Loma Linda University Electronic Theses, Dissertations & Projects

7-2020

# Religious Doubt as a Mediator of the Relationship between Religious Identity and Well-Being

Jedd P. Alejandro

Follow this and additional works at: https://scholarsrepository.llu.edu/etd

Part of the Clinical Psychology Commons

LOMA LINDA UNIVERSITY
School of Behavioral Health in
conjunction with the
Department of Psychology

_____

**Religious Doubt as a Mediator of the Relationship
between Religious Identity and Well-Being**

by

Jedd P. Alejandro

_____

A dissertation submitted in partial satisfaction of the
Requirements for the degree
Doctor of Philosophy in Clinical Psychology

_____

July 2020

Each person whose signature appears below certifies that this doctoral project in his/her opinion is adequate, in scope and quality, as a dissertation for the degree Doctor of Philosophy in Clinical Psychology.

_____, Chairperson
Kendal C. Boyd, Associate Chair and Associate Professor of Department of Psychology


_____
David Veermersch, Chair and Professor of Department of Psychology


_____
Elizabeth Johnston Taylor, Professor of Nursing


_____
Calvin Thomsen, Assistant Professor of Theology

# ACKNOWLEDGEMENTS

TABLE OF CONTENTS

# TABLES AND FIGURES

Tables

Figures

# ABSTRACT

### Religious Doubt as a Mediator of the Relationship between Religious Identity and Well-Being

by

Jedd P. Alejandro

Doctor of Philosophy, Clinical Psychology
Loma Linda University, July 2020

The successful development of an identity is related to greater well-being (Beyers & Luyckx, 2016; Crocetti, 2017; Kroger & Marcia, 2011; Luyckx et al., 2013; Ritchie et al., 2013). Identity development is likely influenced by religious doubt associated with conflicts or contradictions between religion and other domains, such as science (Cook, Kimball, Leonard, & Boyatzis, 2014; Puffer et al., 2008; Ritchie et al., 2013). The aim of the current study was to examine religious doubt as a mediator of the relationship between identity and well-being among emerging adults. Participants (N = 122) included undergraduate students who identified as Christian. Participants completed an online survey about their religious identity, quest orientation, religious doubts, and various well-being measures, such as emotional, social, and psychological well-being. The structural model suggested good model fit. Results indicated that religious doubt significantly mediated the relationship between identity and well-being but only for the reconsideration of commitment dimension of identity, $a_6b_2 = .09$, 95% CI [-0.35, -0.04]. The implications of the current study suggest that psychologists, clergy, and educators may better facilitate well-being by directly helping students address rather than avoid religious doubt.

CHAPTER 1

**Religious Doubt, Identity, and Well-Being**

Erikson's (1963) insight on psychosocial development introduced the idea of identity—that individuals either achieve an identity or fail to recognize their general role in society. An identity crisis is a phenomenon that is particularly important for individuals who are searching for meaning as well as learning about their role or purpose in society. As social norms become more frequently challenged, boys and girls learn more about being an individual and having the ability to choose. For example, men can share responsibilities of caretaking; women can be lawyers, doctors, or military officers. An individual may be torn between a myriad of possible identities from which they could choose, including whether to be religious or not. Although identity may also be conceptualized as personal characteristics, such as gender or physical qualities, Erikson (1963) is more concerned with how individuals experience those characteristics and how they relate to other social groups considering such experiences. Anxiety, stress, and other experiences associated with identity are likely to affect a person's overall well-being (Arnett, 2007; Crocetti, 2017; Luyckx et al., 2013). More importantly, religion offers individuals an identity and worldview that may be adaptive during times of distress.

Although there may be various reasons for religious exploration, such as those identified by Layton and colleagues (2012), religious doubt is one experience in which individuals face existential challenges that directly influence their religious worldview and relationships with others. Religious doubt is characterized as experiencing uncertainty with religious teachings and beliefs as well as having questions about religion (Hunsberger et al., 1993). Religious doubt—a potentially conflicting experience within a religious identity or between identities—is an

important behavior because its relationship to religious identity and well-being remains unclear. For example, such individuals who have a weak (as opposed to strong) religious identity are more likely to engage in harmful behaviors, including smoking, violent behavior, and alcohol use (Afifi Soweid et al., 2004).

How one copes with religious doubt may indicate which particular experiences of doubt are adaptive. Some scholars suggested that doubt may encourage someone to seek answers and attempt to resolve issues that conflict with religion. Paul Tillich (1957) argued that doubt is an aspect of religious faith—that is, doubting in the form of quest is an essential component of faith. Similarly, Gordon Allport (1957) believed that doubting, in the form of quest, encourages one to question and seek answers when faced with conflicts or inconsistencies. This more functional quality of doubt had been associated with greater religious coping despite greater stress (Cook et al., 2014). Doubt in the form of tentativeness and exploration may allow individuals to more adaptively wrestle with religious issues.

The way in which doubt is experienced and addressed likely informs an individual's overall well-being. Because religious identity is associated with religious doubt—whether doubt is viewed as a constructive, nonthreatening process or as a hindering experience (Puffer et al., 2008), it is important to determine how the type of doubt affects the relationship between religious identity and well-being. For example, outcomes may vary if individuals spend more time in productive, adaptive exploration of religious doubt rather than cyclical worrying, such as ruminative exploration. The current study recognizes that because religious doubt influences both identity and well-being, religious doubt may mediate the relationship between identity and well-being.

CHAPTER 2

## Literature Review

Erikson's (1963) conception of identity and the processes involved in identity formation suggest that successfully developing an identity, including religious identity, is dependent on how one managed to address an identity crisis. If an individual experiences strong conflicts or crises with an identity, then one possible response is to search for a more compatible identity. For example, one might encounter conflicts between religion and science, such as "God created the universe and all animals" conflicting with the scientific theory of the Big Bang and Darwinian Evolution. Such conflict may encourage the individual to seek atheism or agnosticism (i.e., neither belief nor disbelief in a God). One may also engage in open, critical conversations with individuals with varying perspectives to seek a more compatible religious identity. Another example of a conflict between identities exists between religion and politics, such as questioning how to love one another yet discriminate against gay marriage or homosexuality. One's ability to adequately deal with an identity crisis—specifically conflicts between identities or within a particular identity—influences whether an individual achieves a mature identity.

### Four Ego-Identity Statuses

Erikson's psychosocial development theory on identity is often recognized through James Marcia's (1980) view, which suggests two independent dimensions: commitment and exploration. In other words, the experience of choosing an identity involves an individual's ability and motivation to explore as well as commit to an identity. Commitment to an identity refers to the degree to which an individual remains faithful to a particular identity. For example,

an individual who attends church and volunteers in various community ministries may be likely to strongly identify as religious; individuals who are committed to a Christian identity adopt values, beliefs, and behaviors that are characteristic of Christian practices. Exploration refers to the degree to which an individual explores other identity alternatives, such as seeking to address religious conflicts or turning to agnosticism or atheism. It is important to note that exploration may refer to either exploring an existing identity or exploring a new, different identity. Overall, commitment and exploration are the main parameters by which identities are managed.

These two dimensions of commitment and exploration produce four ego-identity statuses: identity achievement (those who engage in exploration and are committed to an identity), moratorium (those who engage in exploration but have not made a commitment), foreclosure (those who have made a commitment but have not explored other identity alternatives), and identity diffusion (those who have neither made a commitment nor engaged in any exploration).

An individual who has achieved an identity has experienced identity crises that encouraged him or her to seek identity alternatives or re-evaluate an extant identity that is more coherent. These achieved individuals have both explored and made commitments. As expected, achieved individuals tend to report fewer depressive symptoms, greater self-esteem, and greater overall adjustment (Kroger & Marcia, 2011; Luyckx et al., 2013). Similarly, based on religiosity and smoking behavior research, some commitment (whether an individual has achieved or foreclosed to a particular religious identity) to a certain extent may protect an individual from some harmful behaviors (Afifi Soweid et al., 2004).

The prototypical idea of the foreclosure identity status is a child's unwavering obedience to one's parents to go to medical school without exploring other vocational options. These individuals who have made commitments but have not engaged in exploration are not necessarily

at risk for any problem behaviors. For example, those with a foreclosed identity compare similarly to those with an achieved identity in terms of adjustment and healthy interpersonal relationships. However, in a Belgium study comparing samples of high schoolers, undergraduate students, and both employed and unemployed adults, foreclosed individuals differed from achieved individuals regarding personality characteristics (e.g., foreclosure is associated with low openness and agreeableness) as well as civic behaviors, such as having lower social responsibilities (Crocetti, 2017; Verschueren et al., 2017). In addition, foreclosure differs from achievement in that the former has been associated with lower religious maturity, such as greater racism and homophobia among Christian undergraduate students (Fulton, 1997).

Those who are in moratorium have not made commitments but continue to engage in some form of exploration. Some individuals may ruminate in unproductive ways while others may genuinely search for identities. Thus, it is no surprise that research about this identity status is mixed, suggesting that there may be more factors involved in commitment-making and exploration (Crocetti et al., 2008). Crocetti (2017) distinguishes classic moratorium from searching moratorium, which characterizes an individual as having commitments but still reconsidering other alternative commitments. Thus, classic moratorium is a more stressful (e.g., less life satisfaction, more depressive and anxiety symptoms, and more aggression) and maladaptive state compared to searching moratorium since individuals in the latter status typically have some comfort or support in their current commitments. Overall, both identity statuses moratorium and diffusion are more complex than originally conceived as the outcomes associated with these groups of individuals vary depending on cultural context. For example, employed Belgian adults who have a diffused identity may still have access to a strong community despite having little commitments or engaging in little exploration (Kroger &

Marcia, 2011; Luyckx et al., 2013). However, these four ego-identity statuses generally describe identity based on the dimensions of commitment and exploration.

Considering the examples mentioned above, identity achievement is recognized to be the most mature form of identity status while diffusion, in contrast, is the least mature. Marcia (1980) suggests that identity development is a process whereby individuals can transition into different identity statuses over time, meaning that an individual may not necessarily be stuck in one of these statuses forever. Identity can only be achieved by transitioning from moratorium to achievement. For instance, moratorium is seen as an intermediate status between foreclosure and achievement such that those who are foreclosed may achieve an identity by temporarily reducing their commitment, exploring identity alternatives, and, finally, recommit to a new or coherent identity. One's commitments and exploration of alternative commitments may change during identity development. Conflicts such as religious doubt may influence an individual to change from one identity status to another. Individuals who experience pressure to commit to a religious identity while also being unable to explore alternative identities may likely stay in foreclosure. Identity development is a process that may involve constant transitions between identity statuses not only in adolescence but also emerging adulthood and young adulthood.

**Dimensions of Identity**

One of the first few attempts used to measure identity status was through semi-structured interviews. Marcia (1966) initially had American, male college students interviewed by confederates for 15-30 minutes in three domains: occupation, religion, and politics. A sample question of the religious domain was "have you ever had any doubts about your religious beliefs?" Participants were categorized based on their responses to this question. For example,

those whose identity is achieved may respond along the lines of "Yeah, I even started wondering whether or not there was a god. I've pretty much resolved that now, though. The way it seems to me is …," while those whose identity is moratorium may respond similarly to "Yes, I guess I'm going through that now. I just don't see how there can be a god and yet so much evil in the world or … ." A foreclosure response appears similar to "No, not really, our family is pretty much in agreement on these things," and a diffusion response looks like "Oh, I don't know. I guess so. Everyone goes through some sort of stage like that. But it really doesn't bother me much. I figure one's about as good as the other." Responses to these questions were used to categorize participants into one of the four ego-identity statuses.

There have been more recent improvements in measuring ego identity status. One popular measure that has been extensively used and revised is known as the revised Extended Objective Measure of Ego-Identity Status (EOMEIS-2) scale (Bennion & Adams, 1986). The EOMEIS-2 was constructed to be a self-administered scale and has been demonstrated to be reliable and valid regarding construct validity as well as concurrent validity, which is its relationship to previously validated measures (Adams et al., 1989). For example, in a group of 116 American undergraduates, the EOMEIS-2 subscales (identity achievement, moratorium, foreclosure, and diffusion) are either negatively correlated or not related to each other, which ensures that they each measure separate categories within identity. Scores derived from EOMEIS-2 tend to reflect Marcia's (1966) Ego Identity Interview. As a result, the EOMEIS-2 scale appears to be an adequate measure of identity status.

Although research supports the use of EOMEIS-2 to measure general identity, it may not necessarily be accurate in assessing specific identities. For instance, the EOMEIS-2 examines identity in the domains of occupation, religion, and politics, which are assumed to contribute

together in composing one's general identity. However, such an assumption may not be valid as the correlation between religious and political identity is weak (De Haan & Schulenberg, 1997). Similarly, differences in the rate at which specific identities develop vary over time. Specifically, religious identity developed slower than vocational identity among high school students (Skorikov & Vondracek, 1998), which further suggests that domain-specific identities may be playing a larger role in overall identity development than anticipated. Thus, an individual's behavior to cope or navigate various obstacles in life may be examined more predictably when assessing their commitments and motivation to explore religious domains.

More contemporary models have not only distinguished between different types of commitment and exploration but also domain-specific identities. For example, Crocetti, Rubini, and Meeus (2008) developed the Utrecht-Management of Identity Commitments Scale (U-MICS) to measure general or domain-specific identities along three dimensions: commitment, in-depth exploration, and reconsideration of commitment. Commitment refers to making firm choices and having self-confidence from these choices. In-depth exploration refers to reflecting on current commitments, searching for more information about current commitments, and engaging with others about these commitments. Reconsideration of commitment refers to comparing current commitments with alternative ones when the former is no longer satisfactory. Thus, reconsideration of commitment is similar to exploration but distinct in that it focuses more on the evaluation of current commitments. More importantly, research based on a sample of Dutch adolescents suggests that reconsideration of commitment is associated with psychosocial problems such as symptoms of depression and anxiety; delinquency; and poor family relationships (Crocetti et al., 2008). This suggests that certain aspects of identity still need further investigation, particularly those that predict poor outcomes.

Luyckx and colleagues (2008) validated a five-dimensional model of general identity, known as the Dimensions of Identity Development Scale (DIDS), which expands on the U-MICS. More importantly, the DIDS measures ruminative exploration, which is a maladaptive form of exploration characterized by repetitive brooding and worry. In a study of 4,259 Belgian adolescents, ruminative exploration and reconsideration of commitment were identified as potential risk factors for individuals experiencing identity crises as they are associated with depressive symptoms, lower self-esteem, and weaker commitments (Beyers & Luyckx, 2016). Similarly, greater ruminative exploration was associated with greater problem behaviors, such as rule-breaking and aggression, as well as lower well-being in a diverse sample of 7,649 American undergraduate students (Ritchie et al., 2013). The process of identity development may include changes in the strength of commitments as well as in motivation to explore commitments, which ultimately affect various outcomes.

**Identity in Emerging Adulthood**

While Erikson (1963) believed that adolescence was one particular period where these identities are tested and challenged, emerging adults continue to wrestle with commitments as they navigate within the social environment. This relatively new concept of emerging adulthood, typically occurring during the late teens and early 20s, is characterized as a time of both instability and possibilities (Arnett, 2007). As the name implies, emerging adults are neither adolescents nor fully independent adults. Emerging adulthood is also not merely a brief transition between adolescence and adulthood but more of a distinct developmental period that overlaps with adolescence in the early stages and with adulthood in a later stage.

