - a. Black, African American, Afro-Caribbean, Black African, Other in this category.
  - b. Caucasian, White, European American, White European, Other in this category.
  - c. East Asian, Asian American, Amerasian, Asian-Caribbean, Other in this category.
  - d. Latino/a, Hispanic, Spanish, Latin American, of Spanish speaking- South American/Caribbean heritage, Other in this category.

- e. South Asian, South Asian American, of South Asian heritage, Other in this category.
- f. Middle Eastern, Arab, Non-Black North African, Other in this Category.
- g. Coloured-South African, Khoi San, Cape Malay, Other in this category.
- 8. My father's ethnicity is (Same choices as #3):
  - a. Black, African American, Afro-Caribbean, Black African, Other in this category.
  - b. Caucasian, White, European American, White European, Other in this category.
  - c. East Asian, Asian American, Amerasian, Asian-Caribbean, Other in this category.
  - d. Latino/a, Hispanic, Spanish, Latin American, of Spanish speaking- South American/Caribbean heritage, Other in this category.
  - e. South Asian, South Asian American, of South Asian heritage, Other in this category.
  - f. Middle Eastern, Arab, Non-Black North African, Other in this Category.
  - g. Coloured-South African, Khoi San, Cape Malay, Other in this category.

|     | In my own words, I prefer to think of my ethnicity as  |
|-----|--|
|     | Were you born in the United States? Yes No I. If no, where were you born?  |
|     | Was your mother born in the United States? Yes No I. If no, where was she born?  |
|     | Was your father born in the United States? Yes No I. If no, where was he born?   |
| 13. | Where do you live? In parents' or other relatives' home On-Campus Dorms/ Residence halls On-campus or University-owned Apartments Fraternity/sorority house Off-campus apartments or house Other (specify)                         |
| 14. | What is your religious preference? No religion Agnostic Atheist Mainline Protestant/Christian (e.g., Methodist, Lutheran, Baptist, Presbyterian, etc. Assemblies of God, Pentecostal, Holiness or other Charismatic Roman Catholic |

Orthodox (Eastern, Greek, Russian, Serbian, Ukrainian)
Jewish
Mormon (Latter Day Saints)
Jehovah's Witness
Islamic/Muslim
Hindu
Buddhist
Other (Write in)

15. Please indicate your family's annual household income. If you are supporting yourself, please indicate **your** income. If your family is supporting you, please indicate **their** income:

Below \$30,000 \$30,000 to \$50,000 \$50,000 to \$100,000 Above \$100,000

16. My biological mother and father were the most important mother and father figures in my life while I was growing up. True False

#### IF 16 IS MARKED TRUE, ASK THE FOLLOWING QUESTION:

16a. How would you characterize your family (check one)?

Parents still married
Parents separated/divorced
Parents never married to one
another
One or both parents deceased
Other (please specify)

# <u>IF SEPARATED/DIVORCED OR NEVER MARRIED, ASK THE FOLLOWING QUESTIONS:</u>

16b. How old were you when your parents stopped living together?

16c. How would you describe the living arrangements you had after your parents stopped living together? Lived with mother Lived with father Joint custody Other (specify)

16d. How often did you see the parent you did not live with? (Open-ended answer)

16e. How many people in your family (including cousins, aunts, uncles, grandparents,

etc.) have ever had a severe alcohol or drug problem?

#### IF 16 IS MARKED FALSE, ASK THE FOLLOWING QUESTION:

16f. Whom did you consider to be the most important mother figure in your life?

Biological mother Stepmother Adoptive mother Grandmother

Other (specify)

# IF 16e IS MARKED AS ANYONE OTHER THAN BIOLOGICAL MOTHER, ASK THE FOLLOWING QUESTIONS (IF NOT, CONTINUE TO 16H):

16g. Did this person legally adopt you? Yes No 16h. If so, how old were you when this happened?

16i. What is the religious preference of your primary mother figure?

No religion

Agnostic

Atheist

Mainline Protestant/Christian (e.g., Methodist, Lutheran, Baptist, Presbyterian, etc.)

Assemblies of God, Pentecostal, Holiness or other Charismatic

Roman Catholic

Orthodox (Eastern, Greek, Russian, Serbian, Ukrainian)

Jewish

Mormon (Latter Day Saints)

Jehovah's Witness

Islamic/Muslim

Hindu

**Buddhist** 

Other (Write in)

16j. Whom did you consider to be the most important father figure in your life?

Biological father Stepfather Adoptive father Grandfather

Other (specify)

### <u>IF ANYONE OTHER THAN BIOLOGICAL FATHER, ASK THE FOLLOWING</u> QUESTIONS (IF NOT, CONTINUE TO 161):

16k. Did this person legally adopt you? Yes No

16l. If so, how old were you when this happened?

16m. What is the religious preference of your primary father figure?

No religion

Agnostic

Atheist

Mainline Protestant/Christian (e.g., Methodist, Lutheran, Baptist, Presbyterian, etc.)

Assemblies of God, Pentecostal, Holiness or other Charismatic

Roman Catholic

Orthodox (Eastern, Greek, Russian, Serbian, Ukrainian)
Jewish
Mormon (Latter Day Saints)
Jehovah's Witness
Islamic/Muslim
Hindu
Buddhist
Other (Write in)

16n. In the past year, how many times has your mother (or mother figure) ever done things that could get her in trouble with the police?

None

Once

Twice

Three or more times

160. In the past year, how many times has your father (or father figure) ever done things that could get him in trouble with the police?

None

Once

Twice

Three or more times

16p. Have you ever thought that one of your parents had a drinking problem? (Yes/No)

16q. Did you ever encourage one of your parents to quit drinking? (Yes/No)

16r. Did you ever argue or fight with a parent when he or she was drunk? (Yes/No)

16s. Have you ever heard your parents fight when one of them was drunk? (Yes/No)

16t. Did you ever feel like hiding or emptying a parent's bottle of liquor? (Yes/No)

16u. Did you ever wish that one or both of your parents would stop drinking? (Yes/No)

17. What is your marital status?

Single

In a relationship of less than 1 year duration

Serious committed relationship (1 year or longer)

Engaged

Married/permanently partnered

Divorced

Widowed

- 18. What race/ethnicity is your partner (boyfriend, girlfriend, fiancé(e), spouse)?
  - a. Black, African American, Afro-Caribbean, Black African, Other in this category.
  - b. Caucasian, White, European American, White European, Other in this category.
  - c. East Asian, Asian American, Amerasian, Asian-Caribbean, Other in this category.
  - d. Latino/a, Hispanic, Spanish, Latin American, of Spanish speaking- South American/Caribbean heritage, Other in this category.
  - e. South Asian, South Asian American, of South Asian heritage, Other in this category.

f. Middle Eastern, Arab, Non-Black North African, Other in this category.

| g. Coloured-South African, Khoi San, Cape Malay, Other in this category. |   |  |  |  |
|--|---|--|--|--|
|  | w important is being in a romantic relat                            | ionship with someone of the same   |  |  |
|  | Ç ,   | 1 Completely Unimportant   |  |  |
|  |   | 2 Mostly Unimportant   |  |  |
|  |   | 3 Somewhat Important   |  |  |
|  |   | 4 Extremely Important  |  |  |
|  |   | - Extensely important  |  |  |
| -  | your romantic relationships in the past, e race/ethnicity as you?   | how many of your partners have been of   |  |  |
|  | 1   | None have been the same race/ethnicity.  |  |  |
|  |   | A few  |  |  |
|  | 3   | Some   |  |  |
|  |   | Most   |  |  |
|  |   | All have been the same race/ethnicity.   |  |  |
|  |   | , and the second |  |  |
| 21. How  | wwould you characterize your sexual o                               | rientation?  |  |  |
|  |   | 1 Completely Heterosexual  |  |  |
|  |   | 2 Mostly Heterosexual  |  |  |
|  |   | 3 Bisexual   |  |  |
|  |   | 4 Mostly Homosexual  |  |  |
|  |   | 5 Completely Homosexual  |  |  |
|  |   | 6 Not Sure   |  |  |
|  |   | o Not Suic   |  |  |
| 22. Which the last r   |   | our vaginal, oral, or anal sexual activity in  |  |  |
|  | 1 Sex with one committed partner (boyfriend, girlfriend, fiancé(e), |  |  |  |
|  | spouse)   | r ("frianda with hanafita")  |  |  |
|  | 2 Sex with one casual partne  | · · · · · · · · · · · · · · · · · · ·  |  |  |
|  |   | of the time, but also with other people  |  |  |
|  | 4 Sex with a number of diffe  | * *  |  |  |
|  | 5 I have not had sex in the la                                      | st month   |  |  |
| 23a. V   | What is your height?ft.   | in   |  |  |
| 23a. v   | what is your neight:it.   |  |  |  |
| 23b. V   | What is your current/actual weight?                                 | lbs.   |  |  |
| 23c. V   | What is your most desired (or ideal) we                             | eight?lbs.   |  |  |
| 24. Are y  | you a member of an intramural or extra                              | amural college athletic team? Yes  |  |  |