Arnett (2007) proposed five features that are not necessarily universal but are more common during emerging adulthood than other developmental periods. One unique feature of emerging adulthood is that it is the "age of identity explorations" (Arnett, 2007; p. 69). These 18- to 25-year-olds spend a large amount of time figuring out their role in society through work and education. In high-income countries, this developmental period may extend to 29 years of age as emerging adults continue to seek stable jobs and relationships as well as grow in higher education, such as graduate school. Thus, emerging adults may experience different issues compared to adolescents and young adults, including employment instability (and unemployment), lack of independence, suicide, and social withdrawal (Arnett et al., 2014). More importantly, identity issues are not only relevant for adolescents but also for individuals who have not yet transitioned into adulthood (Crocetti, 2017; Sugimura et al., 2015). Emerging adults also experience a turning point in which they either achieve an identity (i.e., come to terms with, accept, and commit to a particular role) or become confused about their role in the family, community, and society at large.

**Well-Being**

Before discussing religious identity and religious doubt, one common outcome of successful identity formation and development is high well-being. Although well-being may have a variety of definitions in psychology, well-being is broadly defined as experiencing happiness, satisfaction, and overall healthy adjustment in various domains, such as career and relationships (Schwartz et al., 2013). Three commonly studied forms of well-being are subjective well-being, psychological well-being, and eudaimonic well-being (Waterman, 2008), which includes psychological well-being.

Subjective well-being consists of self-esteem, life satisfaction, and the lack of internalizing problem behaviors such as anxiety and depression (Diener, 2006). For example, a person with high subjective well-being feels comfortable about themselves and the environment in which they live. It may be worth noting that well-being is not simply the absence of psychopathology (Keyes, 2011). Well-being also consists of feeling like one belongs in a community or social group; having healthy, stable relationships; feeling that one has contributed to society; and various other psychological aspects. Psychological well-being is an individual's sense that they have mastered various tasks in life, such as maintaining autonomy, healthy relationships, and a sense of control over the work environment (Ryff & Singer, 2008). Eudaimonic well-being, which may be a more broad view of psychological well-being, is happiness based on the concept of eudaimonia (human flourishing) as opposed to hedonia (pleasure). This idea comes from Aristotle and what he conceived as the highest human good. Aristotle (4th Century BCE) believed that the highest human good was not about feeling good or satisfying one's appetites but, instead, living a life of virtue. Thus, eudaimonic well-being refers to feelings of happiness due to a person's sense of purpose or calling (Waterman et al., 2010). Overall, well-being may be conceived as being composed of subjective (emotional), social, and psychological well-being.

**Doubting as Maladaptive**

Based on the broad definition of religious doubt as an experience of uncertainty and questions about religious teachings, the current literature presents religious doubt as a primarily damaging psychological experience. For instance, several studies report the harmful effects of religious doubt as it relates to psychological experiences such as stress (Genia, 1996), anxiety

and depression in college students and church members (Kojetin et al., 1987), and lower

subjective well-being in Presbyterian clergy and elders (Krause et al., 1999). Research also

demonstrates that religious doubt worsens depressive symptoms and grief when the individual

experiences family bereavement (Hayward & Krause, 2014; Patrick & Henrie, 2015). Similarly,

Galek, Krause, Ellison, Kudler, and Flannelly (2007) report that religious doubts—doubts

because of "evil in the world" and "personal suffering"—are associated with depression, general

anxiety, paranoia, and obsessive-compulsive symptoms in American adults. Among high

schoolers, religious doubt is linked to authoritarian parenting, such as being overly strict,

controlling, and lack of warmth and affection among high schoolers (Hunsberger et al., 2002).

These findings suggest that there are some aspects of religious doubt that uncomforting and

distressing, especially when these experiences persist.

One of the limitations of religious doubt research is that doubt is not operationalized

consistently across studies. For example, some studies measure religious doubt with short scales

and low reliability (Galek et al., 2007; Krause et al., 1999). In addition, these scales of religious

doubt do not provide a view that considers religious doubt as both positive and negative. Using

the way in which identity is defined by Marcia (1980) and Erikson (1963), Puffer et al. (2008)

examined the influence of two types of religious doubt on religious identity, one of which is

more passive and the other more active. For example, the passive form of religious doubt may be

focused on ruminating about attitudes toward organized religion (and traditional religious

beliefs), such as having uncertainties with doctrinal teachings. This form of doubt is measured

using the Religious Doubt Scale (RDS), which is a 10-item measure that assesses the degree to

which a person experiences doubt about traditional religious doctrines (Altemeyer, 1988). The

RDS includes doubts about the truth of religious writings due to contradictions with the modern

world. A conflicting experience such as this may contribute to an overall crisis that requires a resolution but may not necessarily be resolved.

A more coherent view of maladaptive doubts was constructed to address various aspects of religious doubt including explicit doctrinal questions (Hunsberger et al., 1996), and conflicts with religious communities (Ingersoll-Dayton, Krause, & Morgan, 2002; Nipkow & Schweitzer, 1991), and doubts due to concerns about evil or suffering in the world (Galek et al., 2007; Krause et al., 1999). Using this broader conception of maladaptive doubt, Henrie and Patrick (2014) found that doubt predicted greater anxiety about death, such as fear of drowning, fear of seeing a dead body, ruminating about death, and viewing life as meaningless because of death. Similarly, doubts about 1) religious or spiritual beliefs; 2) church teachings; 3) life solutions in the Bible; 4) prayer making a difference; and 5) God affecting daily life have been associated with lower self-esteem, lower life satisfaction, and lower optimism (Krause, 2014). Overall, these forms of doubt may be closely associated with the idea of ruminative exploration. Ruminative exploration is a maladaptive form of exploration characterized by repetitive, cyclical worrying and passive doubting, especially if these doubts linger and fail to be addressed (Luyckx et al., 2008).

**Doubting as a Search for Answers**

Although many studies have shown that religious doubt is associated with harmful experiences and behaviors, a more positive view is that doubt is necessary for mature, adaptive development. Hunsberger, Pratt, and Pancer (2001) proposed that religious doubt must also be understood in the context of which doubt is managed. Other than denying or ignoring religious doubt, they had suggested two alternative approaches to dealing with religious doubt: 1) seeking religious sources, or 2) seeking non-religious, objective sources of information. More

importantly, these two approaches are not mutually exclusive; one or both methods may be valid ways of addressing conflicts between religion and other domains.

Avoiding sources to address religious doubt leads to a passive form of doubting, which may prevent individuals from exploring religion in more active ways. Researchers have argued that one form of doubt allows individuals to exercise growth in more adaptive or flexible thought-processing (Acredolo & O'Connor, 1991; Hunsberger et al., 1993). This form of doubt is known as quest, which refers to approaching religion and religious issues as a journey (or quest) that involves existential questioning. The concept of religious quest was developed as part of a growing response to a body of research suggesting that greater religiosity, such as high church attendance, is related to greater prejudice among Christian religions (Allport & Ross, 1967). Exploration of the relationship between religion and prejudice was further clarified by distinguishing between intrinsic, extrinsic, and, later, quest religious orientation. Specifically, intrinsic religiosity refers to having internalized religion as an end in and of itself such that there is no apparent external motive for engaging in religious behaviors; an intrinsically religious person truly believes in religious teachings. Extrinsic religiosity refers to an approach in which religious behaviors are motivated by external factors, such as social acceptance or security; this aspect of religiosity was strongly related to prejudice (Allport & Ross, 1967).

This more active conception of doubting, specifically tentativeness and searching for answers, appears to be theoretically supported by psychological research such as the concept of cognitive dissonance. Festinger's (1957) theory of cognitive dissonance explains that individuals seek to resolve conflicting ideas by changing their attitudes and beliefs. For example, Batson, Schoenrade, and Ventis (1993) linked religious quest (a form of religious doubt) with having less prejudice as well as greater competence, openness, and self-acceptance. Beck, Baker, Robbins,

and Dow (2001) found that tentativeness—a component of the questing process—was positively linked to greater intrinsic religiosity and well-being.

Quest has also been found to be related to identity exploration as well as well-being among Christian college students (Cook et al., 2014). Specifically, Cook and colleagues (2014) found that while quest alone predicted more stress, individuals who reported having a high intrinsic and quest orientation had greater coping. Similarly, Williamson and Sandage (2009) found that greater questing over time predicted greater spiritual openness and engagement in spiritual activities as well as lower spiritual well-being among masters-level graduate seminary students. As quest is understood to be a stance toward religious questions and doubt, quest allows an individual to actively address ruminative behaviors by questioning and seeking religious meaning.

**Hypotheses**

The purpose of the current study is to examine the influence of quest and maladaptive religious doubt on the relationship between religious identity (i.e., dimensions of identity) and well-being among Christian college students. It is hypothesized that:

1. Greater commitment will predict greater well-being through the indirect effect of quest.

2. Lower commitment will predict lower well-being through the indirect effect of religious doubt.

3. Greater in-depth exploration will predict greater well-being through the indirect effect of quest.

4. Lower in-depth exploration will predict lower well-being through the indirect effect of religious doubt.

5.  Greater reconsideration of commitment will predict lower well-being through the indirect effect of quest.

6.  Greater reconsideration of commitment will predict lower well-being through the indirect effect of religious doubt.

CHAPTER 3

## Methods

### Participants

Participants were undergraduate students ($N$ = 122) between the ages of 18 and 25 ($M$ =

20.38, $SD$ = 1.99) from Seventh-Day Adventist institutions. Participants rated on a scale of 0 to

10 that religion was at least somewhat important in their life ($M$ = 7.14, $SD$ = 1.92) and noted

that they were affiliated with a Christian denomination. Most of the participants identified as

female (73.8%), non-Latino White (45.1%), and Seventh-Day Adventist (80.3%); see Table 1 for

a complete demographic breakdown. Most participants reported engaging in organizational

religious activity (attending church or religious meetings) about once a week and non-

organizational religious activity (spending time in private religious activities) about two or more

times a week. See Figures 1 and 2 for a summary of organizational and non-organizational

religious activity. The mean score on the intrinsic religiosity subscale was 10.6 ($SD$ = 2.88).

### Procedure

Participants were recruited and invited via email to complete each of the previously

mentioned scales in a 62-item survey (see Appendix), which took between 10-15 minutes to

complete. Before completing the survey, participants will be provided with an informed consent

form. The consent form highlighted the nature of the study and reminded participants that their

responses will be confidential. Specifically, their responses will only be examined by the

principal investigators. The survey was provided via Qualtrics and displayed the scales in the

following order: U-MICS (adapted for the religious domain; Crocetti et al., 2008), Religious

Doubt Scale (Henrie & Patrick, 2014), Quest scale (Batson & Schoenrade, 1991), Mental Health Continuum – Short Form (MHC-SF; Keyes, 2006), physical health, and Duke University Religion Index (DUREL; Koenig & Büssing, 2010).

At the end of the survey, demographic information was collected, such as gender, ethnicity, and religious affiliation or preference. Participants were provided an opportunity to enter a drawing to win one of 30 electronic $10-gift cards. This study was approved by the Loma Linda University Institutional Review Board (IRB# 5180379) before data collection.

**Measures**

*Religiosity*

Religiosity was assessed using the Duke University Religion Index (DUREL; Koenig & Büssing, 2010). The DUREL is a 5-item scale that measures three dimensions of religiosity (organizational, nonorganizational, and subjective or intrinsic religiosity) and may to summed to compute a religiosity index. The organizational dimension of religiosity refers to the frequency of attending organized religious activities, such as church, synagogues, or Sabbath school. The frequencies for the DUREL items in the current study were like those of the original sample for which the measure was created (Koenig & Büssing, 2010).

The items for the organizational and nonorganizational dimensions are rated on a 6-point scale (1 = Never, 6 = More than once a week). The subjective or intrinsic religiosity dimension refers to an individual's personal commitment or motivation to religion. These items include "In my life, I experience the presence of the Divine (i.e., God)," "My religious beliefs are what really lie behind my whole approach to life," and "I try hard to carry my religion over into all other dealings in life." These three items are rated on a 5-point scale (1 = Definitely not true, 5 =

Definitely true of me) and may be summed to calculate an overall intrinsic religiosity score. The internal consistency reliability of DUREL in the current study was .72, which is lower than values reported in previous research ranging from .78 to .91 (Koenig & Büssing, 2010; Plante et al., 2002; Storch et al., 2004). The DUREL has also demonstrated adequate validity with negative correlations with the strength of religious faith ($r$s between -.71 and -.85) (Plante et al., 2002; Storch et al., 2004).

### *Religious Identity*

The Utrecht-Management of Identity Commitments Scale (U-MICS) was used to measure religious identity. The U-MICS is a 13-item questionnaire that was originally developed to measure three dimensions of a domain-specific identity among adolescents: commitment, exploration in-depth, and reconsideration of commitment (Crocetti et al., 2008; Crocetti et al., 2010). More importantly, this scale can be adapted to various domains, such as ideological, relational, and educational identity. The current study specifically examined only religious identity. The commitment and exploration in-depth subscales of the U-MICS contain five items and the reconsideration of commitment subscale contains three items. Each subscale is rated on a 5-point Likert scale (1 = completely untrue, 5 = completely true) with higher scores indicating greater commitment, exploration, or reconsideration of commitment, respectively. The means and standard deviations for U-MICs items were similar to that of university students from Spain (Llorent & Álamo, 2018).

The commitment subscale measures the extent to which an individual makes firm choices and gains self-confidence from these choices. One example item is "My religion/faith gives me security in life." The in-depth exploration subscale refers to the extent to which an individual

reflects on current commitments, searches for more information about current commitments, and engages with others about these commitments. An example item of in-depth exploration is "I try to find out a lot about my religion/faith." Reconsideration of commitment refers to comparing current commitments with alternative ones when current commitments are not satisfactory. One example item of reconsideration of commitment is "I often think it would be better to try to find a different religion/faith.

The internal consistency reliabilities for the commitment, in-depth exploration, and reconsideration of commitment subscales in the current study were .89, .80, and .90, respectively. These reliability values are consistent with previous research (Crocetti et al., 2010). Each subscale of the U-MICS has been demonstrated to be valid. For example, commitment has been positively related to clarity with one's self-concept (βs between .12 and .23) and negatively related to depression (βs between -.23 and -.21) and generalized anxiety, βs between -.18 and -.13, (Crocetti et al., 2010). In-depth exploration and reconsideration of commitment have been positively related to depression (βs between .10 and .18) and generalized anxiety symptoms, (βs between .07 and .33), (Crocetti et al., 2010).

### *Religious Doubt*

Religious doubt was assessed using Henrie and Patrick's (2014) 14-item Religious Doubt Scale (RDS) by measuring maladaptive religious doubt in three areas. One subscale examines the influence of experiences on religious doubt (Experiences; 8 items). The second subscale examines feelings of pressure associated with one's religion or religious community (Pressure; 4 items). The third subscale examines how much an individual prioritizes religion over other perspectives (Emphasis; 2 items). Henrie and Patrick (2014) reported an exploratory factor

analysis of the RDS and found a three-factor structure with factor loadings greater than .60 and no cross-loadings between factors.

Two example items from Henrie and Patrick's (2014) RDS are "I have experienced doubts concerning the existence of God and/or the truth about the religion I practice" and "Sometimes I perceive the teachings or literature of my religion are contradictory, and this perception makes me question if I wish to continue to be involved in my religion." This scale rates each item on a 5-point scale (1 = very untrue, 2 = somewhat untrue, 3 = neutral, 4 = somewhat true, 5 = very true) with higher scores indicating greater religious doubt. The current study indicated an overall Cronbach's alpha of .89. The Experiences, Pressure, and Emphasis subscales had Cronbach's alphas of .85, .82, and .57, respectively. Overall, the reliabilities of these subscales were consistent with previous findings (Henrie & Patrick, 2014; Patrick & Henrie, 2015), though the Emphasis subscale in the current study had very poor reliability.

Although there is limited research on the validity of the RDS, doubt was negatively correlated with religious meaning ($r$s between -.72 and -.33), religious belief ($r$s between -.70 and -.33), spirituality ($r$s between -.69 and -.36), and spiritual growth ($r = -.32$) (Henrie & Patrick, 2014; Patrick & Henrie, 2015). Religious doubt was also positively related to thoughts and anxiety about death ($r$s between .19 and .21) (Henrie & Patrick, 2014). The means and standard deviations of RDS scores were similar to those of the adult sample reported by Patrick and Henrie (2015).

### *Quest Religious Orientation*

The second measure of religious doubt was quest religious orientation. This more adaptive form of religious doubt was measured using the 12-item Quest scale (Batson &

Schoenrade, 1991). The Quest scale is divided into three subscales (each with 4 items):

Readiness to Face Existential Questions without Reducing their Complexity; Self-Criticism and

Perception of Religious Doubt as Positive; and Openness to Change. The Quest scale assesses

each item on a 9-point scale (1 strongly disagree, 9 = strongly agree) with higher scores

reflecting greater openness to change and greater perceptions of doubt as positive. One example

item is "For me, doubting is an important part of what it means to be religious." The internal

consistency of the Quest scale in the current study was .75, which is consistent with previous

research (Cook et al., 2014; Klaassen & McDonald, 2002; Puffer et al., 2008). The Cronbach's

alphas for the Readiness, Religious Doubt as Positive, and Openness to Change subscales in the

current study were .67, .61, and .68, respectively. The Quest scale has also been found to be valid

as it negatively associates with commitment ($r$ = -.41), and foreclosure ($r$ = -.25) as well as

positively correlates with exploration ($r$ = .41), stress ($r$ = .08), perceived stress ($r$ = .13), and

moratorium ($r$ = .22), (Cook et al., 2014; Klaassen & McDonald, 2002; Puffer, 2013). The means

and standard deviations of quest scores were similar to those of college students in a study by

Burris and colleagues (1996).


### Well-Being

Well-being was assessed by examining an individual's mental health (emotional, social,

and psychological well-being) and physical health. The mental health aspect of well-being was

measured using the Mental Health Continuum Short Form (MHC-SF; Keyes, 2006). The MHC-

SF is a 14-item measure of emotional (3 items), social (5 items), and psychological well-being (6

items) on a 6-point scale (0 = never to 5 = every day). Greater scores indicate that an individual

experienced greater well-being frequently during the past month. Some example items include

"During the past month, how often did you feel interested in life?" (emotional well-being),
"During the past month, how often did you feel that you belonged to a community (like a social
group, or your neighborhood)?" (social well-being), and "During the past month, how often did
you feel that you had experiences that challenged you to grow and become a better person?"
(psychological well-being). The MHC-SF has been demonstrated to be both a reliable and valid
measure of well-being (Keyes et al., 2008). In the current study, the internal consistency
reliabilities of the overall scale, emotional subscale, social subscale, and psychological subscale
were .91, .88, .81, and .85, respectively. These reliabilities are consistent with previous findings
(Lamers et al., 2011).

The MHC-SF subscales have been demonstrated to be valid with positive correlations
with life satisfaction ($r$s between .22 and .49), positive affect ($r$s between .24 and .26), self-
esteem ($r$s between .19 and .39), social engagement ($r$s between .07 and .21), and political
participation ($r$s between .02 and .17) (Lamers et al., 2011). The MHC-SF subscales have also
been shown to be negatively correlated with mental illness ($r$s between -.18 and -.47) (Lamers et
al., 2011). The means and standard deviations reported in the current study were similar to those
of Dutch adults (Lamers et al., 2011).

Self-reported health (SRH) was measured with a single item by asking participants "how
would you rate your health right now?" on a scale from zero to 10 where lower scores indicate
poor health and higher scores indicate excellent health. The current study suggests that this
single-item measure is valid as it was positively correlated with emotional ($r = .49$), social ($r =
.43$), and psychological ($r = .54$) well-being. SRH was also not correlated with quest, religious
doubt, in-depth exploration, and reconsideration of commitment in the current study.

**Design and Analyses**

*Preliminary Analyses*

Prior to running any analyses, the data were examined for outliers and univariate and multivariate non-normality using SPSS v25 (IBM, 2017). Outliers were assessed using residual scatter plots and Box plots; data were found to not violate assumptions of univariate and multivariate normality. No cases were identified containing outliers. About 12% of cases had missing data. Missing data were addressed using full information maximum likelihood estimation (FIML) as the assumptions of FIML were are not violated (Enders, 2010).

*Structural Equation Modeling*

The primary analysis consisted of testing two structural equation models (SEM) using EQS v6.3 (Bentler, 2017) and Robust Maximum Likelihood estimation. Hypotheses were tested using a two-step SEM building approach as suggested by Anderson and Gerbing (1988). Both the measurement model (Model 1) and full structural model (Model 2) were identified. In the first step, the measurement model was evaluated. Model 1 is a single factor solution in which well-being is defined as a latent construct of emotional well-being (EWB), social well-being (SWB), psychological well-being (PWB), and self-reported health (SRH). EWB was used to set the metric for the well-being factor as it had the highest reliability among the four indicators of the well-being factor.

In the second step, the full structural model was evaluated. Model 2 is the full structural model predicting the well-being factor from the total effects of commitment subscale (COM), in-depth exploration subscale (EXP), and reconsideration of commitment subscale (ROC). In addition, the indirect effects of COM, EXP, and ROC on the well-being factor through quest

24

(QRO) and religious doubt scale (RDS). This practice of testing total effects prior to assessing

indirect effects is documented in several studies (Hayes, 2009; Valente et al., 2016; Williams &

MacKinnon, 2008). The two-step rule for identification suggests that the models in Figures 3 and

4 are theoretically identified (Kline, 2011).

Model fit will be assessed by examining the following fit indices according to Kline

(2005): the model chi-square ($\chi^2$), the Bentler Comparative Fit Index (CFI), the Standardized

Root Mean Square Residual (SRMR), and the Root Mean Square Error of Approximation

(RMSEA) and the upper limit of RMSEA confidence interval (CI). The criteria for good fit is

indicated by a nonsignificant $\chi^2$ ($p > .05$), CFI $> .90$, SRMR $< .10$, RMSEA $< .05$, and the upper

limit of the 90% CI for RMSEA $< .10$ (Kline, 2005). Standardized residuals will also be

examined for values greater than $|.10|$, which indicate poor model fit.

### *Tests of Indirect Effects*

To test the indirect effect of quest and religious doubt on well-being, confidence intervals

will be generated via 5000 bootstrapping simulations with 122 cases using a well-documented

approach to testing mediation (Hayes, 2009; Valente et al., 2016; Williams & MacKinnon,

2008). As mentioned previously, this approach will be used to determine whether the dimensions

of identity (commitment, in-depth exploration, and reconsideration of commitment) predict well-

being through the indirect effect of quest and religious doubt.

An indirect effect is assessed by multiplying the regression coefficient of 1) an

independent (predictor) variable predicting another variable (path *a*), and 2) that same variable

(i.e., mediator) predicting an outcome variable (path *b*). Specifically, bootstrapping takes a

sample (of various estimates of *a* and *b*) with replacement from the data set, calculates an

estimate of *ab*, and repeats the process several times to generate an empirically-derived *ab*

distribution (Preacher & Hayes, 2008). The mean *ab* from this distribution is the point estimate

that is used to calculate a confidence interval. Bootstrapping is superior to other methods of

mediation analyses as bootstrapping does not assume a normal distribution of *ab*. Researchers

suggest that bootstrapping has less susceptibility to Type I error and greater power when

estimating *ab* compared to traditional mediation tests (Hayes, 2009; Preacher & Hayes, 2008).

CHAPTER 4


**Results**

**Sample Characteristics**

*Religious preference and religiosity*

The religiosity of the sample was examined using the Duke University Religion Index (DUREL) by comparing students who identified as Seventh-Day Adventists (SDA) with those who identified with another religion (see Figure 3). Specifically, there was a significant difference between the mean religiosity scores for those who identified as SDA and those who did not identify. The DUREL scores for SDA students ($M = 28.03$, $SD = 5.33$) were significantly higher than the DUREL scores for students who did not identify as SDA ($M = 25.38$, $SD = 5.82$), $t(120) = 2.61$, $p < .05$, Cohen's $d = .60$. About 5.37% of the variance in DUREL scores was explained by religious preference, which is a meaningful but small effect size.


*Religious Preference and Religious Doubt*

SDA students did not differ in levels of overall religious doubt compared to students who did not identify as SDA. However, SDA students reported significantly lower scores on the emphasis subscale, which measures how strongly a student emphasizes their religion over other perspectives (see Figure 4). The emphasis subscale scores for SDA students ($M = 4.97$, $SD = 1.88$) were significantly lower than the scores for students with other religious preferences ($M = 6.08$, $SD = 1.79$), $t(118) = -2.62$, $p < .05$, Cohen's $d = .60$. Students of other religious preferences may emphasize their religion over other perspectives more than SDA students, which leads to

fewer experiences of religious doubt. About 5.50% of the variance in Emphasis subscale scores was explained by religious preference, which is a meaningful but small effect size.

*Religious Preference and Study Variables*

There were no significant differences between SDA students and those with other religious preferences in their scores on identity commitment (COM), in-depth exploration (EXP), reconsideration of commitment (ROC), emotional well-being (EWB), social well-being (SWB), psychological well-being (PWB), self-reported health (SRH), quest religious orientation (QRO), overall religious doubt scale (RDS), Experiences subscale of RDS, and Pressure subscale of RDS, $p$s > .05.

*Effect of Age*

There was a small but positive correlation between age and reconsideration of commitment (ROC) such that as age increased, ROC also increased, $r = .19$, $p < .05$. In contrast, age was not correlated with any other study variables, such as identity commitment (COM), in-depth exploration (EXP), emotional well-being (EWB), social well-being (SWB), psychological well-being (PWB), self-reported health (SRH), quest religious orientation (QRO), religious doubt scale (RDS), and religiosity index (DUREL), $p$s > .05.

*Effect of Gender*

There was a significant difference in the mean social well-being (SWB) scores between male-identified and female-identified students (see Figure 5). The SWB scores for male students ($M = 19.71$, $SD = 5.56$) were significantly higher than the SWB scores for female students ($M =$

16.51, $SD = 5.30$), $t(115) = -2.76$, $p < .05$, Cohen's $d = .59$. About 6.21% of the variance in SWB scores was explained by gender, which is a meaningful but small effect size.

There was a significant difference between the mean psychological well-being (PWB) scores for those who identified as males and those who identified as female (see Figure 6). The PWB scores for male students ($M = 28.03$, $SD = 5.33$) were significantly higher than the PWB scores for female students ($M = 25.38$, $SD = 5.82$), $t(115) = -2.20$, $p < .05$, Cohen's $d = .47$. About 4.04% of the variance in PWB scores was explained by gender, which is a meaningful but small effect size.

There was a significant difference between the mean self-reported health (SRH) scores for those who identified as males and those who identified as female (see Figure 7). The SRH scores for male students ($M = 7.43$, $SD = 2.22$) were significantly higher than the SRH scores for female students ($M = 6.30$, $SD = 2.25$), $t(118) = -2.40$, $p < .05$, Cohen's $d = .51$. About 4.65% of the variance in SRH scores was explained by gender, which is a meaningful but small effect size.

There were no significant differences between male students and female students among all other study variables, such as emotional well-being (EWB), identity commitment (COM), in-depth exploration (EXP), reconsideration of commitment (ROC), quest religious orientation (QRO), religious doubt scale (RDS), and religiosity index (DUREL), $p$s > .05.

**Primary Analyses**

*Measurement Model*

Table 2 summarizes the correlations, means, and standard deviations of all variables of interest. Regarding goodness-of-fit, the measurement model (i.e., confirmatory factor analysis of well-being) fit the data well according to the criterion recommended by Kline (2005), Yuan-

Bentler scaled $\chi^2(2) = 0.302$, $p > .85$; CFI = 1.000; Non-robust SRMR = .007; RMSEA = .000, (90% CI[.000, .095]). In addition, the standardized residuals were below |.10|, suggesting good model fit.

Table 3 summarizes the factor loadings of the measurement model (i.e., emotional well-being, social well-being, psychological well-being, and self-reported health). In general, an increase in well-being (WB) was significantly associated with an increase in emotional well-being (EWB), social well-being (SWB), psychological well-being (PWB), and self-reported health (SRH; see Figure 8). The WB factor explained 72.3%, 49.3%, 78.5%, and 35.7% of the variance in EWB, SWB, PWB, and SRH, respectively.

### Full Structural Model

The structural model predicting the well-being (WB) factor from identity commitment (COM), in-depth exploration (EXP), and reconsideration of commitment (ROC) through the indirect effect of quest (QRO) and religious doubt (RDS) fit the data well, Yuan-Bentler scaled $\chi^2(17) = 10.79$, $p > .87$; Non-robust CFI = 1.000; Non-robust SRMR = .024; RMSEA = .000 (90% CI[.00, .04]). The standardized residuals were below |.10|, suggesting good model fit. Figure 9 summarizes the path coefficients and factor loadings of the full structural model. The factor loadings of the full structural model did not differ much from the measurement model.

### Hypotheses

The total effects of identity commitment (COM), in-depth exploration (EXP), and reconsideration of commitment (ROC) on the well-being (WB) factor were examined to determine which indirect effects to test. Contrary to expectations, COM, EXP, and ROC did not

significantly predict WB, $p$s > .05. All indirect effects were tested to explore whether indirect effects were small or approached significance.

*Hypothesis 1.* The hypothesis that greater identity commitment will predict greater well-being through the indirect effect of quest was not supported. Quest did not significantly mediate the relationship between identity commitment and the well-being factor, $a_1b_1 = -.02$, 95% CI [-.03, .08].

*Hypothesis 2.* The hypothesis that lower identity commitment will predict lower well-being through the indirect effect of religious doubt was not supported. Religious doubt did not significantly mediate the relationship between identity commitment and the well-being factor, $a_2b_2 = .10$, 95% CI [-.02, .05].

*Hypothesis 3.* As noted previously, the hypothesis that greater in-depth exploration will predict greater well-being through the indirect effect of quest was not supported. Quest did not significantly mediate the relationship between in-depth exploration and well-being, $a_3b_1 = .03$, 95% CI [-.02, .09].