| 24a. If yes, v    | what sport(s)   | do you play? (Open-6    | ended)             |                         |
|-------------------|---|-------------------------|--------------------|-------------------------|
| 25. Are you<br>No | a member of   | a Greek social frateri  | nity/sorority (not | an honor society)? Yes  |
| 25a. If yes, v    | which one?  |                         |                    |                         |
| 26. What kir      | nds of grades   | do you mostly get in    | your classes?      |                         |
|                   | Mostly A's Mostly A's Mostly B's Mostly B's Mostly C's Mostly C's Mostly D's Mostly D's | and B's and C's and D's |                    |                         |
| 27. How ma        | ny years have   | you been enrolled in    | a university or c  | college?                |
| 28. How far       | is your unive   | rsity from where you    | primarily grew u   | up? (miles /kilometers) |
|                   | en do you trar<br>or don't spea   | •                       | your parents beca  | ause they don't speak   |
| Never             | Rarely  | Sometimes               | Often              | Always                  |

# APPENDIX B

Scales of Psychological Well-Being

#### Scales of Psychological Well-Being

For the following series of questions, please use the following scale:

- 1 = strongly disagree
- 2 = moderately disagree
- 3 = slightly disagree
- 4 = slightly agree
- 5 = moderately agree
- 6 = strongly agree

Answer each according to your own feelings, rather than how you think "most people" would answer. Try to be as honest as you can in responding to each question.

- 1. In general, I feel I am in charge of the situation in which I live.
- 2. When I look at the story of my life, I am pleased with how things have turned out.
- 3. The demands of everyday life often get me down.
- 4. Maintaining close relationships has been difficult and frustrating for me.
- 5. I live one day at a time and don't really think about the future.
- 6. I am quite good at managing the many responsibilities of my daily life.
- 7. I think it is important to have new experiences that challenge how you think about yourself and the world.
- 8. I like most aspects of my personality.
- 9. I tend to be influenced by people with strong opinions.
- 10. In many ways, I feel disappointed about my achievements in life.
- 11. I have confidence in my opinions, even if they are contrary to the general consensus.

- 12. People would describe me as a giving person, willing to share my time with others.
- 13. I have not experienced many warm and trusting relationships with others.
- 14. Some people wander aimlessly through life, but I am not one of them.
- 15. For me, life has been a continuous process of learning, changing, and growth.
- 16. I sometimes feel as if I've done all there is to do in life.
- 17. I gave up trying to make big improvements or changes in my life a long time ago.
- 18. I judge myself by what I think is important, not by the values of what others think is important.

# APPENDIX C

Revised Religious Life Inventory

#### **Revised Religious Life Inventory**

Please answer the next set of questions using the following scale:

| Not Applicable | Strongly<br>disagree | Disagree | Agree | Strongly agree |
|----------------|----------------------|----------|-------|----------------|
| 1              | 2                    | 3        | 4     | 5              |

- 1. Although I am a religious person, I don't let my religion get in the way of what I want to do.
- 2. The reason I pray is to make my life happy and peaceful.
- 3. What religion gives me most is comfort when bad things happen.
- 4. One reason I go to church, temple, mosque, etc. is that it helps to me to know how I fit into my community.
- 5. The church, temple, mosque, etc. is most important as a place to meet people and make friends.
- 6. Although I am a religious person, I don't let my religion get in the way of what I want to do.
- 7. Although I believe in my religion, there are many more important things in my life.
- 8. I pray mostly because I was taught to
- 9. One of the main reasons why I'm interested in religion is because I can spend time with people I know at my church, temple, mosque, etc.
- 10. Sometimes I need to go against my religious beliefs because other things in my life are more important
- 11. I often read books and magazines about my religion.

- 12. Religion is very important to me because it answers questions about the meaning of life.
- 13. My religious beliefs guide my whole approach to life.
- 14. My religious beliefs influence all my dealings in life.
- 15. It is important to me to spend time meditating or thinking about my religion.
- 16. I was not very interested in religion until I began to ask questions about the meaning and purpose in my life.
- 17. My life experiences have led me to rethink my religious convictions.
- 18. I have been driven to ask religious questions out of a growing awareness of the tensions in my world and in my relation to my world.
- 19. God wasn't very important for me until I began to ask questions about the meaning of my own life.
- 20. It might be said that I value my religious doubts and uncertainties.
- 21. For me, doubting is an important part of what it means to be religious
- 22. I find religious doubts upsetting.
- 23. *Questions* are far more central to my religious experience than are *answers*.
- 24. As I grow and change, I expect my religion also to grow and change.
- 25. I am constantly questioning my religious beliefs.
- 26. I do not expect my religious convictions to change in the next few years.
- 27. There are many religious issues on which my views are still changing.