*Hypothesis 4.* Similarly, the hypothesis that lower in-depth exploration will predict lower well-being through the indirect effect of religious doubt was not supported. Religious doubt did not significantly mediate the relationship between in-depth exploration and well-being, $a_4b_2 = .01$, 95% CI [-.19, -.01].

*Hypothesis 5.* Although the total effect of reconsideration of commitment (ROC) on well-being (WB) was not significant, the direct effect of ROC on WB was significant, $p < .05$. Similarly, the direct effect of ROC on quest (QRO) and religious doubt (RDS) was significant, $p$s < .05. As a result, the indirect effects through QRO and RDS were examined. However, the hypothesis that greater ROC will predict lower WB through the indirect effect of QRO was not

supported. QRO did not significantly mediate the relationship between ROC and WB, $a_5b_1 = .03$, 95% CI [-.08, .25].

*Hypothesis 6.* The hypothesis that greater reconsideration of commitment will predict lower well-being through the indirect effect of RDS was supported. As ROC increased by one standard deviation, WB decreased by 0.09 standard deviations through the effect of RDS, $a_6b_2 = -.09$, 95% CI [-0.35, -0.04].

*Effect Sizes*. Regarding the full structural model, the well-being (WB) factor explained 73.1%, 50.1%, 77.0%, and 35.8% of the variance in emotional well-being (EWB), social well-being (SWB), psychological well-being (PWB), and self-reported health (SRH), respectively. The optimal linear combination of commitment (COM), in-depth exploration (EXP), and reconsideration of commitment (ROC) accounted for 21.6% of the variance in quest (QRO). The optimal linear combination of COM, EXP, and ROC accounted for 47.6% of the variance in religious doubt (RDS). As expected, the correlation between COM and EXP was positive ($r = .24$), suggesting convergent validity. EXP and ROC were also positively correlated ($r = .20$), which suggests convergent validity. COM and ROC were negatively correlated ($r = -.40$), suggesting moderately strong inverse convergent validity (see Table 2).

**Post hoc Analyses**

***Effect of Quest on Well-Being through the Indirect Effect of Religious Doubt***

A post hoc analysis was conducted to examine whether religious doubt mediated the relationship between quest and well-being. The effect of quest on well-being through the indirect effect of religious doubt was small but significant, $a_7b_2 = -.07$, 95% CI [-.15, -.01]. As quest

increased by one standard deviation, well-being decreased by 0.07 standard deviations through the indirect effect of religious doubt.

*Total Mediation Effect of Quest and Religious Doubt*

A post hoc analysis was conducted to examine whether the effects of quest and religious doubt together mediated the relationship between commitment (COM) and well-being (WB); in-depth exploration (EXP) and WB; and reconsideration of commitment (ROC) and WB, respectively.

The effect of COM on WB through the combined indirect effects of quest and religious doubt was not significant, $p > .05$. However, the combined indirect effects of quest and religious doubt on the relationship between COM and WB approached significance, $a_1a_7b_2 = .01$, 95% CI [-.05, .00].

The effect of EXP on WB through the combined indirect effects of quest and religious doubt was not significant, $p > .05$. However, the combined indirect effects of quest and religious doubt on the relationship between EXP and WB approached significance, $a_3a_7b_2 = -.02$, 95% CI [-.04, .00].

The effect of ROC on WB through the total indirect effects of quest and religious doubt was significant and small, $a_5a_7b_2 = -.02$, 95% CI [-.13, -.01]. As ROC increased by one standard deviation, WB decreased by .02 standard deviations through the combined indirect effects of quest and religious doubt.

### *Effect of Quest and Religious Doubt on Overall Well-Being*

A 2 × 2 (Quest [Low, High] × Religious Doubt [Low, High]) between-subjects MANOVA was used to examine the effect of quest and religious doubt on students' overall well-being scores. This exploratory analysis was conducted for two reasons. First, the primary analysis may have insufficient statistical power to detect significant effects that result in Type II error due to small sample size. Conducting a more robust analysis may improve power and increase the chance of detecting a truly significant effect. Second, the effect of quest and religious doubt on well-being may differ based on the particular aspect of well-being.

Well-being (WB) consisted of the average scores for emotional well-being (EWB), social well-being (SWB), psychological well-being (PWB), and self-reported health (SRH), respectively. Students whose quest scores were below the average score (65.06) were categorized as low questers and those whose scores were above the average were categorized as high questers. Similarly, students who scored below average (36.48) on the religious doubt scale (RDS) were grouped together in the "low religious doubt" group and those who scored above average were grouped together in the "high religious doubt." The assumptions of MANOVA (i.e., multivariate normality, linearity, and homogeneity of regression) were tested and not violated. In addition, there were no significant outliers or issues with multicollinearity. Lastly, the homogeneity of variance-covariance matrices was not violated and cell sizes were about equal.

Results of the MANOVA are summarized in Table 4. The effect of quest on WB scores was not significant ($p > .05$, partial $\eta^2 = .019$). However, the effect of religious doubt on well-being scores was significant, $F(4, 100) = 4.033$, Wilks's Lambda $= 0.861$, $p < .05$, partial $\eta^2 =$

.139. There was no significant interaction effect of quest and religious doubt on WB scores ($p >$ .05, partial $\eta^2 = .037$).

To compare the differences in well-being scores between students in the "low religious doubt" group and "high religious doubt" group, a post hoc analysis was conducted, specifically a Roy-Bargmann Stepdown analysis due to the high correlations between well-being subscale scores (see Table 2). A Bonferroni correction for Type I error was used and α was set to 0.01 for both the univariate ANOVA and subsequent univariate ANCOVAs. Each of the well-being subscales was ranked in the following order: EWB, SWB, PWB, and SRH. Results of the stepdown analysis are summarized in Table 5. As expected, a univariate ANOVA predicting EWB from religious doubt was statistically significant, $F(1, 107) = 13.54$, $p < .001$, partial $\eta^2 = .112$. Specifically, students in the "high religious doubt" group ($M = 4.08$, $SD = 0.95$) had significantly lower scores on EWB compared to students in the "low religious doubt" group ($M = 4.81$, $SD = 1.03$). SWB, PWB, and SRH were not significantly predicted by religious doubt ($ps > .01$, partial $\eta^2$s $< .022$).

CHAPTER 5

**Discussion**

**Identity and Well-Being**

The current study aims to examine how identity commitment, in-depth exploration, and reconsideration of commitment are related to well-being and whether quest or religious doubt explains why these relationships exist. In contrast to previous literature establishing an association between identity and well-being, the current study suggested no relationship between well-being and both religious commitment and religious in-depth exploration. One reason may be that particular identity domains may impact well-being more than other domains. For example, most studies on identity have examined the well-being of emerging and young adults within the ideological domain, such as commitment to education or occupation, and interpersonal domain, such as commitment to a particular relationship. Research suggests that high identity commitment, high in-depth exploration, and low reconsideration of commitment predicted greater self-esteem and satisfaction with life among Japanese emerging adults (Sugimura et al., 2015) and greater well-being among European emerging adults, respectively (Karaś et al., 2015).

Contrary to research that reconsideration of commitment predicts lower well-being, the current study demonstrated that reconsidering one's commitments predicted greater well-being. This finding contrasts other studies of identity domains among adolescents and emerging adults in both the U.S. and various European countries (Afifi Soweid et al., 2004; Beyers & Luyckx, 2016; Crocetti et al., 2008; Karaś et al., 2015; Puffer et al., 2008; Ritchie et al., 2013; Sugimura et al., 2015). One reason might be that reconsidering commitments that are not helpful may lead individuals to transition out of or to another religion that is more compatible with their views. As

36

a result, these Christian college students may begin the process of letting go of their previous dissatisfactory commitments and orient toward new commitments that provide them with a greater sense of security, confidence, and comfort (Crocetti, 2017).

It may be important to note that little research has explored the religious domain of identity as well as the influence of the religious domain on well-being. One study by Iannello and colleagues (2017) explored the role of the religious domain of identity on empathy whereas another study specifically examined the influence of multiple social identities (i.e., ethnic, familial, and religious identity) on self-esteem among European adolescents (Dimitrova et al., 2018). Due to limited studies on religious commitment and exploration, it may be unclear how strongly the religious domain of identity influences emotional, social, and psychological functioning.

Although the religious domain may not strongly predict overall well-being, another explanation for why religious identity did not predict well-being may be that religious phenomena occur across various identity domains, which may result in difficulty with separating one's sense of commitment to work or relationships independent of religion. For instance, an individual's religious identity may include a sense of security and self-confidence due to religious beliefs and teachings yet express challenges with security related to members of a congregation. Similarly, an individual may be more "spiritual but not religious" and try to learn more about his personal relationship with God but have little desire to explore the teachings of his church. The overlap between religiosity and spirituality may influence both how one perceives religion and integrates religious aspects into one's education, work, relationships, culture, and other identity domains.

Results of the current study are consistent with the finding that religious doubt influences both mental and physical health (Krause & Ellison, 2009). Older religious adults who experienced frequent religious doubts and ineffective coping of doubts also reported having poor health, perceiving their health to be poorer compared to peers, and that their health was worse in the past year. Although college-aged students may experience and cope with religious doubts differently compared to older adults, rumination and frequent experiences of doubt may generally produce experiences of depression, anxiety, anger, feelings of loneliness, and low satisfaction in life (Exline et al., 2014; Krause & Hayward, 2012). These symptoms associated with religious doubt may be due to an inability to resolve or cope with frequent rumination and worrying about religious doubt, which may negatively impact an individual's well-being. This is consistent with the significant negative association between reconsideration of commitment and well-being. Despite strong religious commitments and exploration of commitments, frequent negative experiences with religious doubt often produce negative health outcomes.

The results of the current study were mixed in support of the study hypotheses that greater religious commitment, greater in-depth exploration, and lower reconsideration of commitment would predict greater well-being scores through the indirect effects of quest and religious doubt. Although the quest and religious doubt did not significantly mediate the relationship between identity dimensions and well-being, the hypothesis that greater reconsideration of commitment would predict lower well-being scores through the indirect effects of quest and religious doubt individually was partially supported.

**Role of Quest**

The hypotheses that greater identity commitment, greater in-depth exploration, and lower reconsideration of commitment would predict greater well-being through the indirect effect of quest were not supported. Although these identity dimensions may be related to well-being, quest did not explain any variance in well-being. A quest approach to existential questions and religious doubt may not necessarily improve or reduce well-being among Christian college students. Regardless of the strength of commitments or depth of exploration, Christian college students' well-being are unaffected by whether they assume a quest stance. The lack of relationship between quest and well-being in the current study is similar to research by Maltby, Lewis, and Day (1999) who found that quest was not significantly related to depression, anxiety, or self-esteem among Christian undergraduate students in the United Kingdom. However, other studies indicate that quest is associated with greater stress, greater depressive symptoms, and lower self-esteem among Christian college populations in the U.S. (Cook et al., 2014; Genia, 1996). Similarly, college students from various countries including Slovenia, Bosnia and Herzegovina, Serbia, the United States of America, and Japan, who reported higher quest scores also exhibited higher levels of negative affect, such as worry and sadness (Lavrič & Flere, 2008).

The complexity of quest may indicate suggest why it may be beneficial for some religious individuals but not others. Watson, Morris, and Hood (1992) noted the importance of perceptions and cultural beliefs about quest for particular religious subgroups may lead to different consequences. For example, quest may hold some positive value for intrinsic religious individuals but have negative associations for extrinsic religious groups. The distinction between different types of quest (e.g., "hard" and "soft" quest) further highlights how quest functions differently depending on how an individual conceptualizes and applies a quest orientation in life

(Crosby, 2013). For instance, individuals who operate under "hard" quest may or may not grow closer to their religious community and its currently held beliefs, leading potentially to greater anxiety and lower well-being. In contrast, "soft" questers may value religious questions and doubt while still maintaining a commitment to a religious worldview and community. Lastly, the current study suggests that religious doubt may indirectly mediate the relationship between quest and well-being. Quest may not directly affect well-being yet still indirectly influence well-being due to frequent experiences of religious doubt associated with quest.

The effect of quest on well-being among Christian college students may be explained by another phenomenon besides the complexity qualities unique to quest. Literature on religious coping and health outcomes highlight the idea that negative health outcomes may be easier to detect. Specifically, Pargament and colleagues (2000) suggested that while negative religious coping strategies may predict lower physical health among adults, engaging in positive religious coping strategies may not necessarily produce greater physical health. As such, the current study failed to demonstrate a positive or negative relationship between quest and well-being. Adopting a quest orientation alone may not sufficiently address the negative thoughts and emotional experiences associated with religious doubt.

**Role of Religious Doubt**

The hypotheses that lower commitment and lower in-depth exploration would predict lower well-being through the indirect effect of religious doubt were not supported. Religious doubt did not significantly mediate the relationship between these two identity dimensions and well-being. Though lower commitment predicts greater religious doubt, the latter is not the primary explanation for the relationship between commitment and well-being. Similarly, in-

40

depth exploration does not seem to be related to religious doubt or well-being among Christian college students. These results suggest that commitment and in-depth exploration have no effect on well-being based solely on the role of religious doubt. Whether students have deep commitments or engage in regular exploration of such commitments has little impact on their overall emotional, psychological, and social well-being due to doubt.

Although a quest orientation and religious doubt both independently have little to no influence on the relationship between identity and well-being, the current study suggests that the effect of identity on well-being may be mediated by the combined effects of both quest and religious doubt. As mentioned previously regarding the complexity of quest, individuals who are more quest oriented may engage in different religious behaviors depending on the strength of their commitments to a religious community and emphasis on confronting existential questions. However, future research may need to replicate the findings of the current study before making strong claims.

Contrary to the role of religious doubt in religious commitments and in-depth exploration, the hypothesis that greater reconsideration of commitment would predict lower well-being through the indirect effect of religious doubt was supported. Students who frequently reconsidered their commitments were more likely to report lower well-being due to more frequent experiences of religious doubt. Although ruminating on whether to continue maintaining religious commitments may directly reduce well-being, religious doubt explains why such a relationship exists. This finding is consistent with research by Patrick and Henrie (2015) who found that adults who had experienced fewer religious doubt during the bereavement of a grandparent also experienced greater spiritual growth and less current grief. Although the current study did not examine bereavement or grief necessarily, religious doubt may prolong

grief and, thus, negatively affect well-being. Experiences of religious doubt due to frequent reconsideration of commitments may parallel ruminative exploration, which may result in various mental health issues such as greater depressive and anxiety symptoms and lower self-esteem (Luyckx et al., 2008). Thus, students who frequently reconsider their commitments may more often experience religious doubt and ruminate on such doubts without necessarily working through the doubts or addressing mental health symptoms due to doubt.

**Limitations**

The current study has some limitations in terms of design and statistical analyses. One limitation regarding design is specific coping behaviors that college students may use to address religious doubts were not specifically examined. For example, a student may practice healthy religious coping behavior such as seeking spiritual support, which may predict positive health outcomes; in contrast, a student may express dissatisfaction with her relationship with God and frequently lament to God, which may result in more negative health consequences (Pargament, 1997; Pargament et al., 2011). Understanding how individuals address religious doubt may inform recommendations for maintaining overall well-being through healthy coping behaviors. Another limitation of the research design is that the current study examined cross-sectional and correlational data. Few studies, if any, examine quest and health outcomes over time. The findings of the current study cannot be used to explain how quest and religious doubt influence the relationship between identity and well-being over time. Future studies may use experimental designs to examine whether particular programs or interventions to address religious doubt can help buffer their negative effects on well-being.

Another limitation is that the sample size of the current study may be too small to detect significant differences among variables whose effect sizes range between small to moderate (Gauthier et al., 2006; Henrie & Patrick, 2014; Puffer et al., 2008). It may be possible that the sample size of this study did not have enough statistical power given that study variables with small to moderate effect sizes often require relatively large samples (Iacobuccii, 2010; McCallum et al., 1996). Future studies may benefit from larger sample sizes to have more statistical power. Further research may also explore religious doubts in students at public colleges or religious students who may not identify as Christian. Collaborating with churches to recruit college students may also help collect a more diverse sample.

**Implications**

The significance of the current study may further clarify the role of religious doubt on religious identity and well-being. Emerging adults may be exposed to a variety of experiences that may lead one to question religion, such as whether God exists due to suffering in the world or whether religion makes people good. These types of difficult questions may be re-experienced by religious individuals, especially if such doubts are not adequately addressed during the identity development process. For example, doubts may be more salient in individuals who experience trauma or other emotionally challenging events. Krause and Hayward (2012) found that greater exposure to traumatic events predicted a greater frequency of religious doubt among older adults who exhibited less humility than their humbler peers. Similarly, research shows that anxiety is associated with greater struggles with religious doubt over time, suggesting that individuals are more susceptible to doubt when they are also experiencing anxiety (Wilt et al.,

2017). The inability to deal with doubt particularly when it is more conspicuous may not only reduce well-being but also undermine one's worldview and religious commitment.

Implications of the current study may inform psychotherapists and clergy on how best to approach emerging adults regarding their religious doubts. For example, Psychotherapists may discuss with clients openly and assist them with working through doubts during treatment. Psychotherapists can learn more about a client's cultural and diversity factors to assess a client's relationship with religion and the meaning of religious doubts. By understanding the function of religious doubts, therapists may be better equipped with challenging unhelpful religious doubts that contribute to depressive and anxiety symptoms. Doubts may be perceived as negative unhelpful thoughts, which would allow clients to observe their doubts and challenge them directly using a thought record. Therapists may also consider making appropriate referrals for clients who may be interested in conversing with religious leaders. Giving clients the opportunity to work through doubt due to grief, trauma, or other difficult life events may not only strengthen the therapeutic relationship but also improve their well-being.

One important reason for psychologists as well as clergy to recognize the influence of adaptive and maladaptive religious doubt is that psychologists may view religion, in general, as maladaptive. Soheilian and colleagues (2014) found that therapists often focus more on issues related to race, gender, and ethnicity rather than issues of religiosity and spirituality. Similarly, although a survey of psychologists recognized a positive relationship between religion and mental health, they were still less religious than the clients for whom they provide treatment (Delaney et al., 2007). These findings reflect a professional culture that is potentially biased and prejudiced against religion and spirituality. Thus, healthcare professionals who have difficulty with the topic itself could possibly experience greater difficulty treating clients who also

experience religious doubt. Psychologists, clergy, and educators who view doubt as something to be avoided or ignored may overlook opportunities for emerging adults to adequately work through religious doubt to improve well-being.

In addition to psychotherapists working directly with doubts to reduce mental health symptoms, clergy may learn more ways to integrate psychology with scripture and religious teachings. Specifically, clergy may also recognize the language and model of cognitive-behavioral therapy when discussing religious doubts. For example, religious leaders may approach young adults by acknowledging that thoughts are not necessarily true and may be tested before believing in them. Clergy can empathize with individuals who experience religious doubt and inform them that doubts are thoughts that can be challenged with evidence from scripture, teachings, and personal experiences. Evidence to challenge doubts may include illustrating how important biblical figures and religious leaders navigated through grief, trauma, anxiety, and other difficult experiences. Clergy may also consult psychologists or recommend therapy for those who may be concerned with an individual's well-being.

## Conclusion

The findings of the current study support Erikson's theory of psychosocial development that being unable to make commitments and explore one's identity results in crises where the individual must respond to discomforting experiences adequately to maintain well-being. Having an identity with strong commitments and a space to explore such commitments may improve well-being. Inadequately dealing with religious doubts creates dissonance, which may reduce well-being and negatively impact one's religious identity. Experiencing conflicting thoughts and beliefs about one's religion without adequately addressing such concerns may lead an individual

to ruminate and fail to explore a satisfactory religious or spiritual identity. The importance of teaching individuals how to respond to religious doubt may both facilitate religious identity development and increase well-being. Being able to help individuals manage religious doubts, particularly during stressful times, may promote their religious identity development and overall health.

# References

Acredolo, C, & O'Connor, J. (1991). On the difficulty of detecting cognitive uncertainty. *Human Development*, *34*, 204–223.

Adams, G. R., Bennion, L., & Huh, K. (1989). The objective measure of ego identity status: A reference manual. Unpublished manuscript, University of Guelph, Canada.

Afifi Soweid, R. A., Khawaja, M., & Salem, M. T. (2004). Religious identity and smoking behavior among adolescents: Evidence from entering students at the American University of Beirut. *Health Communication*, *16*(1), 47-62. DOI: 10.1207/S15327027HC1601_4

Allport, G. W. (1957). *The individual and his religion: A psychological interpretation*. New York: Macmillan.

Allport, G. W., & Ross, J. M. (1967). Personal religious orientation and prejudice. Journal of Personality and Social Psychology, *5*(4), 432–443. https://doi.org/10.1037/h0021212

Altemeyer, B. (1988). *Enemies of freedom: Understanding right-wing authoritarianism*. San Francisco: Jossey-Bass.

Arnett, J. J. (2007). Emerging adulthood: What is it, and what is it good for? *Child Development Perspectives*, *1*, 68–73. doi:10.1111/j.1750-8606.2007.00016.x

Arnett, J. J., Žukauskienė, R., & Sugimura, K. (2014). The new life stage of emerging adulthood at ages 18–29 years: Implications for mental health. *Lancet Psychiatry*, *1*, 569–576. https://doi.org/10.1016/S2215-0366(14)00080-7

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological bulletin*, *103*(3), 411.

Aristotle. (4th Century BCE). Nicomachean ethics (T. Irwin, Trans.). Indianapolis, IN: Hackett.

Batson, C. D., & Schoenrade, P. (1991). Measuring religion as quest: Reliability concerns. *Journal for the Scientific Study of Religion*, *30*, 430–447.

Batson, C. D., Schoenrade, P. A., & Ventis, W. L. (1993). *Religion and the individual: A social-psychological perspective*. New York: Oxford University Press.

Beck, R., Baker, L., Robbins, M., & Dow, S. (2001). A second look at Quest motivation: Is Quest unidimensional or multidimensional? *Journal of Psychology and Theology*, *29*, 148–157.

Bennion, L. & Adams, G. R. (1986). A revision of the Extended Version of the Objective Measure of Ego Identity Status: An identity instrument for use with late adolescents. *Journal of Adolescent Research*, *1*(2), 183–197. doi: 10.1177/074355488612005

Bentler, P. M. (1985-2017). EQS 6.3 for Windows [Computer software]. Encino, CA: Multivariate software.

Bertram-Troost, G. D., de Roos, S. A., & Miedema, S. (2007). Religious identity development of adolescents in Christian secondary schools: Effects of school and religious backgrounds of adolescents and their parents. *Religious Education*, *102*(2), 132–150. https://doi.org/10.1080/00344080701285402

Beyers, W., & Luyckx, K. (2016). Ruminative exploration and reconsideration of commitment as risk factors for suboptimal identity development in adolescence and emerging adulthood. *Journal of Adolescence*, *47*, 169–178. https://doi.org/10.1016/j.adolescence.2015.10.018

Burris, C. T., Jackson, L. M., Tarpley, R. W., & Smith, G. J. (1996). Religion as quest: The self-directed pursuit of meaning. *Personality and Social Psychology Bulletin*, *22*, 1068–1076.

Chung, J. M., Robins, R. W., Trzesniewski, K. H., Noftle, E. E., Roberts, B. W., & Widaman, K. F. (2014). Continuity and change in self-esteem during emerging adulthood. *Journal of Personality and Social Psychology*, *106*(3), 469–483. http://doi.org/10.1037/a0035135

Cook, K. V., Kimball, C. N., Leonard, K. C., & Boyatzis, C. J. (2014). The complexity of quest in emerging adults' religiosity, well-being, and identity. *Journal for the Scientific Study of Religion*, *53*, 73–89. https://doi.org/10.1111/jssr.12086

Crocetti, E. (2017). Identity formation in adolescence: The dynamic of forming and consolidating identity commitments. *Child Development Perspectives*, *11*(2), 145–150. https://doi.org/10.1111/cdep.12226

Crocetti, E., Rubini, M., Luyckx, K., & Meeus, W. (2008). Identity formation in early and middle adolescents from various ethnic groups: From three dimensions to five statuses. *Journal of Youth and Adolescence*, *37*, 983–996. https://doi.org/10.1007/s10964-007-9222-2

Crocetti, E., Rubini, M., & Meeus, W. (2008). Capturing the dynamics of identity formation in various ethnic groups: Development and validation of a three-dimensional model. *Journal of Adolescence*, *31*(2), 207–222. https://doi.org/10.1016/j.adolescence.2007.09.002

Crocetti, E., Schwartz, S. J., Fermani, A., & Meeus, W. (2010). The Utrecht-Management of Identity Commitments Scale (U-MICS) Italian validation and cross-national comparisons. *European Journal of Psychological Assessment*, *26*(3), 172–186. https://doi.org/10.1027/1015-5759/a000024

Crosby, J. W. (2013). Making sense of quest's multidimensionality: The search for a higher order structure. *Journal of Psychology & Theology*, *41*(3), 213–228.

De Haan, L. G., & Schulenberg, J. (1997). The covariation of religion and politics during the transition to young adulthood: Challenging global identity assumptions. *Journal of Adolescence*, *20*(5), 537–552. https://doi.org/10.1006/jado.1997.0108

Delaney, H. D., Miller, W. R., & Bisonó, A. M. (2007). Religiosity and spirituality among psychologists: A survey of clinician members of the American Psychological Association. *Professional Psychology Research and Practice, 38,* 538–546.

Diener, E. (2006). Guidelines for national indicators of subjective well-being and ill-being. *Journal of Happiness Studies*, *7*, 397–404.

Dimitrova, R., Musso, P., Solcova, I. P., Stefenel, D., Uka, F., Zahaj, S., … & Jordanov, E. (2018). Multiple social identities in relation to self-esteem of adolescents in post-communist Albania, Bulgaria, the Czech Republic, Kosovo, and Romania. In: N. Lebedeva, R. Dimitrova, J. Berry (Eds.), *Changing values and identities in the post-communist world* (pp. 225–241). Springer, Cham.

Enders, C. K. (2010). *Applied missing data analysis*. Guilford Press.

Erikson, E. H. (Ed.). (1963). *Youth: Change and challenge*. Basic books.

Exline, J. J., Pargament, K. I., Grubbs, J. B., & Yali, A. M. (2014). The religious and spiritual struggles scale: Development and initial validation. *Psychology of Religion and Spirituality*, *6*(3), 208–222. https://doi.org/10.1037/a0036465

Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford, CA: Stanford University Press.

Fulton, A. S. (1997). Identity Status, Religious Orientation, and Prejudice. *Journal of Youth and Adolescence*, *26*(1), 1–11.

Galek, K., Krause, N., Ellison, C. G., Kudler, T., & Flannelly, K. J. (2007). Religious doubt and

    mental health across the lifespan. *Journal of Adult Development*, *14*, 16–25.

    https://doi.org/10.1007/s10804-007-9027-2

Gauthier, K. J., Christopher, A. N., Walter, M. I., Mourad, R., & Marek, P. (2006). Religiosity,

    religious doubt, and the need for cognition: Their interactive relationship with life

    satisfaction. *Journal of Happiness Studies*, *7*(2), 139–154.

    https://doi.org/10.1007/s10902-005-1916-0

Genia, V. (1996). I, E, quest, and fundamentalism as predictors of psychological and spiritual

    well-being. *Journal for the Scientific Study of Religion*, *3*(5), 56–65.

Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new

    millennium. *Communication Monographs*, *76*, 408–420.

Hayward, R. D., & Krause, N. (2014). How religious doubt moderates depression symptoms

    following older adult bereavement. *Death studies*, *38*(4), 217–223.

Henrie, J., & Patrick, J. H. (2014). Religiousness, religious doubt, and death anxiety.

    *International Journal of Aging & Human Development*, *78*(3), 203–227.

    https://doi.org/10.2190/AG.78.3.a

Hunsberger, B., Alisat, S., Pancer, S. M., & Pratt, M. (1996). Religious fundamentalism and

    religious doubts: Content, connections, and complexity of thinking. *The International

    Journal for the Psychology of Religion*, *6*, 201–220.

Hunsberger, B., McKenzie, B., Pratt, M., & Pancer, S. M. (1993). Religious doubt: A social

    psychological analysis. *Research in the Social Scientific Study of Religion*, *5*, 27–51.

Hunsberger, B., Pratt, M., & Pancer, S. M. (2001). Adolescent identity formation: Religious exploration and commitment. *Identity: An International Journal of Theory and Research*, *1*(4), 376–386.

Hunsberger, B., Pratt, M., & Pancer, S. M. (2002). A longitudinal study of religious doubts in high school and beyond: Relationships, stability, and searching for answers. *Journal for the Scientific Study of Religion*, *41*(2), 255–266. https://doi.org/10.1111/1468-5906.00115

Iacobucci, D. (2010). Structural equations modeling: Fit indices, sample size, and advanced topics. *Journal of Consumer Psychology*, *20*(1), 90–98.

Iannello, N. M., Hardy, S. A., Musso, P., Coco, A. Lo, & Inguglia, C. (2017). Spirituality and ethnocultural empathy among Italian adolescents: The mediating role of religious identity formation processes. *Psychology of Religion and Spirituality*, *11*(1), 32–41. https://doi.org/10.1037/rel0000155

IBM Corp. (2017). IBM SPSS Statistics for Windows, Version 25.0. Armonk, NY: IBM Corp.

Ingersoll-Dayton, B., Krause, N., & Morgan, D. (2002). Religious trajectories and transitions over the life course. *International Journal of Aging & Human Development, 55*(1), 51–70. https://doi.org/10.2190/297Q-MRMV-27TE-VLFK

Karaś, D., Cieciuch, J., Negru, O., & Crocetti, E. (2015). Relationships between identity and well-being in Italian, Polish, and Romanian emerging adults. *Social Indicators Research*, *121*(3), 727–743. https://doi.org/10.1007/s11205-014-0668-9

Keyes, C. L. M. (2006). Mental health in adolescence: Is America's youth flourishing? *American Journal of Orthopsychiatry*, *76*, 395–402.

Keyes, C. L. M., Wissing, M., Potgieter, J. P., Temane, M., Kruger, A., & van Rooy, S. (2008). Evaluation of the mental health continuum-short form (MHC-SF) in Setswana-speaking South Africans. *Clinical Psychology and Psychotherapy*, *15*(3), 181–192.