# APPENDIX D

Assessment of Global Religiousness

# **Assessment of Global Religiousness**

| 1. | 1. In the last month, how often have you attended a religious service at your church/mosque/synagogue?   |                               |  |
|----|--|-------------------------------|--|
|    |  | 1 Not at all                  |  |
|    |  | 2 Less than once per week     |  |
|    |  | 3 About once per week         |  |
|    |  | 4 2-3 times per week          |  |
|    |  | 5 More than 3 times per week  |  |
|    |  |                               |  |
| 2. | How many times in the last month have you attend somewhere outside of a church/mosque/synagogue  |                               |  |
|    | 1 7 8 8  | 1 Not at all                  |  |
|    |  | 2 Less than once per week     |  |
|    |  | 3 About once per week         |  |
|    |  | 4 2-3 times per week          |  |
|    |  | 5 More than 3 times per week  |  |
|    |  | o more man o mines per week   |  |
| 3. | How often do you pray?   |                               |  |
|    | The state of the s | 1 Never                       |  |
|    |  | 2 Hardly ever                 |  |
|    |  | 3 Sometimes                   |  |
|    |  | 4 Often                       |  |
|    |  | 5 Every day                   |  |
|    |  | 5 Every day                   |  |
| 4. | In terms of religion, how observant are you?   |                               |  |
|    |  | 1 I do not observe a religion |  |
|    |  | 2 I observe during holidays   |  |
|    |  | 3 I follow some customs       |  |
|    |  | regularly                     |  |
|    |  | 4 I follow most of the        |  |
|    |  | customs                       |  |
|    |  | 5 I follow all of the customs |  |
|    |  |                               |  |
|    |  |                               |  |
|    |  |                               |  |

APPENDIX E

Consent Form

#### **Consent Form**

You are being asked to take part in a research study called "Family Functioning, Personal and Cultural Identity, and Psychosocial Functioning and Risk Behaviors among College Students." The goal of this project is to understand how family functioning, identity, religiosity, and spirituality are related to adjustment and to drug and alcohol use, sexual activity, and other risk taking behaviors in college students from different universities and from different ethnic groups.

Participation will involve completing a series of questionnaires that take approximately 90 minutes to 2 hours to complete. Approximately 10,000 participants will be recruited for the study this year.

There are no foreseeable risks or discomforts to your participation. You may become fatigued by completing multiple questionnaires and minor embarrassment associated with disclosing information about drug/alcohol use and sexual activity. You are free to skip any questions you do not wish to answer. Although there are not likely to be direct benefits to you from participation, your responses will help us understand how family functioning and identity are related to risk-taking behaviors.

You will be given credit to satisfy part of the research requirement for a course in which you are enrolled. You will be asked to enter your email and student number. This information will not be linked to your responses, but rather will be used to provide you with credit for taking part in the study.

Participation is entirely voluntary and you may discontinue participation at any time without loss of any benefits to which you would otherwise be entitled.

The responses will be anonymous and cannot be used to identify you. All data will be kept in a password-protected data file. The investigators and their assistants will consider your records confidential to the extent permitted by law. The U.S Department of Health and Human Services (DHHS) may request to review and obtain copies of your records. Your records may also be reviewed for audit purposes by authorized University or other agents who will be bound by the same provisions of confidentiality.

You may contact Dr. Seth Schwartz at (305) 243-4359 (<u>SSchwartz@med.miami.edu</u>) with any questions about the research in which you are participating. If you have any questions about your rights as a research participant, you may contact a Human Subjects Protection official at your university. The name of, and contact information for, this official can be obtained from your course instructor.

If you agree to participate in this study, please check the box below and click on the link next to the box. Clicking on the link below is considered consent to participate.

#### **VITA AUCTORIS**

Avi J. Gordon earned his Bachelor of Arts degree in Psychology from Yeshiva University in 2011. He then completed a Master of Arts in Psychology in Education at Teachers College, Columbia University. In 2013, he began the Psy.D. program at Loyola University Maryland and received his Master of Science in Clinical Psychology in 2015. Throughout his clinical training, he has worked with emerging adults at Stevenson University and community mental health clinics, including the Loyola Clinical Centers and Chase Brexton Health Care, conducting individual and group psychotherapy and psychological assessments. He is currently completing an APA-approved doctoral internship at Faulk Center for Counseling, Florida. Avi anticipates receiving his Doctorate in Clinical Psychology in September 2018 and will continue his training as a post-doctoral fellow at the Center for Psychological Growth and Wellness in Plantation, Florida.