Klaassen, D. W., & McDonald, M. J. (2002). Quest and identity development: Re-examining pathways for existential search. *International Journal for the Psychology of Religion*, *12*(3), 189–200. https://doi.org/10.1207/S15327582IJPR1203_05

Kline, R. B. (2011). Principles and practice of structural equation modeling (3rd ed.). New York: Guilford.

Koenig, H. G., & Büssing, A. (2010). The Duke University Religion Index (DUREL): A five-item measure for use in epidemological studies. *Religions*, *1*(1), 78–85. https://doi.org/10.3390/rel1010078

Kojetin, B. A., McIntosh, D. N., Bridges, R. A., & Spilka, B. (1987) Quest: Constructive search or religious conflict? *Journal for the Scientific Study of Religion*, *26*, 111–115.

Krause, N. (2014). Religious doubt, helping others, and psychological well-being. *Journal of Religion and Health*, *54*(2), 745–758. https://doi.org/10.1007/s10943-014-9977-1

Krause, N., & Ellison, C. G. (2009). The doubting process: A longitudinal study of the precipitants and consequences of religious doubt. *Journal for the Scientific Study of Religion*, *48*(2), 293–312. DOI: 10.1111/j.1468-5906.2009.01448.x

Krause, N., & Hayward, R. D. (2012). Humility, lifetime trauma, and change in religious doubt among older adults. *Journal of Religion and Health*, *51*(4), 1002–1016. https://doi.org/10.1007/s10943-012-9576-y

Krause, N., Ingersoll-Dayton, B., Ellison, C. G., & Wulff, K. M. (1999). Aging, religious doubt, and psychological well-being. *The Gerontologist*, *39*(5), 525–533.

Kroger, J., & Marcia, J. E. (2011). The identity statuses: Origins, meanings, and interpretations. In S. J. Schwartz, K. Luyckx, & V. L. Vignoles (Eds.), *Handbook of Identity Theory and Research* (pp. 31–54). New York: Springer.

Lamers, S. M. A., Westerhof, G. J., Bohlmeijer, E. T., ten Klooster, P. M., & Keyes, C. L. M. (2011). Evaluating the psychometric properties of the Mental Health Continuum-Short Form (MHC-SF). *Journal of Clinical Psychology*, *67*, 99–110.

Lavrič, M., & Flere, S. (2008). The role of culture in the relationship between religiosity and psychological well-being. *Journal of Religion and Health*, *47*(2), 164–175. https://doi.org/10.1007/s10943-008-9168-z

Layton, E., Hardy, S. A., & Dollahite, D. (2012). Religious exploration among highly religious American adolescents. *Identity: An International Journal of Theory and Research*, *12*(2), 157–184. https://doi.org/10.1080/15283488.2012.668728

Llorent, V. J., & Álamo, M. (2018). Utrecht-Management of Identity Commitments Scale: Validation in Spanish university students. *Frontiers in Psychology*, *9*, 1–5. https://doi.org/10.3389/fpsyg.2018.01364

Luyckx, K., Klimstra, T. A., Schwartz, S. J., & Duriez, B. (2013). Personal identity in college and the work context: Developmental trajectories and psychosocial functioning. *European Journal of Personality*, *27*(3), 222–237. https://doi.org/10.1002/per.1903

Luyckx, K., Schwartz, S. J., Berzonsky, M. D., Soenens, B., Vansteenkiste, M., Smits, I., & Goossens, L. (2008). Capturing ruminative exploration: Extending the four-dimensional model of identity formation in late adolescence. *Journal of Research in Personality*, *42*(1), 58–82. https://doi.org./10.1016/j.jrp.2007.04.004

MacCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power analysis and

determination of sample size for covariance structure modeling. *Psychological

methods*, *1*(2), 130–149.

Maltby, J., Lewis, C. A., & Day, L. (1999). Religious orientation and psychological well-being:

The role of the frequency of personal prayer. *British Journal of Health Psychology*, *4*,

363–378.

Marcia, J. E. (1966). Development and validation of ego-identity status. *Journal of Personality

and Social Psychology*, *3*(5), 551.

Marcia, J. E. (1980). *Identity in adolescence*. In Adelson, J. (ed.), Handbook of Adolescent

Psychology. Wiley, New York.

McFarland, S. G. & Warren, J. C. (1992). Religious orientations and selective exposure among

fundamentalists. *Journal for the Scientific Study of Religion*, *31*, 163–174.

Moksnes, U. K., & Espnes, G. A. (2013). Self-esteem and life satisfaction in adolescents-gender

and age as potential moderators. *Quality of Life Research*, *22*(10), 2921–2928.

https://doi.org/10.1007/s11136-013-0427-4

Moulin, D. (2015). Religious identity choices in English secondary schools. *British Educational

Research Journal*, *41*(3), 489–504. https://doi.org/10.1002/berj.3151

Nipkow, K. E., & Schweitzer, F. (1991). Adolescents' justifications for faith or doubt in God: A

study of fulfilled and unfulfilled expectations. *New Directions for Child Development,

52*, 91–100. https://doi.org/10.1002/cd.23219915208

Pargament, K. I. (1997). *The psychology of religion and coping: Theory, research, practice*. New

York: Guilford Press.

Pargament, K., Kennell, J., Hathaway, W., Grevengoed, N., Newman, J., & Jones, W. (1988). Religion and the problem-solving process: Three styles of coping. *Journal for the Scientific Study of Religion, 27*(1), 90–104. https://doi.org/10.2307/1387404

Pargament, K., Koenig, H. G., & Perez, L. (2000). The many methods of religious coping: Development and validation of the RCOPE. *Journal of Clinical Psychology*, *56*, 519–543.

Pargament, K., Feuille, M., & Burdzy, D. (2011). The brief RCOPE: Current psychometric status of a short measure of religious coping. *Religions*, *2* (1), 51–76. https://doi.org/10.3390/rel2010051

Parkerson, G. R., Jr., Broadhead, W. E., & Tse, C. J. (1990). The Duke Health Profile: A 17-Item measure of health and dysfunction. *Medical Care*, *28*(11), 1056–1072. https://doi.org/10.1097/00005650-199011000-00007

Patrick, J. H., & Henrie, J. A. (2015). Religious Doubt and Spiritual Growth Among Adults Bereaved of a Grandparent. *Journal of Religion, Spirituality and Aging*, *27*, 93–107. https://doi.org/10.1080/15528030.2014.971142

Plante, T. G., Vallaeys, C. L., Sherman, A. C., & Wallston, K. A. (2002). The development of a brief version of the Santa Clara Strength of Religious Faith Questionnaire. *Pastoral Psychology*, *50*, 359–368.

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods, 40*(3), 879–891.

Puffer, K. A. (2013). Social personality traits as salient predictors of religious doubt phenomena among undergraduates. *Journal of Psychology and Theology*, *41*(3), 229–241.

Puffer, K. A., Pence, K. G., Graverson, T. M., Wolfe, M., Pate, E., & Clegg, S. (2008). Religious

doubt and identity formation: Salient predictors of adolescent religious doubt. *Journal of*

*Psychology and Theology*, *36*(4), 270–284.

Ritchie, R. A., Meca, A., Madrazo, V. L., Schwartz, S. J., Hardy, S. A., Zamboanga, B. L., …

Lee, R. M. (2013). Identity dimensions and related processes in emerging adulthood:

Helpful or harmful? *Journal of Clinical Psychology*, *69*(4), 415–432.

https://doi.org/10.1002/jclp.219B0

Ryff, C. D., & Singer, B. H. (2008). Know thyself and become what you are: A eudaimonic

approach to psychological well-being. *Journal of Happiness Studies*, *9*, 13–39.

Schwartz, S. J., Zamboanga, B. L., Luyckx, K., Meca, A., & Ritchie, R. A. (2013). Identity in

emerging adulthood: Reviewing the field and looking forward. *Emerging Adulthood,*

*1*(2), 96–113.

Skorikov, V., & Vondracek, F. W. (1998). Vocational identity development: Its relationship to

other identity domains and to overall identity development. *Journal of Career*

*Assessment*, *6*(1), 13–35. https://doi.org/10.1177/106907279800600102

Storch, E. A., Roberti, J. W., Heidgerken, A. D., Storch, J. B., Lewin, A. B., Killiany, E. M., …

Geffken, G. R. (2004). The Duke Religion Index: A psychometric investigation. *Pastoral*

*Psychology*, *53*, 175–181. https://doi.org/10.1023/B:PASP.0000046828.94211.53

Sugimura, K., Niwa, T., Takahashi, A., Sugiura, Y., Jinno, M., & Crocetti, E. (2015). Cultural

self-construction and identity formation in emerging adulthood: A study on Japanese

university students and workers. *Journal of Youth Studies*, *18*(10), 1326–1346.

https://doi.org/10.1080/13676261.2015.1039964

Tillich, P. (1957). *The dynamics of faith*. New York: Harper and Brothers.

Verschueren, M., Rassart, J., Claes, L., Moons, P., & Luyckx, K. (2017). Identity statuses throughout adolescence and emerging adulthood: A large-scale study into gender, age, and contextual differences. *Psychologica Belgica*, *51*(1), 32–42. https://doi.org/10.5334/pb.348

Waterman, A. S. (2008). Reconsidering happiness: A eudaimonist's perspective. *Journal of Positive Psychology*, *3*, 234–252.

Waterman, Alan S., Schwartz, Seth J., Zamboanga, Byron L., Ravert, Russell D., Williams, Michelle K., Agocha, V. Bede, . . . Donnellan, M. Brent. (2010). The Questionnaire for Eudaimonic Well-Being: Psychometric properties, demographic comparisons, and evidence of validity. *The Journal of Positive Psychology*, *5*(1), 41–61. https://doi.org/10.1080/17439760903435208

Williams, J., & MacKinnon, D. P. (2008). Resampling and distribution of the product methods for testing indirect effects in complex models. *Structural Equation Modeling*, *15*(1), 23–51. https://doi.org/10.1080/10705510701758166

Watson, P. J., Morris, R. J., & Hood, R. W., Jr. (1992). Quest and identity within a religious ideological surround. *Journal of Psychology and Theology*, *20*(4), 376–388.

Watson, P. J., Morris, R. J., Hood, R. W., Jr., Miller, L., & Waddell, M. G. (1999). Religion and the experiential system: Relationship of constructive thinking with religious orientation. *International Journal for the Psychology of Religion*, *9*, 195–207.

Williamson, I. T., & Sandage, S. J. (2009). Longitudinal analyses of religious and spiritual development among seminary students. *Mental Health*, *Religion & Culture*, *12*(8), 787–801. https://doi.org/10.1080/13674670902956604

Wilt, J. A., Grubbs, J. B., Lindberg, M. J., Exline, J. J., & Pargament, K. I. (2017). Anxiety

    predicts increases in struggles with religious/spiritual doubt over two weeks, one month,

    and one year. *International Journal for the Psychology of Religion*, *27*(1), 26–34.

    https://doi.org/10.1080/10508619.2015.1098820

Wolf, E. J., Harrington, K. M., Clark, S. L., & Miller, M. W. (2013). Sample size requirements

    for structural equation models: An evaluation of power, bias, and solution propriety.

    *Educational and Psychological Measurement*, *76*(6), 913–934.

    https://doi.org/10.1177/0013164413495237

**Table 1**

*Frequencies of Demographic Background among Sample*

| Variable | Category | *N* (%) |
|---|---|---|
| Gender | Female | 90 (73.8) |
| | Male | 30 (24.6) |
| | Unspecified | 2 (1.6) |
| Ethnicity | Non-Latino White | 55 (45.1) |
| | Latino or Hispanic | 36 (29.5) |
| | Asian American | 17 (13.9) |
| | African American | 11 (9.0) |
| | Pacific Islander | 2 (1.6) |
| | Other | 1 (0.8) |
| Religious Preference | Seventh-Day Adventist | 98 (80.3) |
| | Catholic | 11 (9.0) |
| | Non-denominational | 6 (4.9) |
| | Other | 4 (3.2) |
| | Baptist | 1 (0.8) |
| | Lutheran | 1 (0.8) |
| | Presbyterian | 1 (0.8) |

**Table 2**

*Correlation Matrix among Variables of Interest*

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | *M* | *SD* |
|---|---|---|---|---|---|---|---|---|---|---|
| 1. COM | 1.00 | | | | | | | | 3.69 | 0.82 |
| 2. EXP | .24 | 1.00 | | | | | | | 3.34 | 0.72 |
| 3. ROC | -.40** | .20* | 1.00 | | | | | | 1.93 | 1.02 |
| 4. EWB | .26** | .18 | -.06 | 1.00 | | | | | 4.44 | 1.05 |
| 5. SWB | .24** | .17 | .07 | .61** | 1.00 | | | | 3.34 | 1.11 |
| 6. PWB | .21* | .09 | .03 | .76** | .62** | 1.00 | | | 4.32 | 0.97 |
| 7. SRH | .20* | .13 | -.02 | .49** | .43** | .54** | 1.00 | | 6.53 | 2.30 |
| 8. QRO | -.19* | .29** | .37** | -.00 | -.01 | .04 | -.07 | 1.00 | 5.42 | 1.16 |
| 9. RDS | -.55** | .02 | .56** | -.29** | -.17 | -.15 | -.18 | .41** | 36.48 | 11.13 |

*Note*. COM = Identity Commitment. EXP = In-depth Exploration. ROC = Reconsideration of Commitment. EWB = Emotional Well-Being. SWB = Social Well-Being. PWB = Psychological Well-Being. SRH = Self-Reported Health. QRO = Quest Religious Orientation. RDS = Religious Doubt Scale. *M* = Mean. *SD* = Standard Deviation.

*p* < .05. **p* < .01.

**Table 3**

*Unstandardized and Standardized Factor Loadings for the Measurement Model*

| Indicator | Unstandardized Loadings | *SE* | Standardized Loadings |
|---|---|---|---|
| Social Well-Being | 1.44* | 0.19 | 0.70 |
| Psychological Well-Being | 1.91* | 0.15 | 0.89 |
| Self-Reported Health | 0.51* | 0.07 | 0.60 |
| Emotional Well-Being | 1.00 | -- | 0.85 |

*Note*. *SE* = standard error. Measured variables whose unstandardized loadings are equal to 1.00 were used to set the metric for the Well-Being factor.

*p* < .05.

**Table 4**

*Results of Multivariate Analysis of Variance Predicting Overall Well-Being from Quest and*

*Religious Doubt*

| Source of Variance | Wilks' Lambda | Multivariate $F$ | Partial$\eta^2$ |
|---|---|---|---|
| Quest | 0.981 | 0.479 | .019 |
| Religious Doubt | 0.861 | 4.033* | .139 |
| Quest × Religious Doubt | 0.963 | 0.961 | .037 |

*$p < .05$

**Table 5**

*Results of Roy-Bargmann Stepdown Analysis Predicting Well-Being from Religious Doubt*

| Variable | Univariate $F$ | $df_1$ | $df_2$ | Partial $\eta^2$ |
|---|---|---|---|---|
| Emotional Well-Being | 13.54** | 1 | 107 | .112 |
| Social Well-Being | 0.71 | 1 | 104 | .007 |
| Psychological Well-Being | 0.12 | 1 | 101 | .045 |
| Self-Reported Health | 2.20 | 1 | 100 | .022 |

*Note*. Following the univariate ANOVA predicting emotional well-being from religious doubt, each subsequent univariate ANCOVA controls for the previously tested dependent variable(s). Bonferroni correction for Type I error changes the significance level to $\alpha = .01$. $df_1$ = degrees of freedom between "high religious doubt" group and "low religious doubt" group. $df_2$ = degrees of freedom within groups.

**$p < .01$

**Figure 1**

*Frequencies of Organizational Religious Activity among Undergraduate Students*
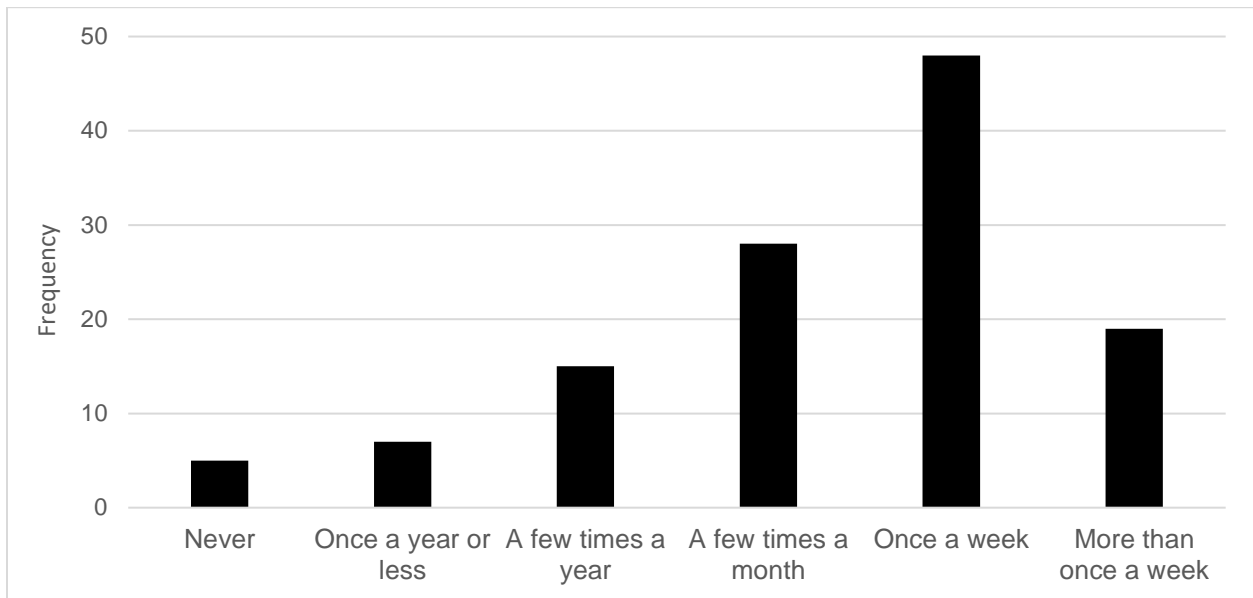
**Figure 2**

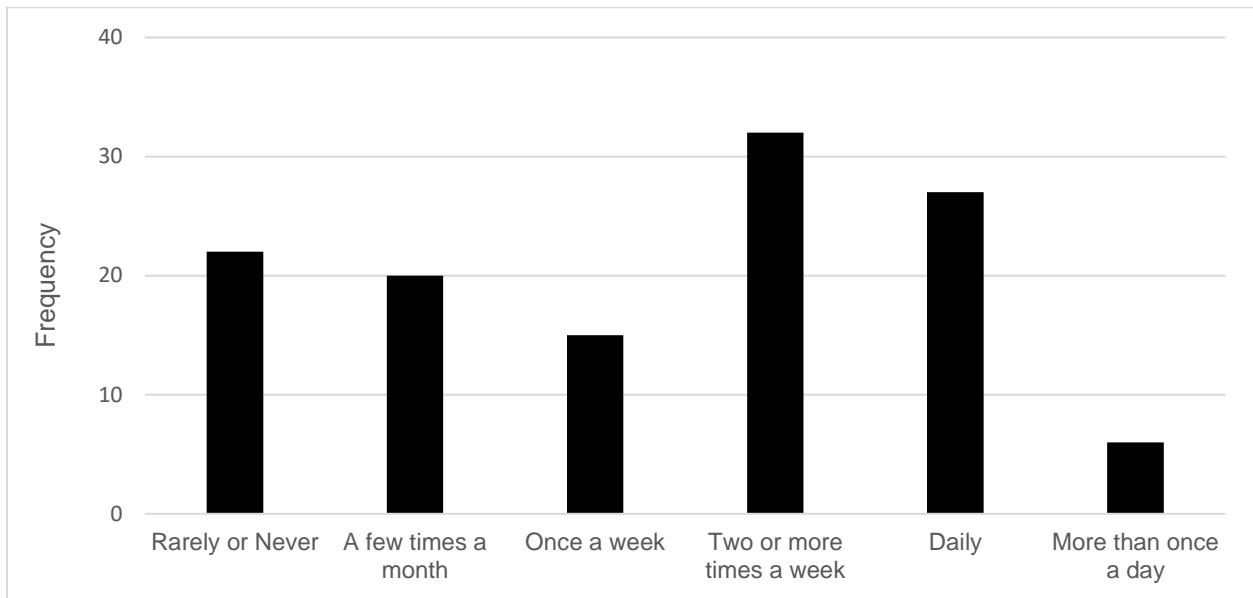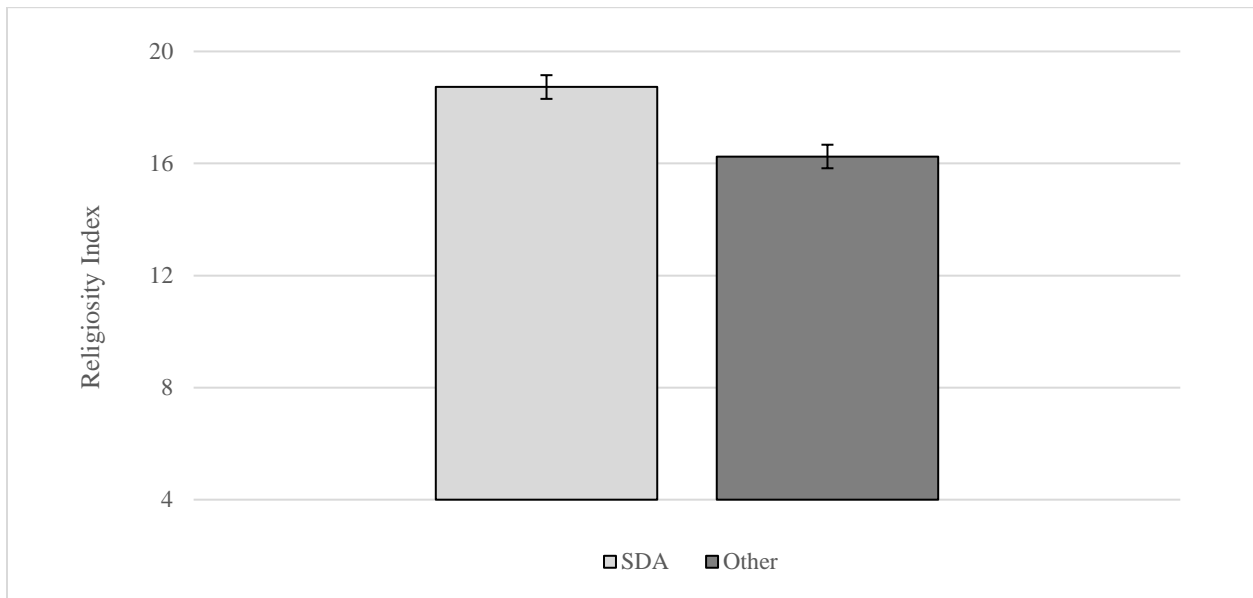*Frequencies of Non-Organizational Religious Activity among Undergraduate Students*
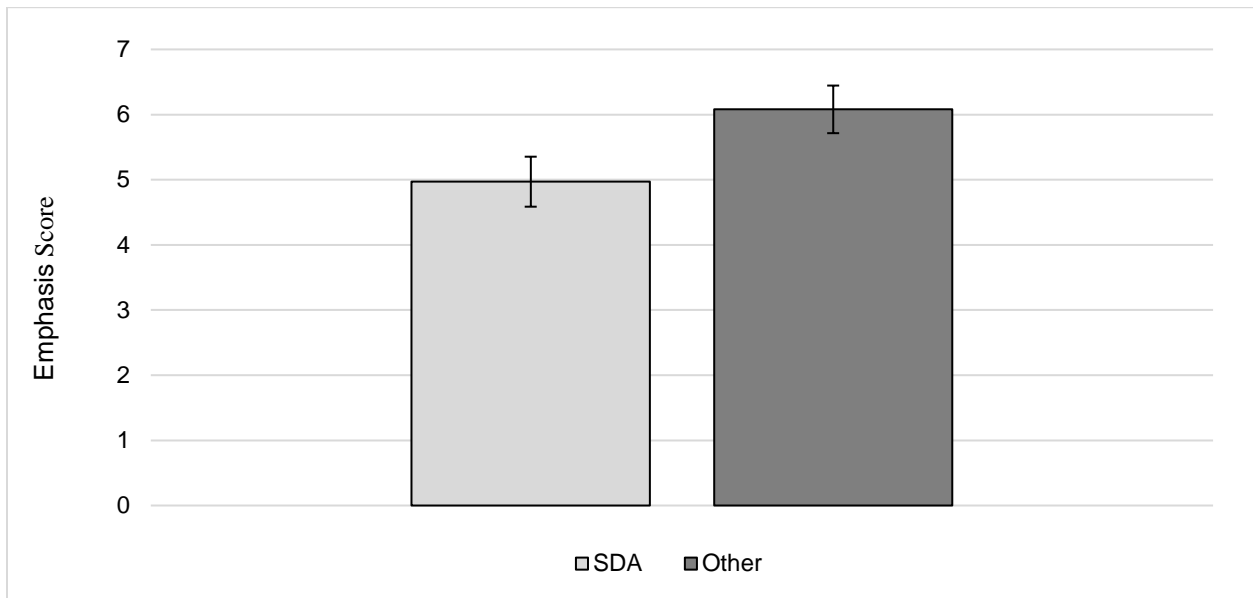
**Figure 3**

*Comparison of Religiosity Scores by Religious Preference*



*Note*. Religiosity scores of undergraduate students are shown for those who identify as Seventh-Day Adventist and those who identify with another religion (error bars show standard errors).
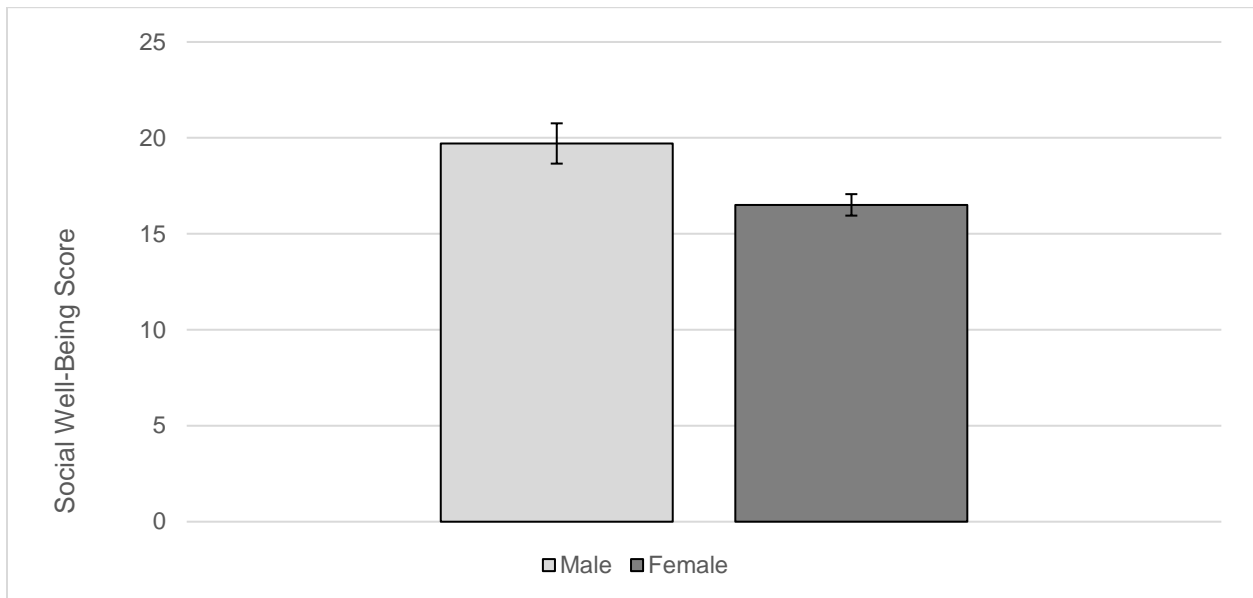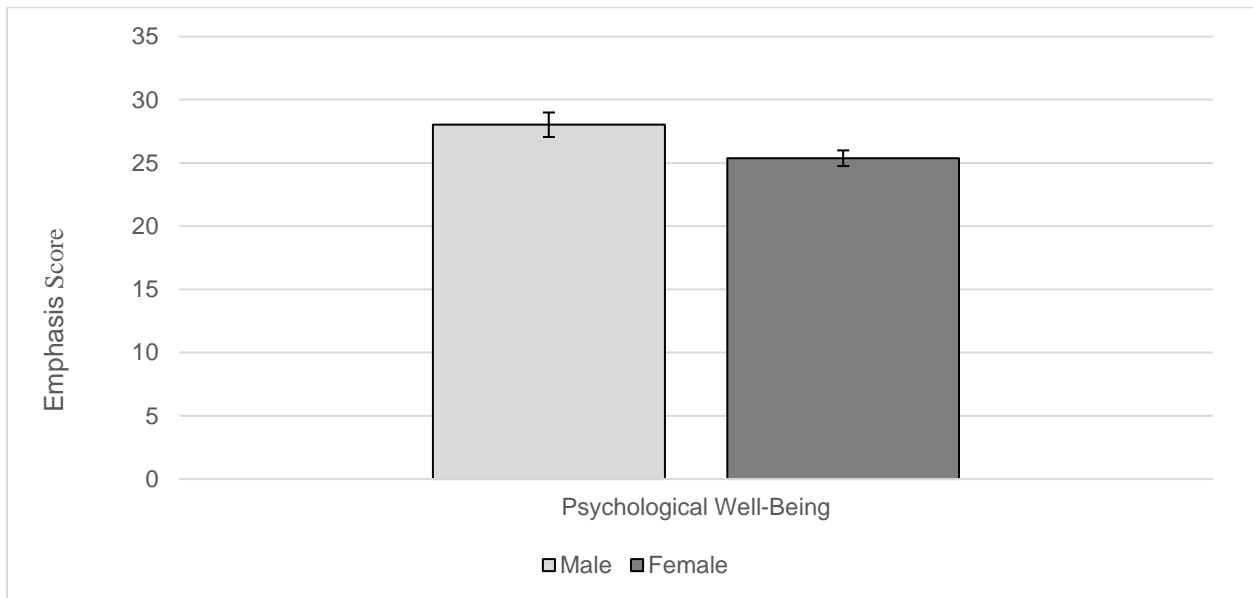
**Figure 4**

*Comparison of Emphasis Scores by Religious Preference*



*Note*. Emphasis scores of undergraduate students are shown for those who identify as Seventh-Day Adventist and those who identify with another religion (error bars show standard errors).

**Figure 5**

*Comparison of Social Well-Being Scores by Gender*



*Note*. Social well-being scores of undergraduate students are shown for those who identify as male and female (error bars show standard errors).
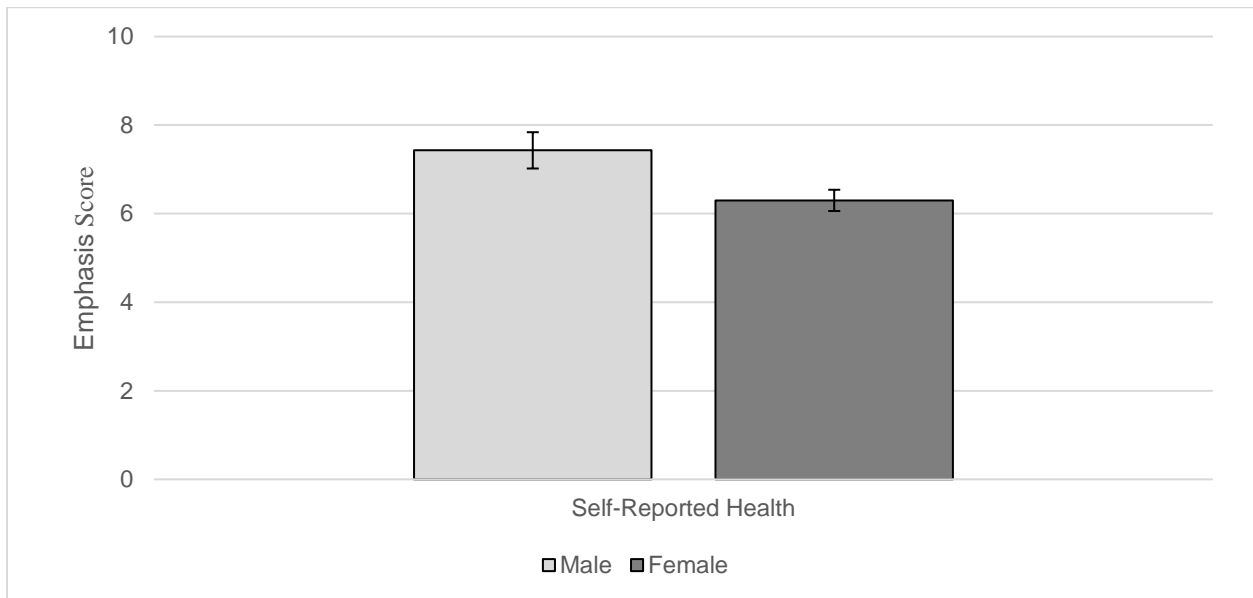
**Figure 6**

*Comparison of Psychological Well-Being Scores by Gender*



*Note*. Psychological well-being scores of undergraduate students are shown for those who

identify as male and female (error bars show standard errors).
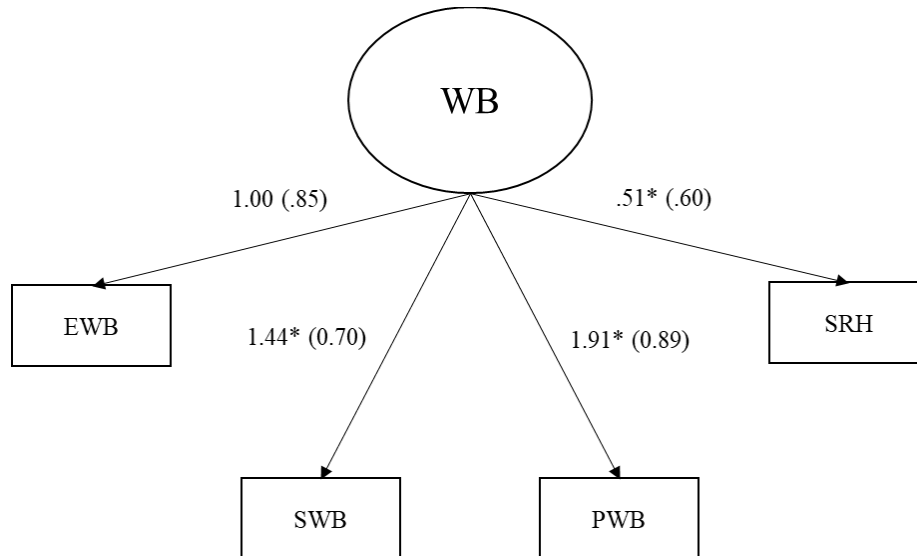
**Figure 7**

*Comparison of Self-Reported Health Scores by Gender*



*Note*. Self-reported health scores of undergraduate students are shown for those who identify as male and female (error bars show standard errors).

**Figure 8**

*Confirmatory Factor Analysis of Well-Being*



*Note.* A confirmatory factor analysis model of well-being consisting of emotional well-being, social well-being, psychological well-being, and self-reported health. Standardized factor loadings are reported in parentheses. WB = Well-Being. EWB = Emotional Well-Being. SWB = Social Well-Being. PWB = Psychological Well-Being. SRH = Self-Reported Health. EWB was used to set the metric for the WB factor.

**Figure 9**

*Structural Equation Model Predicting Well-Being from Three Dimensions of Identity*
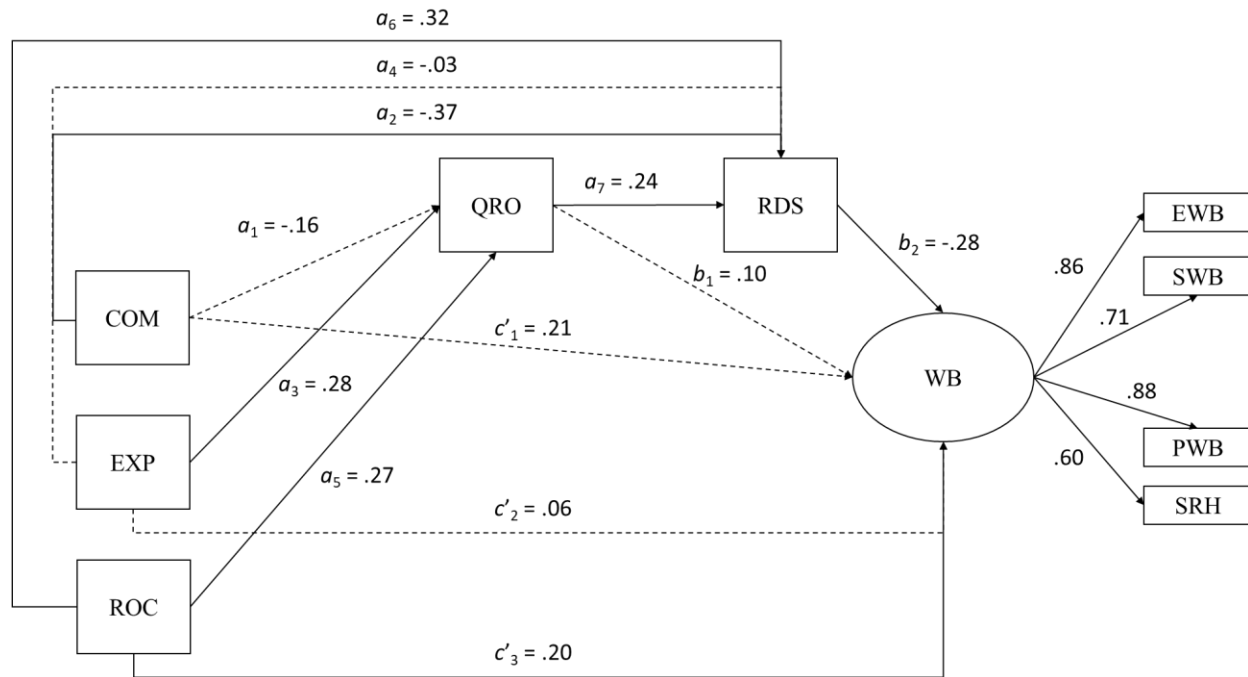


*Note.* A structural equation model predicting well-being from identity commitment, in-depth exploration, and reconsideration of commitment through the indirect effects of quest and religious doubt. Standardized effects and factor loadings are reported. Bold paths and asterisks indicate significant effects at $p < .05$. Paths labeled $c'$ indicate a parameter estimate for the direct effect with the subscript number referring to the given predictor. Paths labeled $a$ or $b$ indicate the path coefficients corresponding to an indirect effect of the predictor on well-being through the mediator. The subscript of an $a$ or $b$ path refers to the hypothesis number. COM = Commitment. EXP = In-depth Exploration. ROC = Reconsideration of Commitment. QRO = Quest Religious Orientation. RDS = Religious Doubt Scale. WB = Well-Being. EWB = Emotional Well-Being. SWB = Social Well-Being. PWB = Psychological Well-Being. SRH = Self-Reported Health. EWB was used to set the metric for the WB factor.

# Appendix

Below are a number of questions about you and your religion/faith. In each case, choose the option that most closely matches your opinion.

| Completely untrue (1) | Untrue (2) | Sometimes true / Sometimes not (3) | True (4) | Completely true (5) |
|---|---|---|---|---|

1. My religion/faith gives me security in life
2. My religion/faith gives me self-confidence
3. My religion/faith makes me feel sure of myself
4. My religion/faith gives me security for the future
5. My religion/faith allows me to face the future with optimism
6. I try to find out a lot about my religion/faith
7. I often reflect on my religion/faith
8. I make a lot of effort to keep finding out new things about my religion/faith
9. I often try to find out what other people think about my religion/faith
10. I often talk with other people about my religion/faith
11. I often think it would be better to try to find a different religion/faith
12. I often think that a different religion/faith would make my life more interesting
13. In fact, I'm looking for a different religion/faith

Below are some statements about thoughts you may or may not have had concerning religion and the world. Please indicate how true these statements are for you. Choose only one response for each question.

| Very Untrue (1) | Somewhat Untrue (2) | Neutral (3) | Somewhat True (4) | Very True (5) |
|---|---|---|---|---|

14. Seeing suffering and evil in the world makes me question the existence of a god or question God's power.
15. Feeling personal pain and suffering has made me question the existence of a god or feel that God has abandoned me.
16. My prayers are being ignored, or they do not make a difference.
17. Solutions for my problems can be found in religious literature (e.g., the Bible) or through the help of religious leadership (e.g., the clergy).
18. When natural disasters occur, and innocent people are harmed or killed, I question the existence of a god or question God's love and morality.
19. Disagreeing with a stance taken by my religion or my religious community makes me question whether I want to be a part of this religion or community.
20. Dissatisfaction with the clergy or leadership of my religion or religious community makes me question if I wish to continue to be involved in my religion or community.
21. Sometimes I perceive that the teachings or literature of my religion are contradictory, and this perception makes me question if I wish to continue to be involved in my religion.

22. I have felt pressured by my religion, my religious community, or the leadership of my religion/community to forgive someone for a transgression that I did not want to forgive.
23. I have felt pressured by my religion, my religious community, or the leadership of my religion/community to be generous to someone that I did not believe deserved my generosity.
24. I have experienced doubts concerning the existence of God and/or the truth about the religion I practice.
25. I have felt pressured by my religion, my religious community, or the leadership of my religion/community to be compassionate toward someone for whom I felt no sympathy.
26. When the views of my religion contrast with the views of scientific research or theory, I side with my religion.
27. I have felt pressured by my religion, my religious community, or the leadership of my religion/community to change the way that I live against my will.


Please indicate to what extent you agree or disagree with the following statements.

1 = Strongly Disagree ..................................................................................... 9 = Strongly Agree

28. I was not very interested in religion until I began to ask questions about the meaning and purpose of my life.
29. 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.
30. My life experiences have led me to rethink my religious convictions.
31. God wasn't very important for me until I began to ask questions about the meaning of my own life.
32. It might be said that I value my religious doubt and uncertainties.
33. For me, doubting is an important part of what it means to be religious.
34. I find religious doubts upsetting.
35. Questions are far more central to my religious experience than are answers.
36. As I grow and change, I expect my religion also to grow and change.
37. I am constantly questioning my religious beliefs.
38. I do not expect my religious convictions to change in the next few years.
39. There are many religious issues on which my views are still changing.

During the PAST MONTH, how often did you feel...

| Never (1) | Once or twice (2) | About once a week (3) | 2 or 3 times a week (4) | Almost every day (5) | Every day (6) |
|---|---|---|---|---|---|

40. Happy
41. interested in life
42. satisfied with life
43. that you had something important to contribute to society
44. that you belonged to a community (like a social group, or neighborhood)
45. that our society is a good place, or is becoming a better place, for all people
46. that people are basically good
47. that the way our society works makes sense to you
48. that you liked most parts of your personality
49. good at managing the responsibilities of your daily life
50. that you had warm and trusting relationships with others
51. that you had experiences that challenged you to grow and become a better person
52. confident to think or express your own ideas and opinions
53. that your life has a sense of direction or meaning to it

54. How would you rate your health right now?

| Poor | | Fair | | Good | | | Very Good | | Excellent |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

55. How often do you attend church or other religious meetings (excluding services required by your school)?
- Never  (1)
- Once a year or less  (2)
- A few times a year  (3)
- A few times a month  (4)
- Once a week  (5)
- More than once a week  (6)

56. How often do you spend time in private religious activities, such as prayer, meditation, or Bible study?
- Rarely or never  (1)
- A few times a month  (2)
- Once a week  (3)
- Two or more times a week  (4)
- Daily  (5)
- More than once a day  (6)

The following section contains 3 statements about religious belief or experience. Please mark the extent to which each statement is true or not true for you.

| Definitely not true (1) | Tends not to be true (2) | Unsure (3) | Tends to be true (4) | Definitely true of me (5) |
| --- | --- | --- | --- | --- |

57. In my life, I experience the presence of the Divine (i.e., God)
58. My religious beliefs are what really lie behind my whole approach to life
59. I try hard to carry my religion over into all other dealings in life


60. With which gender identity do you most identify?
- Female  (1)
- Male  (2)
- Transgender Female  (3)
- Transgender Male  (4)
- Gender Variant/Non-Conforming  (5)
- Not Listed. Please specify:  (6)
- Prefer not to answer  (7)


61. With which ethnic identity do you most identify?
- Non-Latino, White
- Latino or Hispanic
- Native American
- African American
- Asian American
- Pacific Islander
- Not listed. Please specify:


62. With which religious identity do you most identify?
- Baptist
- Catholic
- Eastern Orthodox
- Episcopalian / Anglican
- Latter-Day Saints
- Lutheran
- Methodist / Wesleyan
- Pentecostal
- Presbyterian
- Seventh-Day Adventist
- Non-denominational
- Decline to answer
- Not listed, Please specify: