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UNIVERSITY OF NORTHERN COLORADO
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The Graduate School

SEXUAL MINORITY IDENTITY AND RELIGIOUS STYLES:
HOW SEXUAL IDENTITY DEVELOPMENT AND
RELIGIOUS SCHEMATA EXPLAIN
EXPERIENCES OF RELIGIOUS
AND SPIRITUAL STRUGGLES
AND LIFE SATISFACTION

A Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy

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College of Education and Behavioral Sciences
Department of Applied Psychology and Counselor Education
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This Dissertation by: Jeffrey Allen Paul

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has been approved as meeting the requirement for the Degree of Doctor of Philosophy in the College of Education and Behavioral Sciences in the Department of Applied Psychology and Counselor Education, Program of Counseling Psychology

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ABSTRACT


A growing body of research indicates both potentially positive and negative experiences for sexual minorities with religious/spiritual (R/S) experiences. The current study sought to answer calls for larger samples and quantitative research methods at this intersection of identities by investigating the relationships between sexual minority identity development, religious schemata, R/S struggles, and life satisfaction among a sample of sexual minority adults with R/S experiences (N = 655). Hierarchical regression analyses were conducted to determine the variance explained by sexual identity development factors and religious schemata above and beyond the variance explained by demographic differences when explaining the outcome variables of R/S struggles and life satisfaction. Results showed participants with higher levels of sexual identity exploration and/or higher levels of religious fundamentalism reported higher levels of R/S struggles, whereas those with higher levels of sexual identity integration reported lower levels of R/S struggles. Additionally, participants with higher levels of sexual identity integration reported higher levels of life satisfaction. Interestingly, those with higher levels of religious fundamentalism also reported slightly higher levels of life satisfaction, although this result had a very small effect size and might have minimal practical significance.
Age, education level, and relationship status were significant explanatory demographic variables. These results suggested understanding sexual identity development and religious schemata might be important in promoting the well-being of sexual minority individuals with R/S experiences.
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CHAPTER I

INTRODUCTION

Identity is considered “a coherent sense of one’s values, beliefs, and roles, including but not limited to gender, race, ethnicity, social class, spirituality, and sexuality” (Worthington, Navarro, Savoy, & Hampton, 2008, p. 22). The process of identity development is complex and was initially studied as a time-specific process occurring during adolescence (Erikson, 1968). Today, the process of exploring and committing to identities has been conceptually extended across the lifespan (Marcia, 2002) and many models related to specific areas of identity have been established (e.g., racial identity development; Phinney, 1989, 1992). The current study focused on the domains of sexual minority identity development and religious/spiritual (R/S) identity development with the goal of increasing understanding at this important intersection of identities (Crenshaw, 1991; Rosenthal, 2016). While many domains of identity can be studied developmentally, gaining insight into how multiple identities influence each other during development appears increasingly important, especially at this intersection of identities. As Worthington (2004) stated, “religion and sexuality are inextricably intertwined for many people because virtually every religion regulates sexual behavior and dictates a specific set of values regarding human sexuality” (p. 741). A growing body of research investigating this intersection among sexual minorities has begun to find potentially negative and positive mental health outcomes when these identities are felt to
be in conflict (e.g., Beagan & Hattie, 2015; Brewster, Velez, Foster, Esposito, & Robinson, 2016; Dehlin, Galliher, Bradshaw, & Crowell, 2015). Compared to heterosexual peers, lesbian, gay, bisexual, and queer (LGBQ) individuals have been found to have higher risks for negative mental and physical health outcomes (Institute of Medicine, 2011). From a minority stress perspective (Meyer, 1995, 2003), these higher rates of mental health concerns are seen as products of acute and chronic stress due to stigmatization of sexual minority identities and experiences of discrimination rather than as indicative of internal deficiencies or pathology as has been portrayed in the past. A significant and increasing amount of research supports this perspective (e.g., Mereish & Poteat, 2015; Meyer, 2013), with LGBQ individuals being found to experience higher rates of depression and anxiety alongside reports of discrimination and even sexual victimization (e.g., Brewster & Moradi, 2010; Cochran & Mays, 2007; Conron, Mimiaga, & Landers, 2010; King et al., 2008; Semlyen, King, Varney, & Hagger-Johnson, 2016). A recent longitudinal study (Everett, 2015) of a large sample of adolescents and young adults ($N = 11,727$) found changes in sexual orientation identity toward sexual minority identities increased reports of depressive symptoms, suggesting continued stigmatization of LGBQ individuals and a need to better understand the process of sexual minority identity development.

**Sexual Identity Development Theoretical Framework**

The current study utilized the Dillon, Worthington, and Moradi (2011) universal model of sexual identity development to conceptualize the process of sexual identity development among sexual minorities. Conceptually, the model is applicable to individuals regardless of current self-identified sexual orientation, allowing for more
diverse utility than other models (e.g., Morgan, Steiner, & Thompson, 2010; Morgan & Thompson, 2011; Parent, Talley, Schwartz, & Hancock, 2015). Sexual identity is viewed individually and socially with these two areas seen as paralleling and influencing each other throughout development. Building upon the Worthington, Savoy, Dillon, and Vernaglia (2002) model, sexual orientation identity (e.g., one’s identity as lesbian, gay, bisexual, queer, heterosexual) is described as one component of individual sexual identity rather than as sexual identity itself. Sexual orientation identity is painted as one of six components of individual sexual identity: (a) perceived sexual needs, (b) preferred sexual activities, (c) preferred characteristics of sexual partners, (d) sexual values, (e) recognition and identification of sexual orientation, and (f) preferred modes of sexual expression. This robust view of sexual identity extended research in this area beyond the process of self-identifying with a particular orientation identity to better capture the complexity of other elements of sexual identity.

The universal model of sexual identity development also built upon the theoretical and empirical work of Marcia (1966, 1980, 2002) to outline five identity statuses: (a) compulsory heterosexuality, (b) active exploration, (c) diffusion, (d) deepening and commitment, and (e) synthesis. Compulsory heterosexuality describes the earliest sense of sexual identity, which is seen as often rooted in heteronormative cultural views and a lack of awareness surrounding the influence of such views. Individuals are portrayed as potentially passing through time periods of exploring their sense of sexual identity (active exploration), experiencing a more carefree or more distressing sense of apathy surrounding sexual identity (diffusion), feeling a deeper sense of understanding, appreciation, and alignment with their sexual identity (deepening and commitment) in
various cycles throughout life. Synthesis, proposed as the most mature of the statuses, is described as a deep integration of sexual identity with other identities (e.g., one’s R/S identity) and into an overall sense of self.

These statuses were considered generally developmental but the model allowed for circular reprocessing at any time throughout the lifespan. As Dillon et al. (2011) put it: “Points in the model should be thought of as non-linear, flexible, and fluid descriptions of statuses through which people may pass as they develop their sexual identity over the lifespan” (p. 658). Empirical research has begun accumulating in support of the breadth and specificity of this model (e.g., Morgan et al., 2010; Preciado, Johnson, & Peplau, 2013; Thompson & Morgan, 2008; Worthington et al., 2008; Worthington & Reynolds, 2009). As a framework for sexual identity development, the Dillon et al. model was chosen for the current study as it offered an integrated conceptualization of previous theory and research (e.g., Cass, 1979; Fassinger & Miller, 1996; McCarn & Fassinger, 1996), widespread applicability across the spectrum of sexual orientation, and a growing basis of empirical support.

**Religious and Spiritual Identity Development**

**Theoretical Framework**

Humans are complex social beings with multiple identities that intersect in compelling ways (Crenshaw, 1991; Rosenthal, 2016). Religious/spiritual identity is another major domain of personal identity—one that has been found to meaningfully relate to sexual identity for many sexual minorities. In the United States, data indicated approximately 76% of the population considered themselves religious; about 70% identified as Christian and 6% identified as members of other religious groups (e.g., Jewish, Buddhist, Muslim; Pew Research Center, 2016). From over 35,000 respondents
to a 2014 religious landscape study, about 5% self-identified as lesbian, gay, or bisexual (Murphy, 2015). Approximately 59% of those LGB respondents identified as religious: nearly half (48%) self-identified as Christian and a smaller percentage (11%) identified as members of other religious communities. Another national survey including 3,242 sexual and gender minorities found 53% of that group were considered “moderately” or “highly” religious (Newport, 2014). While data indicated sexual minorities were less religiously involved compared to the general population (e.g., Herk, Norton, Allen, & Sims, 2010; Pew Research Center, 2016), it appeared religion played a significant role in the lives of the majority of LGBQ individuals.

Among the general population, research on religion and spirituality (R/S) has shown positive correlations between religious practices and psychological well-being (e.g., Koenig, 2009; Smith, McCullough, & Poll, 2003). Explanations for these relationships included increased social support (Corrêa, Moreira-Almeida, Menezes, Vallada, & Scazuca, 2011), opportunities for meaning making (Aten, O’Grady, & Worthington, 2013; Park, Edmondson, & Hale-Smith, 2013), and access to other coping resources (Gall & Guirguis-Younger, 2013). For sexual minority individuals, however, experiences surrounding R/S appeared more complicated (e.g., Brewster et al., 2016; Fontenot, 2013), likely due to increased social pressures many faced in religious communities that did not affirm or support same-sex identities and relationships.

Across cultures, religious beliefs appear to have significantly influenced views of homosexuality (van den Akker, van der Ploeg, & Scheepers, 2013) with personal religious beliefs being particularly influential in the United States (Adamczyk & Pitt, 2009). Social psychological research has found religiosity generally and conservative
religious beliefs specifically to be consistently connected to negative views of sexual minorities (e.g., Balkin, Schlosser, & Levitt, 2009; Cragun & Sumerau, 2015; Finlay & Walther, 2003; Herek, 1994; Schulte & Battle, 2004). For LGBQ individuals, moral values learned in religious and spiritual contexts were thus likely a significant factor influencing sexual identity development (Worthington, 2004). During the coming out process, some sexual minority people of faith experienced such rejection from their families and faith communities that they felt forced to walk away from their faiths in order to maintain positive sexual minority identities (Rodriguez & Ouellette, 2000). With longitudinal research suggesting a sense of coherence and stability regarding religion was related to psychosocial well-being in later life, these experiences of familial and communal rejection might have long-term consequences for religious and spiritual sexual minority individuals (Wink & Dillon, 2008). Devastatingly, evidence suggested such rejection might have significantly impacted the increased risks for suicide among sexual minorities found in the literature (Haas et al., 2011; Woodward, Wingate, Gray, & Pantalone, 2014).

Researching religious and spiritual experiences of sexual minorities is a relatively new area of study. Hamblin and Gross (2014) overviewed some of the work in this area and indicated there was a wide range of conceptualizations and models. Much of the previous research at this intersection had used qualitative methodologies (e.g., Beagan & Hattie, 2015; Subhi & Geelan, 2012) and quantitative measures of level of internalized heterosexism (elsewhere internalized homonegativity or internalized homophobia; e.g., Brewster et al., 2016; Herek, Gillis, & Cogan, 2009). The current study used a
developmental approach to investigate how identity development in terms of sexual and R/S identities impacted mental health.

Streib’s (2001) model of religious styles served as the developmental framework for religious/spiritual (R/S) identity in the current study. Built upon a re-envisioning of Fowler’s (1981) classic model of faith development, the religious styles perspective and its operationalization through the measurement of religious schemata (Streib, Hood, & Klein, 2010) allowed for exploration of how individuals approached R/S. Repetitive use of specific interpretative lenses (schemata) was seen as translating into a religious style, which Streib and colleagues suggested were related to but distinct from Fowler’s stages of faith. The three schemata were truth of text and teachings (ttt), fairness, tolerance, and rational choice (ftr), and xenosophia/interreligious dialog (xenos); they were seen to exist “on the spectrum between a more fundamentalist orientation on the one hand and tolerance, fairness, and openness for dialog on the other” (Streib et al., 2010, p. 155). A repetitive use of the ttt schema might reflect a strong belief in the unchallenged integrity of one’s faith tradition and its teachings, a repetitive use of ftr might lead to more respectful dialogue even when disagreements exist, and a repetitive use of xenos might indicate a desire to learn and understand elements of many religious traditions. This framework allowed for better understanding of the cognitive and interpersonal dynamics at play when approaching R/S and has been initially supported by empirical research (e.g., Hathcoat & Fuqua, 2014; Kamble, Watson, Marigoudar, & Chen, 2014; Streib et al., 2010; Streib & Klein, 2014). In the current study, it offered a way to explore how sexual minority individuals approached R/S and how these approaches impacted overall well-being.
Religious and Spiritual Struggles and Life Satisfaction

In the current study, measures of religious/spiritual (R/S) struggles and life satisfaction were used to assess the potential negative and positive outcomes related to sexual identity development factors and religious schemata. Research on R/S struggles has outlined three general types: supernatural, interpersonal, and intrapersonal (e.g., Exline, 2013; Exline, Pargament, Grubbs, & Yali, 2014). Supernatural struggles include individuals’ experiences with the divine and the demonic based on their views of R/S, interpersonal struggles consider potential negative influences of individuals and institutions surrounding R/S, and intrapersonal struggles involve inward and internal negative experiences individuals can experience with R/S. Studies indicated R/S struggles were relatively common among the general population and were linked consistently to numerous negative mental health outcomes such as increased anxiety, depression, and emotional distress (e.g., Abu-Raiya, Pargament, & Exline, 2015; Abu-Raiya, Pargament, & Magyar-Russell, 2010; Ano & Vasconcelles, 2005; Exline, 2013; Exline, Park, Smyth, & Carey, 2011; McConnell, Pargament, Ellison, & Flannelly, 2006).

Specific to sexual minorities, there was strong evidence of significant struggles in integrating sexual and religious/spiritual (R/S) identities. Schuck and Liddle (2001) found experiences of conflict with R/S could negatively affect sexual identity development for sexual minorities such as delaying the coming out process or increasing distress throughout it. Organizational bias and discrimination in religious settings could also lead to experiences of R/S struggles in sexual minorities (Smith & Freyd, 2014). Qualitative (e.g., Beagan & Hattie, 2015; Dahl & Galliher, 2012; Gold & Stewart, 2011; Jeffries, Dodge, & Sandfort, 2008; Murr, 2013; Subhi & Geelan, 2012) and quantitative
(e.g., Barnes & Meyer, 2012; Herek et al., 2009; Shilo & Savaya, 2012; Sowe, Brown, & Taylor, 2014) evidence indicated conflict at the intersection of these identities was relatively common and research with quantitative measures specifically designed to assess R/S struggles might provide additional insights into the prevalence and types of struggles. Using the specific quantitative measure employed in the current study, Exline et al. (2014) presented initial evidence of R/S struggles being higher among sexual minorities compared to heterosexual peers. Additional research could clarify these findings. Thus, the current study furthered exploration of religious struggles and strain among sexual minorities.

While literature provided significant evidence of the potential for conflict between sexual minority and R/S identities (e.g., Hamblin & Gross, 2013; Sowe et al., 2014), it also offered evidence for the potential successful integration of these identities (e.g., Brewster et al., 2016; Rostosky, Abreu, Mahoney, & Riggle, 2017). With this in mind, the current study also incorporated measurement of overall life satisfaction (Diener, Emmons, Larsen, & Griffin, 1985) as a construct to assess sexual minorities’ current reported level of contentment with their lives. Vaughan and Rodriguez (2014) called for positive perspectives to be incorporated into research regarding sexual minorities; exploring life satisfaction in the current study was one way for participants to not only report the potential absence of R/S struggles but also the presence of current life contentment (or perhaps both simultaneously). Research on life satisfaction suggested positive associations with self-esteem and negative associations with experiences of depression, anxiety, and R/S struggles (e.g., Abu-Raiya, Pargament, Krause, & Ironson, 2015; Arrindell, Meeuwesen, & Huyse, 1991; Exline et al., 2014; Schimmack, Oishi,
Furr, & Funder, 2004; Wilt, Grubbs, Exline, & Pargament, 2016). Considering the overall level of current life satisfaction in context of sexual and R/S identity development offered a manner of assessing the potential for successful integration of these identities.

**Study Rationale and Purpose**

Relatively little research has explored the intersection of sexual minority and religious/spiritual (R/S) identities (e.g., Lee, Rosen, & Burns, 2013; Phillips, Ingram, Smith, & Mindes, 2003). Most of the research thus far has focused on the deep, rich experiences of small numbers of individuals using qualitative methodologies (e.g., Dahl & Galliher, 2012; Levy, 2012). One of the strongest themes found by qualitative studies was the experience of conflicts that could be categorized as intrapersonal, interpersonal, and supernatural; many participants reported depression, anxiety, low self-esteem, self-harming behaviors, and suicidality based on those tensions (e.g., Barnard, 2009; Barton, 2010; Beagan & Hattie, 2015; Kubicek et al., 2009; Schuck & Liddle, 2001; Subhi & Geelan, 2012). Feelings of shame, experiences of discrimination, unsuccessful attempts to change sexual orientation, and experiences of familial, religious, and LGBQ communal rejection likely influenced negative mental health outcomes reported by sexual minorities regarding their experiences with R/S (e.g., Beagan & Hattie, 2015; Beckstead & Morrow, 2004; Bowers, Minichiello, & Plummer, 2010; Buser, Goodrich, Luke, & Buser, 2011; Dahl & Galliher, 2012; Gold & Stewart, 2011; Jeffries et al., 2008; Lytle, Foley, & Aster, 2013; Murr, 2013; Nadal et al., 2011; Subhi & Geelan, 2012). Few LGBQ individuals attending religious communities that were not affirming of their identities and relationships seemed to be unaffected by such communal stances (e.g., Barnes & Meyer, 2012; Brewster et al., 2016; Herek et al., 2009; Shilo & Savaya, 2012; Sowe et al., 2014;
Subhi & Geelan, 2012). Gibbs and Goldbach (2015) found sexual minority young adults who grew up in non-affirming religious contexts had over twice the odds of reporting a recent suicidal attempt than those who did not grow up in such contexts even after leaving such religious communities due to conflict.

Concurrently, research also found potentially positive experiences of sexual minorities with R/S. Few (3 out of 35) of Beagan and Hattie’s (2015) interviewees chose to walk away or reject R/S completely in the face of conflict as most found ways to make R/S positive for themselves. A number of studies also showed positive experiences with R/S when sexual minority individuals found affirming faith communities that supported their relationships (e.g., Barrow & Kuvalanka, 2011; Lease, Horne, & Noffsinger-Frazier, 2005; Murr, 2013; Rodriguez & Ouellette, 2000; Rostosky et al., 2017; Schuck & Liddle, 2001; Yakushko, 2005). Schuck and Liddle (2001) reported that interviewees expressed a sense of internal strength for having to deeply question their R/S beliefs while Brewster et al. (2016) found turning to a higher power for support, forgiveness, and guidance (i.e., forms of positive religious coping) mitigated negative effects of internalized heterosexism among religious and spiritual sexual minorities. For some LGBQ individuals, successfully integrating R/S and sexual identities appeared possible (Dahl & Galliher, 2009) and might be the outcome associated with the most positive mental health over rejection or compartmentalization of sexual identity (Dehlin et al., 2015). In addition, evidence suggested some conservative religious denominations were becoming generally less stigmatizing and more affirming toward LGBQ individuals and same-sex relationships, meaning there might be fewer rejecting communities over time (Paul, 2017).
Notably, most research at this intersection of identities tended to focus on the experiences of sexual minorities from Christian denominations. While LGBQ individuals have faced criticism and rejection from the vast majority of religious groups in the United States (Sherkat, 2002), data were less available on the religious and spiritual experiences of sexual minorities from faith traditions other than Christianity. Research on followers of Islam—the second largest world religion—suggested LGBQ Muslims also experienced considerable conflict integrating their identities (Jaspal, 2012; Siraj, 2012). For followers of Judaism, research indicated sexual minorities experienced more conflict when attending Orthodox communities than when attending Reform communities (Abes, 2011; Barrow & Kuvalanka, 2011; Kissil & Itzhaky, 2015; Lytle et al., 2013; Schnoor, 2006). Research on non-monotheistic religions, such as Buddhism, Hinduism, and Native American spirituality, generally found more welcoming stances toward sexual diversity (e.g., Porter, Ronneberg, & Witten, 2013; Schnoor, 2006; Westerfield, 2012). Due to this insightful, yet limited research on the experiences of non-Christian sexual minorities, the current study used measures that were open to all faith traditions to broaden the scope of research at this intersection of identities.

Consequently, understanding how sexual minorities experience R/S remains a crucial area of research. The current sparsity of quantitative research on this intersection of identities indicated a need for larger samples and statistically rigorous research methods to confirm qualitative themes and obtain more generalizable data (Hamblin & Gross, 2014). Additionally, the American Psychological Association’s (APA; 2012) Guidelines for Psychological Practice with Lesbian, Gay, and Bisexual Clients specifically encouraged psychologists “to consider the influences of religion and
spirituality in the lives of lesbian, gay, and bisexual persons” (p. 20) in terms of research as well as teaching and practice. Increasing psychological understanding at this intersection of identities could benefit psychological practice with sexual minority individuals in many settings (e.g., education, training, research, organizational change, practice). The current study sought to answer such calls.

Research Questions

With previous research in mind and the need for further research at this intersection of identities established, the following research questions were developed to explore how the preceding theoretical frameworks might provide insight into a poignant blind spot in the current psychological literature:

Q1 Do sexual identity development factors and religious schemata explain a significant and unique amount of the variance in experiences of R/S struggles among adult sexual minority individuals with religious/spiritual (R/S) experiences, accounting for demographic differences?

Q2 To what extent do sexual identity development factors explain a significant and unique amount of the variance in experiences of R/S struggles among adult sexual minority individuals with R/S experiences, accounting for the variance explained by religious schemata?

Q3 To what extent do religious schemata explain a significant and unique amount of the variance in experiences of R/S struggles among adult sexual minority individuals with R/S experiences, accounting for the variance explained by sexual identity development factors?

Q4 Do sexual identity development factors and religious schemata explain a significant and unique amount of the variance in experiences of life satisfaction among adult sexual minority individuals with R/S experiences, accounting for demographic differences?

Q5 To what extent do sexual identity development factors explain a significant and unique amount of the variance in experiences of life among adult sexual minority individuals with R/S experiences, accounting for the variance explained by religious schemata?
Q6 To what extent do religious schemata explain a significant and unique amount of the variance in experiences of life satisfaction among adult sexual minority individuals with R/S experiences, accounting for the variance explained by sexual identity development factors?

Limitations

There were several important limitations of the current study. First, the results might not be wholly generalizable as nonprobability sampling methods were utilized; thus, results must be translated in context of the current sample (Remler & Van Ryzin, 2015). Sampling LGBQ participants has been historically difficult for a variety of reasons including high costs involved in probability sampling and potential biases introduced through non-probability sampling (Meyer & Wilson, 2009). Additionally, current research methods likely result in skew toward those who are somewhat further along in sexual minority identity development as being a research participant in studies focused on sexual minorities involves a certain level of understanding of oneself as LGBQ (Eliason & Schope, 2007; Hamblin & Gross, 2014; Moradi, Mohr, Worthington, & Fassinger, 2009). Because of these reasons, no current sampling methods for accessing sexual minorities are without limitations. That being noted, the current study employed nonprobability snowball sampling (Meyer & Wilson, 2009) in hopes of obtaining a larger number of participants by accessing participants’ social networks through asking initial participants to share the survey materials with other individuals to whom the study might apply. This method broadened the potential participant pool, allowing participants who might be facing social pressures of heterosexism from both faith communities and the wider culture to privately participate in research (Herek et al., 2009).
In terms of research methods, the current study utilized self-report measures to explore the relationships between the constructs of interest. This single method of data collection could introduce bias (e.g., Donaldson & Grant-Vallone, 2002) and future studies could utilize multiple data collection methods (e.g., observational, self-report, in-depth interviews) to corroborate findings of the current study. Additionally, use of a web-based survey potentially introduced volunteer bias (Remler & Van Ryzin, 2015) or a possible skew in the data based on participants volunteering who are somehow different than the population of interest—in this case, perhaps being more open than others about their various identities. Most research indicated these concerns around web-based surveys were unfounded (e.g., Gosling & Mason, 2015; Gosling, Vazire, Srivastava, & John, 2004; Hewson, 2014; Riggle, Rostosky, & Reedy, 2005). Specific to sexual minorities, self-report research might lead to bias in terms of those who are more socially public about their LGBQ identities with those who have not come out to various social groups perhaps not being open to being involved in research (Meyer & Wilson, 2009).

Another limitation was the lack of in-depth explorations of gender identity outside of inclusion as a demographic survey item (see Appendix A). In light of the chosen focus on sexual identity including sexual orientation identity, gender minorities might not have been appropriately represented in the results. Although individuals who identify as gender minorities (e.g., transgender, gender nonconforming) might share some similar experiences with sexual minorities with regard to R/S in terms of stigma and conflicting identities (Moradi et al., 2009), the current study did not specifically explore the experiences of gender minorities; thus, the results cannot be generalized as they might neglect elements of transgender experiences. Further research is needed to explore the
religious and spiritual experiences of gender minorities as sexual orientation and gender identity are often conflated and gender minorities are underrepresented in the psychological literature (APA, 2015; Benson, 2013; Sánchez & Vilain, 2013).

Finally, the measure of religious styles used for the current study (Streib et al., 2010) was not found to have been used specifically with sexual minorities. However, research supported its utility for exploring approaches to R/S in racially and religiously diverse samples from the United States, Germany, and India (Hathcoat & Fuqua, 2014; Kamble et al., 2014; Streib et al., 2010; Streib & Klein, 2014), which suggested it might have further uses with other populations. Thus, the current study sought to extend the application of the measure and provide initial data for its use among LGBQ individuals.

**Definition of Terms**

**Affirming Religious/Spiritual Communities.** No single definition for affirming faith communities has been widely accepted. The current study used *affirming* based upon Nugent and Gramick’s (1989) conceptualization of faith community’s possible responses to homosexuality—where affirming indicated a position of full acceptance, where same-sex orientations are “a sign of the rich diversity of creation, and that homosexual expression is as natural and good in every way as heterosexuality” (p. 39).

**Coming Out.** “The process in which one acknowledges and accepts one’s own sexual orientation. It also encompasses the process in which one discloses one’s sexual orientation to others” (APA, 2012, p. 11).
**Faith.** A universal, not necessarily religious (e.g., Hood, 2003) way of seeking after and making meaning of the transcendent and ultimate (e.g., Park, 2005), which is similar to, yet distinct from, spirituality (see Fowler, 1981).

**Gender Minorities.** “Those who have a gender identity that is not fully aligned with their sex assigned at birth” (APA, 2015, p. 832). The current study did not seek to specifically address issues related to gender identity. Although transgender individuals may share some experiences with sexual minorities due to societal and religious/spiritual (R/S) stigma and prejudice, they have unique experiences and it would be inappropriate to generalize current findings to this population.

**Identity.** “Comprises a coherent sense of one’s values, beliefs, and roles, including but not limited to gender, race, ethnicity, social class, spirituality, and sexuality” (Worthington et al., 2008, p. 22).

**Identity Development.** “An active process of exploring and assessing one’s identity and establishing a commitment to an integrated identity” (Worthington et al., 2008, p. 22).

**Lesbian, Gay, Bisexual, and Queer.** An acronym of common sexual minority identities used interchangeably with *sexual minorities* throughout the current study. At times, lesbian, gay, bisexual, transgender, and queer (LGBTQ) is used when addressing the popular usage of LGBTQ communities or as appropriate when transgender individuals are included in discussion.

**Life Satisfaction.** Global assessment of an individual’s subjective well-being (see Diener, Inglehart, & Tay, 2013).
Minority Stress. “The excess stress to which individuals from stigmatized social categories are exposed as a result of their social, often a minority, position” (Meyer, 2013, p. 4).

Religion. “The search for significance that occurs within the context of established institutions that are designed to facilitate spirituality” (Pargament, Mahoney, Exline, Jones, & Shafranske, 2013, p. 15).

Religion/Spirituality. A more global term used to denote an important domain of life that often overlaps with religion and spirituality as defined (e.g., Zinnbauer et al., 1997). Individual constructs were utilized when more appropriate.

Religious and Spiritual Struggles. “Occur when some aspect of R/S belief, practice or experience becomes a focus of negative thoughts or emotions, concern or conflict” (Exline et al., 2014).

Sexual Identity. A larger construct…including other dimensions of human sexuality (e.g., sexual needs, sexual values, modes of sexual expression, preferred characteristics of sexual partners, preferred sexual activities and behaviors) as well as group membership identity (e.g., a sexual orientation identity, or considering oneself as a member of sexuality-related social groups) and attitudes toward sexual minority individuals. (Dillon et al., 2011, p. 651)

Sexual Identity Development. The individual and social processes by which persons acknowledge and define their sexual needs, values, sexual orientation, preferences for sexual activities, modes of sexual expression, and characteristics of sexual partners. We add to this
definition the assumption that sexual identity development entails an understanding (implicit or explicit) of one’s membership in either a privileged dominant group (heterosexual) or a marginalized, minority group (gay, lesbian, or bisexual identity), with a corresponding set of attitudes, beliefs, and values with respect to members of other sexual identity groups. (Dillon et al., 2011, p. 657)

**Sexual Minorities.** “All individuals with same-sex attractions or behavior, regardless of self-identification” (Diamond, 2007, p. 142).

**Sexual Orientation.** “The sex of those to whom one is sexually and romantically attracted” (APA, 2012, p. 11).

**Sexual Orientation Identity.** “The individual’s conscious acknowledgment and internalization of sexual orientation” (e.g., lesbian, gay, bisexual, queer, heterosexual; Dillon et al., 2011, p. 650).

**Spirituality.** “A search for the sacred—elements of life that are seen as manifestations of the divine, transcendent or ultimate, either inside or outside of a specific religious context” (Exline et al., 2014, p. 208).

**Summary**

Relatively limited research has been conducted at the intersection of sexual and religious/spiritual (R/S) identities (e.g., Lee et al., 2013; Phillips et al., 2003). Much of the research in this area thus far has utilized qualitative methodologies (e.g., Dahl & Galliher, 2012; Levy, 2012), which offer deep, rich knowledge of experiences with a drawback of limited generalizability. Thus, further quantitative research was needed to enhance current understandings of the mental and physical health disparities (Institute of Medicine, 2011) and greater suicide risks (Haas et al. 2011; Woodward et al., 2014)
found among sexual minorities. As there was significant evidence of potential conflicts and strengths at this intersection of identities (e.g., Brewster et al., 2016; Hamblin & Gross, 2013; Rostosky et al., 2017; Sowe et al., 2014), frameworks of identity development for sexual identity (Dillon et al., 2011) and R/S identity (Streib et al., 2010) were proposed to help explain potentially negative and potentially positive outcomes. The current study sought to offer researchers and counseling psychologists deeper, more generalizable understandings of sexual minorities’ experiences of religion/spirituality through developmental lenses, which could benefit future research, teaching, and practice of psychology.
CHAPTER II

REVIEW OF LITERATURE

This review of the literature provides theoretical and empirical support for the current study. First, a historical overview of approaches to studying sexual identity development is presented, followed by a framework for utilizing sexual minority identity as an explanatory variable in the current study, which is supported by current research. After this, research on religious/spiritual (R/S) identity development is summarized and a framework for the current study’s exploration of this identity as an explanatory variable is presented. Finally, the constructs of R/S struggles and life satisfaction are overviewed with data to support their usage in this study as outcome variables. To close this chapter, the frameworks selected are summarized and rationale and implications for the current study are provided.

Theoretical Frameworks

Identity Development

Research on identity and identity development has greatly evolved since the early and mid-20th century. Today, identity is considered “a coherent sense of one’s values, beliefs, and roles, including but not limited to gender, race, ethnicity, social class, spirituality, and sexuality” (Worthington et al., 2008, p. 22). In developing an identity, individuals actively explore and consider how an identity fits into their world and ultimately decide the extent to which they will commit to that identity. Identity
development can be explored in terms of specific domains (e.g., sexuality, religion/spirituality) but it also can be understood from intersectional perspectives (e.g., Crenshaw, 1991; Rosenthal, 2016) that respect the interconnectedness of identities. This view of intersectionality was a backdrop for the current review of the literature.

Recent work on the domain of sexual identity built upon the influence of major theorists in psychology. Identity research has a long history in psychology, starting with Sigmund Freud’s (1923/1961) theory of psychosexual development, which focused on early childhood and how individuals come to see themselves. Erikson’s (1950) classic theory of psychosocial development was heavily influenced by Freud’s psychosexual stages but focused on social experiences and extended development across the lifespan, which was broken down into eight relatively distinct stages. From Erikson’s perspective, identity development specifically occurred during the stage of adolescence with an individual attempting to achieve a coherent sense of self. If individuals successfully completed this task, they were considered to have achieved *identity synthesis* or the integration of a set of values and ideals that allow for a clear sense of self. If an individual failed in this regard, Erikson considered the result to be *identity confusion* or an individual lacking a coherent set of values and ideals upon which to build an adult identity. Today, Erikson’s stages are seen less as concrete, sequential periods and more as developmental challenges individuals face and might revisit across the lifespan (e.g., Schoklitsch & Baumann, 2012; Wilt, Cox, & McAdams, 2010). Vaillant and Milofsky (1980) visually described this process as a spiral where a person might reface developmental challenges they have overcome before. Within this framework of ongoing
identity development, an individual can fluctuate between identity synthesis and confusion throughout life (e.g., Arnett, 2000; Schwartz, 2001).

Erikson (1968, 1974, 1980) authored many insightful and complex works addressing identity development but his ideas were often difficult to operationalize and to support empirically. Marcia (1966, 1980, 2002) built upon Erikson’s ideas, providing a more structured framework that envisioned identity development as a process of exploration and commitment (related to Erikson’s identity confusion and identity synthesis, respectively) where the former signified a quest for self-knowledge and the latter represented chosen alignment with a set of values, beliefs, and ideals. Marcia (1966) described how someone could have high or low levels of each of these factors, which allowed him to create a 2x2 grid of identity statuses with four possibilities: foreclosure (low exploration, high commitment), moratorium (high exploration, low commitment), achievement (high exploration, high commitment), and diffusion (low exploration, low commitment). Through the use of structured interviews, sentence completion tasks, and later Likert format self-reports, Marcia and others began to empirically research identity development (see Schwartz, 2001). It has been over 45 years since the introduction of Marcia’s identity status model and the model has been the catalyst for close to 1,000 theoretical and empirical publications since then (see Kroger & Marcia, 2011). It has also been extended to specific identities such as racial identity development (Phinney, 1989, 1992). Worthington et al. (2008) used Marcia’s conceptualization of identity exploration and commitment to develop a model and measure of sexual identity development as subsequently described.
Sexual Identity Development

Historical context. To appropriately understand changes in theories of sexual identity development over time, it is crucial to note that psychological research and practice do not exist in a vacuum outside the social influence of current events. For the majority of the 20th century, the field of psychology conceptualized and described homosexual orientation as a mental illness (Morin, 1977; Smith, Blakeslee, & Rosenthal, 2008). For a time, the field of psychology generally held similar, negative views of sexual minority individuals as those espoused by the general culture and many conservative religious groups (Paul, 2017). Thus, negative views held toward sexual minority identities were heavily influenced by the field of psychology and most models of sexual minority identity development acknowledged and incorporated the social stressor of stigma as a significant factor (Troiden, 1989).

The American Psychiatric Association’s (2013) Diagnostic and Statistical Manual of Mental Disorders (DSM), sometimes referred to as the “psychiatric bible” (Kutchins & Kirk, 1997, p. 5), heavily influenced psychological and American cultural views of mental health (Drescher, 2012). Psychologists, as members of the APA, utilized the DSM in practice to conceptualize client concerns, provide diagnoses, and inform treatment. Many other mental health professionals followed suit. The DSM was first published in 1952 and has undergone numerous revisions to arrive at the DSM-5 currently used today (American Psychiatric Association, 2013). These versions of the DSM reflected current understandings of mental health and the conceptualization of homosexuality as a mental illness from 1952-1973 heavily influenced treatment of sexual minority individuals (Drescher, 2012; Smith et al., 2008). Early studies of gay men
began to break down misinformed understandings regarding the mental health of sexual minorities.

Alfred Kinsey (Kinsey, Pomeroy, & Martin, 1948; Kinsey, Pomeroy, Martin, & Gebhard, 1953) and Evelyn Hooker’s (1957) early work in this area provided data that led mental health professionals to begin questioning the “illness” label associated with same-sex orientations. In a time when discussing sexual behavior was taboo, Kinsey began researching and asking individuals about their sexual experiences and giving them forced choice questions about their sexual interests and attractions, which resulted in a Kinsey Scale score between 0 (exclusively heterosexual) and 6 (exclusively homosexual). Kinsey’s methods have been explored and critiqued substantially (e.g., Cochran, Mosteller, & Tukey, 1954; MacDonald, 1983; Reumann, 2005) but one of the major findings from his data was homosexual and bisexual behaviors were far more common than previously thought. A few years thereafter, Hooker conducted a study in which a sample of gay and heterosexual men completed three different projective tests and she then asked experts in psychoanalysis to evaluate the responses while blind to the participants’ sexual orientations. Based on expert analysis, she found there were no significant differences in mental health between men of different sexual orientations. These early studies on the sexual activity of men and women and the psychological health of gay men eventually led to dialogue in the field of psychology and could be seen as starting points for contemporary understandings of sexual orientation. However, it took quite some time for official stances to shift (Carrier & Boxer, 1998; Chiang, 2008).

At the end of the 1960s and into the 1970s, LGBTQ activism gained momentum. In June of 1969, police in New York City raided the Stonewall Inn—a local gay bar in
Greenwich Village—and sexual and gender minority individuals present began rioting. Now seen as a turning point for gay rights activism and perhaps the most influential event in the contemporary fight for LGBTQ civil rights (Duberman, 1994), the Stonewall riots increased sexual and gender minority visibility as activists began to speak up and share their experiences. Now celebrated annually in June, LGBTQ Pride Month commemorates the events at the Stonewall Inn, cementing it as a historic symbol for the civil rights of LGBTQ people (Armstrong & Crage, 2006). More recently, the Stonewall Inn was named the first national monument recognizing the movement for LGBTQ civil rights in the United States (Rosenberg, 2016). As activism increased in the early 1970s, the social and political climate was still tumultuous surrounding LGBTQ issues.

One of the most damaging messages in society at the time was the label of mental illness the DSM attached to homosexuality. Activists sought to raise awareness about what it was like to live with such a diagnosis. In 1972, Dr. H. Anonymous appeared on a panel at the American Psychiatric Association’s annual convention alongside other self-identifying homosexuals (Scasta, 2002). Appearing on stage in an ill-fitted tuxedo, a wig, and a Richard Nixon Halloween mask, Dr. H. Anonymous spoke through a voice-altering microphone about his experiences living as a psychiatrist who was also a self-identified homosexual. As same-sex behavior was illegal in most of the United States at the time, Dr. H. Anonymous disguised himself to avoid stigma and the potential of losing his license. Although he had to disguise himself to distance the messenger from the message, the power of his words still resonates today.

As psychiatrists who are homosexual, we must know our place and what we must do to be successful. If our goal is academic appointment, a level of earning
capacity equal to our fellows, or admission to a psychoanalytic institute, we must make certain that no one in a position of power is aware of our sexual orientation or gender identity. Much like the black man with the light skin who chooses to live as a white man, we cannot be seen with our real friends—our real homosexual family—lest our secret be known and our dooms sealed. (Scasta, 2002, pp. 80–81)

Feeling the opportunity at hand, Dr. H. Anonymous—who was able to later publicly identify himself as Dr. John Fryer—shared his experiences, hoping for a change in how the psychiatric community viewed homosexuality.

Stories like Dr. Fryer’s and those of other gay activists who faced stigma and prejudice for their sexual orientation led the American Psychiatric Association (2013) to consider such testimonies of psychologically healthy individuals in context of the research on sexual orientation available. This review ultimately led the American Psychiatric Association to remove homosexuality from the DSM as a diagnosable mental illness in 1973 and to begin conceptualizing homosexual orientations as part of natural human diversity (Drescher, 2012). The American Psychiatric Association’s historic decision led other mental organizations to examine their positions on homosexuality. As the world’s largest organization of psychologists, the American Psychological Association took an official stance in affirmation of sexual minority individuals in 1975, calling psychologists to remove entrenched societal stigma surrounding same-sex sexual orientation:

Homosexuality, per se, implies no impairment in judgment, stability, reliability, or general social and vocational capabilities; further, the American Psychological Association urges all mental health professionals to take the lead in removing the
stigma of mental illness that has long been associated with homosexual orientations. (Conger, 1975, p. 633)

This public stance did not lead to immediate societal change but it did lead to increased research and exploration of sexual minority identity as subsequently discussed.

Today, nearly every major mental health organization in the United States—APA (2009), the American Psychiatric Association (Scasta & Bialer, 2013), the American Counseling Association (2009), the American Association of Marriage and Family Therapy (2004)—views same-sex orientations as healthy possibilities in the diversity of human experience, yet a substantial body of literature found sexual minorities reported higher rates of mental health concerns than did their heterosexual peers (e.g., Hatzenbuehler, Hilt, & Nolen-Hoeksema, 2010; Marshal et al., 2011; Mustanski, Garofalo, & Emerson, 2010). Social psychological literature has explored the effects of prejudice and stigma on the mental health of sexual minorities through the lens of the minority stress model (MSM; Meyer, 1995). Rather than seeing the higher risks for mental health disorders among minority groups as indicative of internal deficiencies or pathology, the MSM explored these experiences as products of chronic stress. Meyer (2013) highlighted research on stereotypes, prejudice, and stigma that could demystify mental health challenges experienced by some sexual minorities. Most models of minority identity development incorporated elements of minority stress into current conceptualization. A recent longitudinal study of a large sample of adolescents and young adults (N = 11,727) revealed that changes in sexual identity toward sexual minority identities increased reports of depressive symptoms (Everett, 2015), suggesting
continued stigmatization of LGBQ individuals and indicating a need to better understand the process of sexual minority identity development.

**Stage models of gay and lesbian identity development.** Following the removal of homosexuality from the DSM (American Psychiatric Association, 2013), theories of positive sexual minority identity development began to develop. Vivienne Cass (1979) proposed a seminal stage model of sexual minority identity development that conceptualized coming to terms with a same-sex orientation in six stages (see Table 1). The stages were seen as sequential; however, the amount of time between stages could vary widely and identity foreclosure (Marcia, 1966) could occur at any stage with an individual ceasing to explore possibilities and rather committing to a current identity status. Cass made a distinction between public and private identity with the latter stages signifying more congruence between the two spheres. Her model broke significant ground by outlining and touching upon many important areas for sexual minorities that had been neglected in the psychological literature. It is important to understand the stage progression of Cass’ model as it has provided the framework and trajectory of many later theories, acting as a catalyst for much of the current work in sexual identity development.
Table 1

*Homosexual Identity Development* (Cass, 1979)

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1: Identity Confusion</td>
<td>Individuals struggle to come to terms with same-sex attractions in context of Western cultures socializing individuals to be heterosexual. Identity formation begins when individuals acknowledge that external behavior or internal thoughts and feelings could be considered homosexual. Individuals likely to experience distress.</td>
</tr>
<tr>
<td>Stage 2: Identity Comparison</td>
<td>Individuals are more willing to admit the possibility of being homosexual. Comparisons to those who identify as heterosexual occur, which can increase sense of social alienation. Isolation may differ depending on social climate.</td>
</tr>
<tr>
<td>Stage 3: Identity Tolerance</td>
<td>Individuals more open to probably being homosexual, with greater exploration of homosexual communities and commitment to a homosexual identity. Emotional quality of contact with other homosexual influences experiences.</td>
</tr>
<tr>
<td>Stage 4: Identity Acceptance</td>
<td>Individuals can say, “I am homosexual.” Increased engagement with others who share homosexual identities crucial. Individuals may begin disclosing homosexual identity to significant heterosexual friends and family, but likely not publicly acknowledging it.</td>
</tr>
<tr>
<td>Stage 5: Identity Pride</td>
<td>Being considered heterosexual feels incongruent and individuals begin to openly acknowledge minority identity. Heterosexuals views and values (e.g., strict gender roles) may be devalued with increased focus on gay communities. Individuals may become frustrated or angry living in a society that devalues them, using energy to fuel activism.</td>
</tr>
<tr>
<td>Stage 6: Identity Synthesis</td>
<td>Individuals committed to homosexual identity while more flexible and integrative of sexual identity with other identities (e.g., gender, race). Individuals become more accepting of heterosexuals, seeing them as capable of good and not as categorically anti-homosexual.</td>
</tr>
</tbody>
</table>
Cass (1979) offered an important caveat about her model of homosexual identity formation: “It is not intended that [the model] should be true in all respects for all people since individuals and situations are inherently complex” (p. 235; emphasis in original). She also had the foresight to predict societal attitudes and prejudice might shift over time. Her stage model brought significant insight to an area of psychology that was woefully lacking. She also developed a questionnaire that allowed her to provide initial support for her model (Cass, 1984a, 1984b). Her stage allocation measure (Cass, 1984b) included a paragraph description for each stage of her model and one paragraph description for a Pre-Stage 1. Participants self-selected which paragraph fit them best and her lengthy 210-item Homosexual Identity Questionnaire (Cass, 1984b) was meant to determine one’s stage of homosexual identity development. Little psychometric information was provided for these measures. While perhaps simplistic by today’s standards, these were significant steps forward in sexual identity research methodology. Brady and Busse (1994) later developed the Gay Identity Questionnaire, a briefer but still lengthy measure of Cass’ stages among gay men that generally supported the concepts in Cass’ stage model.

Criticism of Cass’ (1979, 1984a, 1984b) work drove research forward including the development of newer models (e.g., McCarn & Fassinger, 1996). Although presented as a homosexual identity formation model, Cass’ (1979) six-stage trajectory is seen today more as representative of the coming out process rather than as a complete model of sexual identity development (McCarn & Fassinger, 1996; Savin-Williams, 2005). Numerous other authors (e.g., Coleman, 1982; Milton & McDonald, 1984; Troiden, 1989) have presented stage theories of development for gay and lesbian identities that
generally share related features and an overall trajectory, e.g., beginning to acknowledge one’s same-sex attraction, exploring one’s same-sex attractions, and eventually committing to and publicly demonstrating one’s same-sex attraction (Prince, 1995, Savin-Williams, 2005). McCarn and Fassinger (1996) highlighted that many of the models building upon Cass’ model failed to provide empirical evidence and the conceptualization of strict stages was too rigid and perhaps an oversimplification of the process. Cass’ model was historically monumental and still conceptually influences contemporary models of sexual identity development. Later models created frameworks allowing for more complex understandings of sexual identity development and collection of empirical evidence.

**Phase models of gay and lesbian identity development.** McCarn and Fassinger (1996) and Fassinger and Miller (1996) critiqued Cass’ (1979) model and synthesized perspectives from other models into a new framework for lesbian and gay identity development. One of their major criticisms was earlier models built primarily on the experiences of White gay men with the ultimate stage trajectory of a politicized, public sexual minority identity, which might have limited applicability to women and people of color and created a narrow conceptualization of identity development. The authors brought attention to the works of Downing and Roush (1985), Sophie (1985-1986), and Chapman and Brannock (1987) to highlight the experiences of women and to the works of Chan (1989), Loiacano (1989), and Morales (1989) to highlight the experiences of racial minorities in developing sexual minority identities. Adams and Phillips (2009) offered similar critiques of previous models as Eurocentric.
These critiques helped expand this area of research to better address the complexities of sexual identity development when a person identifies with multiple stigmatized identities. Specifically, McCarn and Fassinger (1996) incorporated Cross’ (1987) conceptualization of racial identity development having both a personal and public component in order to create a framework that considered the personal and public identity of sexual minority individuals. As they saw it, Cass’ (1979) model and other models conflated the trajectories of personal and public sexual minority identity development, resulting “in an odd tyranny in which political activism and universal disclosure become signs of an integrated lesbian/gay identity” (McCarn & Fassinger, 1996, p. 519). Political activism was not portrayed as a negative outcome but one importantly distinct from personal identification. With this in mind, the authors sought to distinguish between these two spheres of personal and public identity development.

The model proposed by McCarn and Fassinger (1996) for lesbian identity development and then extended by Fassinger and Miller (1996) to gay identity development thus had four phases that were seen along the dimensions of individual and group membership identity: (a) awareness, (b) exploration, (c) deepening/commitment, and (d) internalization/synthesis. Phases rather than stages were used because the strict linearity of stage models did not allow for the authors’ envisioned process: “Although we outline phases in a progression, we conceptualize the process as continuous and circular” (McCarn & Fassinger, 1996, pp. 521-522). The four phases were generally seen in a progression but this might not always have been the case and revisiting phases was presented as a possibility. Additionally, personal and group identity development were seen as distinct, being potentially in different phases for each. For example, a person
could be in the internalization/synthesis phase in terms of personal identity—marked by a deep sense of personal fulfillment and identity in the person’s relationships with members of the same-sex—and in the exploration phase in terms of group membership identity—perhaps marked by feelings of excitement and fear over getting more involved in lesbian or gay communities. Measures were subsequently developed to explore these dynamics—the Gay Identity Scale (Fassinger, 1997) and the Lesbian Identity Scale (Fassinger & McCarn, 1997)—but little published research evidence could be found to support continued use of the measures.

Worthington et al. (2008) noted the complexity of the overall conceptualization of Fassinger and colleagues’ model while offering the important critique that their measures required a person to currently identify as either gay or lesbian in order to complete them, meaning there would be inherent skew toward those who were further along in their identity development and promotion of a homosexual-heterosexual binary without options for other sexual identities in between. Savin-Williams (2005) provided additional critique to Fassinger and colleagues’ model and other similar lesbian and gay identity models that were not open to the spectrum of possible identities (e.g., bisexual, heterosexual). Others critiqued the current limitation of a false homosexual-heterosexual binary in sexual identity research (e.g., Paul, Smith, Mohr, & Ross, 2014), which continued to further dialogue on how to expand the scope of research on sexual minority identity development beyond the identities of lesbians and gay men.

**Bisexual identity development.** In the area of bisexual identity research, Klein (1993) was a driving force, bringing attention to the unique experiences of those who identified as bisexual. He was the first editor-in-chief of the *Journal of Bisexuality* in
2000, which has highlighted strengths and struggles specific to individuals who identify as bisexual (Eliason & Elia, 2011). Alongside colleagues, he also developed the Klein Sexual Orientation Grid (KSOG; Klein, Sepekoff, & Wolf, 1985), which included items related to past, present, and future (i.e., ideal) self-identified sexual orientation. While the KSOG holds promise based on these dimensions for future research exploring changes in sexual orientation over time, there is evidence the current model does not meet sufficient psychometric rigor (Cramer, Chevalier, Gemberling, Stroud, & Graham, 2015). The KSOG might not currently be the most effective measure of sexual orientation identity but Klein’s work in the area of sexual identity has undoubtedly increased awareness surrounding bisexuality.

In the face of cultural and individual heterosexism and prejudice (Herek et al., 2009), bisexual individuals encounter many of the same challenges as other sexual minorities. Recent research has demonstrated the need to include and consider bisexual individuals as distinct from other sexual minority identities (e.g., Semlyen et al., 2016; Shilo & Savaya, 2012; White & Stephenson, 2014); evidence indicates bisexual individuals experience unique stressors in their own identity development (e.g., Brewster & Moradi, 2010). Although the Kinsey reports (Kinsey et al., 1948, 1953) brought awareness to the fact that bisexual and homosexual behaviors were far more common than previously thought, bisexuality has a history of being neglected in the literature since (e.g., Bieschke, Paul, & Blasko, 2007; Moradi et al., 2009).

Weinberg, Williams, and Pryor’s (1994) seminal work on bisexuality noted bisexual individuals have had to overcome expectations associated with two socially acknowledged sexual identities (i.e., heterosexual and homosexual) to establish a unique
identities of their own. Based on their research, the authors depicted a stage model where bisexual identity progressed from initial confusion, finding and applying the bisexual label, settling into the identity, and lastly continued uncertainty. The final stage of uncertainty in their observed model appeared to be especially influenced by the social pressure to fit within the homosexual-heterosexual binary. Notably, this model highlighted similar concepts of exploration, commitment, and confusion addressed by Marcia’s (1966) conceptualization of identity development, indicating these were crucial concepts across the experience of various sexual identities.

Bisexual individuals have been found to have higher levels of exploration and uncertainty in their identities than other sexual orientation groups (Worthington et al., 2008), which might support a more fluid experience of sexual identity compared to other groups and result in within-group differences in the research among those who identify as more homosexual leaning, heterosexual leaning, or somewhere else on the spectrum (Savin-Williams, Joyner, & Rieger, 2012; Weinberg et al., 1994; Weinrich & Klein, 2003). Worthington et al. (2008) summarized literature on bisexual identities:

(a) Bisexuality is a unique and legitimate identity; (b) substantial external pressures to conform to the gay–straight binary may result in considerable confusion, exploration, and uncertainty; and (c) there are important within-group differences among bisexual individuals that have critical influences on sexual identity development. (p. 23)

Keeping this overview in mind, the current study utilized measures of sexual identity made with bisexual individuals in mind in order to provide exploratory data on how they were similar to or different from other sexual minorities in context of the current research
questions. Some authors have developed measures specifically exploring the bisexual experience (e.g., Paul et al., 2014) and further research specific to this population would likely provide insight into the extent research on LGBQ individuals could be generalized to sexual minorities or interpreted with caution due to unique differences between identities.

**Heterosexual identity development.** As research on sexual identity development progressed, a notable lack of understanding regarding heterosexual individuals’ sexual identity development persisted. Similar to the initial lack of research on majority identity development in terms of racial identity (i.e., White identity development), the research on majority identity development in terms of sexual identity (i.e., heterosexual identity development) lagged behind (Worthington et al., 2002). Two prominent models of heterosexual identity development were proposed by Mohr (2002) and Worthington et al. (2002). The former explored the identity development of heterosexual therapists and how it related to their work with sexual minority clients more narrowly, whereas the latter ambitiously explored heterosexual identity development more broadly. Notably, neither model suggested a linear stage-like progression of heterosexual identity development, which seemed indicative of growing awareness of the complex nature of identity development (Bieschke, 2002). Both models explored heterosexual identity development in terms of individuals having multiple identities and in the context of societal heterosexism. Due to the broader scope of the Worthington et al. model, it was the focus here.

With Fassinger and colleagues’ models (Fassinger & Miller, 1996; McCarn & Fassinger, 1996) in mind, Worthington et al. (2002) proposed a model of heterosexual
identity development that highlighted several biopsychosocial contextual factors influencing development: (a) biology, (b) microsocial contexts, (c) gender norms and socialization, (d) culture, (e) religious orientation, and (f) systemic homonegativity, sexual prejudice, and privilege. Similar to Fassinger and colleagues’ personal and public lesbian and gay identities, Worthington and colleagues saw individuals developing an individual and a social heterosexual identity. It was also pertinent to note that religious orientation was offered as one of the primary contextual factors influencing sexual identity as this supported the case for this area of identity as a focus of the current study.

Crucially, the Worthington et al. (2002) model described sexual orientation identity as one component of individual sexual identity rather than as sexual identity itself. Sexual orientation identity has been painted as one of six components of individual sexual identity: (a) perceived sexual needs, (b) preferred sexual activities, (c) preferred characteristics of sexual partners, (d) sexual values, (e) recognition and identification of sexual orientation, and (f) preferred modes of sexual expression. Thus, sexual orientation identity has been subsumed by sexual identity, which includes multiple other factors. By removing “heterosexual” and including more inclusive language, this model could be seen as a more universal model of sexual identity development that applies to sexual minority individuals as well. Bieschke (2002) made a case for this position and Dillon et al. (2011) obliged, proposing a model of sexual identity as a universal process. Thus, the Worthington et al. model of heterosexual identity development broadened the scope of sexual identity research to view sexual orientation identity as one important piece of a larger puzzle.
Sexual identity development as a universal process. The model proposed by Dillon et al. (2011) was developed to provide a framework for understanding the sexuality identity development of all people regardless of sexual orientation. This extended theory in this area beyond the identity development of specific sexual orientation identities (e.g., lesbian, gay, bisexual, heterosexual; Schwartz, Zamboanga, Luyckx, Meca, & Ritchie, 2013) as was considered in the past (e.g., Cass, 1979; Fassinger & Miller, 1996; McCarn & Fassinger, 1996; Weinberg et al., 1994; Worthington et al., 2002). That being said, Dillon et al. acknowledged the benefits of identity-specific sexual identity development models, describing how they could provide additional insight into unique experiences of particular groups. From this perspective, their model was meant to add to this research area rather than replace previous models:

Group-specific and universal models of sexual identity development can be viewed as having complementary strengths and limitations in that aspects of sexual identity development that are uniquely salient to specific groups are the focus of group-specific models, and aspects that are shared across groups are the focus of universal models. (Dillon et al., 2011, p. 26)

Synthesizing the previous sexual identity literature, the authors sought to describe identity statuses that could be seen as universal.

Similar to previous models, the Dillon et al. (2011) model viewed sexual identity individually and socially with these two areas seen as paralleling and influencing each other. Sexual orientation identity was again described as one dimension of individual sexual identity. Five identity statuses were outlined: (a) compulsory heterosexuality, (b) active exploration, (c) diffusion, (d) deepening and commitment, and (e) synthesis. The
last four were connected to the models previously described in this chapter while the first incorporated literature regarding social norms as subsequently described. The statuses were considered generally developmental but the model allowed for circular reprocessing at any time throughout the lifespan. As the authors put it: “Points in the model should be thought of as non-linear, flexible, and fluid descriptions of statuses through which people may pass as they develop their sexual identity over the lifespan” (Dillon et al., 2011, p. 658). They hypothesize theoretical pathways between statuses in their model; however, further research would be necessary to support these directional transitions (see Figure 1).

Figure 1. Process of sexual identity development (Dillon et al., 2011).
The first status, compulsory heterosexuality, was based on the work of Rich (1980), which was later adopted by Mohr (2002). This status describes any individual who accepts a heterosexual orientation identity based on societal and cultural norms and pressures. Due to the heteronormativity present in many cultures, compulsory heterosexuality is depicted as a likely initial status for most individuals. Similar to previous literature in sexual identity development, inherent societal and individual heterosexism and prejudice (Herek et al., 2009) were seen as having a powerful influence regardless of an individual’s sexual orientation. This was the one status the authors depicted as unlikely to be revisited after an individual began exploring his/her identity.

Active exploration describes purposeful exploration, experimentation, and evaluation of the components of sexual identity (e.g., preferred characteristics of sexual partners, sexual values, recognition and identification of sexual orientation). This exploration does not necessarily require behavioral exploration and can be done cognitively. The forms this exploration can take (e.g., reading, engaging in new sexual activities, exploring new group identities) might look very different depending on a host of personal (e.g., gender, age, race, ethnicity) and contextual (e.g., family, religion, sexual orientation identity group culture) factors (Dillon et al., 2011). Those in this status are depicted as more questioning of societal and cultural messages regarding sexuality.

The third identity status, diffusion, is perhaps the hardest to simply define. Generally, it is considered both the lack of active exploration as well as the lack of commitment to particular identity components (Marcia, 1987), which can be experienced in a more carefree or a more distressing manner (Luyckx, Goossens, Soenens, Beyers, & Vansteenkiste, 2005; Luyckx et al., 2008). In terms of sexual orientation identity, this
could mean a person experiences openness to new experiences and apathy surrounding commitment to a particular sexual orientation identity. It could also mean a person experiences anxiety, depression, or other distressing symptoms. Individuals in this status likely express some amount of confusion and perhaps lack self-awareness regarding intentionality in their openness to new ideas, experiences, and behaviors.

Deepening and commitment, the fourth identity status, is most synonymous with Marcia’s (1966) conceptualization of identity achievement (high exploration, high commitment). However, in the Dillon et al. (2011) model, this status could be entered by heterosexual individuals without a high level of active exploration due to the option and relative ease of fitting into heteronormative societal expectations. For sexual minorities, active exploration is proposed as typically preceding entering into deepening and commitment. Sexual minorities in this status are generally seen as having a deeper understanding and appreciation of their values and sexual orientation identity in the individual realm and greater awareness and knowledge of dominant/privileged and non-dominant sexual orientation identity groups in the social realm.

The final identity status of this model is synthesis. In this status, congruence is considered between individual and social sexual identity, making it arguably the most mature of the statuses (Dillon et al., 2011). Individuals here are depicted as aware of the messages and values influencing their views of sexuality and having gained a sense of sexual identity that is self-fulfilling and self-chosen. In this status, the intersection of multiple identities (e.g., gender, race, religious/spiritual) is proposed to be more consistent and coherent than in other statuses. Thus, Dillon et al. (2011) hypothesized that being in the synthesis status of sexual identity development would correlate with a
more consolidated and mature sense of identity in other aspects of identity. Additionally, sexual minority individuals in this status are seen as holding less negative self-views and heterosexual individuals are seen as holding less negative views of sexual minorities. Both heterosexual and sexual minority individuals in this status are seen as more aware of the complexity of human sexuality.

This universal process of sexual identity development has begun to show strong empirical support. The Measure of Sexual Identity Exploration and Commitment (MoSIEC; Worthington et al., 2008) informed the development of the Dillon et al. (2011) model and can be seen as an empirical measure of it (see Chapter III). This measure has four factors that built upon previous work: (a) exploration, (b) commitment, (c) sexual orientation identity uncertainty, and (d) synthesis/integration. The third factor, sexual orientation identity uncertainty, focuses specifically on sexual orientation identity as one aspect of sexual identity. Based on the theoretically supported creation and psychometrically supported validation of the MoSIEC, the Dillon et al. model showcased significant utility. In studies of within-group differences of sexual minorities, the MoSIEC supported the universal process model by capturing different levels of sexual identity development factors for “mostly straight” and “exclusively straight” women with higher levels of exploration and uncertainty found among the “mostly straight” women (Worthington & Reynolds, 2009). Thompson and Morgan (2008) demonstrated that differences in sexual behavior did not directly correlate with differences in sexual identity development factors using an earlier version of the MoSIEC, supporting the universal model’s conceptualization of sexual behavior as only part of sexual identity. Additionally, an earlier version of the MoSIEC supported the universal model’s
conceptualization that exploration of sexual identity and sexual identity uncertainty were correlated with more affirmative views of sexual minorities as self-identified heterosexuals who scored higher on exploration held less negative views of sexual minorities (Worthington, Dillon, & Becker-Schutte, 2005; Worthington & Reynolds, 2009).

The MoSIEC (Worthington et al., 2008) has been used in other contexts, demonstrating its psychometrically strong foundation, its conceptual versatility, as well as its further support of the universal model. Morgan et al. (2010) used the MoSIEC to explore the process of sexual orientation questioning among self-identified heterosexual men while Morgan and Thompson (2011) incorporated the MoSIEC similarly in a study of self-identified heterosexual women. Sexual identity commitment across sexual orientations has been positively correlated with self-efficacy in providing LGB-affirming counseling (Dillon, Worthington, Soth-McNett, & Schwartz, 2008). Interestingly, Preciado et al. (2013) implemented the MoSIEC in a study that found manipulating messages of support or stigma regarding same-sex relationships resulted in changes in sexual orientation uncertainty and self-perceived sexual orientation among heterosexual participants with more positive messages resulting in higher reports of same-sex sexuality. Higher scores on the exploration subscale have been correlated with more positive sexual self-concepts for both heterosexual and sexual minority women (Parent et al., 2015). Borders, Guillén, and Meyer (2014) found higher sexual orientation uncertainty scores were associated with depressive symptoms and perceived stress among sexual minorities but not among heterosexuals, which was in line with research on cultural prejudice and stigma against sexual minorities (Meyer, 2013). The MoSIEC has
also been used longitudinally to measure changes in sexual identity exploration and synthesis/integration among young sexual minority men (Moreira, Halkitis, & Kapadia, 2015).

**Dimensional models of sexual identity.** In addition to developmental models, it is important to recognize another recent research paradigm for sexual identity: dimensional models. Rather than focusing on identity development over time, these models and accompanying measures explore dimensions of sexual identity considered important to sexual minorities. Examples of such measures include the Outness Inventory (Mohr & Fassinger, 2000) as well as the Lesbian and Gay Identity Scale (Mohr & Fassinger, 2000) and its revised version the Lesbian, Gay, and Bisexual Identity Scale (Mohr & Kendra, 2011). The Outness Inventory assesses the extent to which sexual minority individuals are discussing their sexual orientation with different social groups (e.g., friends, family, coworkers) and the Lesbian, Gay, and Bisexual Identity Scale (Mohr & Kendra, 2011) considers experiences on eight factors (e.g., acceptance concerns, internalized homonegativity, identity centrality). Due to the developmental lens of the current study, measures of sexual identity development were the focus; the goal was to gain a better understanding of how sexual identity development factors related to religious/spiritual (R/S) development. Future research could explore how specific dimensions of identity (e.g., identity centrality) impact the religious and spiritual experiences of LGBQ individuals.

**Measures of sexual identity development.** Based on this overview of literature on sexual identity development, the Dillon et al. (2011) model and the MoSIEC (Worthington et al., 2008) appeared to be the most advanced and well-researched (see
Table 2). Cass’ (1979) seminal model provided a significant starting point but the relatively simplistic design of the Stage Allocation Measure (Cass, 1984b) lacked the complexities and advances of later measures and the lengthy Gay Identity Questionnaire (Brady & Busse, 1994) focused on the experiences of gay men. Fassinger and colleagues (Fassinger & Miller, 1996; McCarn & Fassinger, 1996) focused on specific sexual orientation identities (e.g., lesbian, gay) rather than being open to any possible sexual orientation identity with the Lesbian Identity Scale (Fassinger & McCarn, 1997) and Gay Identity Scale (Fassinger, 1997), thus potentially neglecting the experiences of individuals who identified with other sexual orientations. The integration of theory and empirical support, as well as its applicability to individuals across the spectrum of sexual orientation, made the MoSIEC the instrument of choice for the current study.
Table 2

*Measures of Sexual (Orientation) Identity Development*

<table>
<thead>
<tr>
<th>Measure</th>
<th>No. of Items/Scaling</th>
<th>Psychometric Data</th>
<th>Factors Included</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stage Allocation Measure (SAM) and Homosexual Identity Questionnaire (HIQ; Cass, 1984b)</strong></td>
<td>SAM: Seven paragraphs; participants self-select statement they identify with most  &lt;br&gt;HIQ: 210 items; multiple-response type and checklists</td>
<td>No evidence for reliability or validity for either measure found</td>
<td>Paragraph description for each of the six stages of the model and one for Pre-Stage 1; numerous dimensions thought to align with the stages</td>
</tr>
<tr>
<td>Gay Identity Development Questionnaire (Brady &amp; Busse, 1994)</td>
<td>45-item self-report measure, true/false responses</td>
<td>Kuder–Richardson interitem reliability is reported to range from .44 to .78</td>
<td>42 questions aligned to six stages (seven per stage) and three validity questions</td>
</tr>
<tr>
<td><strong>Lesbian Identity Scale (LIS; McCarn &amp; Fassinger, 1996)</strong></td>
<td>40-item self-report measure; 7-point Likert-type scale</td>
<td>Cronbach’s α from unpublished studies estimated to range from .53 to .73 and from .62 to .94 for one study (Tozer &amp; Hayes, 2004)</td>
<td>Four phases for individual and group identity: awareness, exploration, deepening/commitment, internalization/synthesis</td>
</tr>
<tr>
<td>Gay Identity Scale (GIS; Fassinger &amp; Miller, 1996)</td>
<td>40-item self-report measure; 7-point Likert-type scale</td>
<td>Cronbach’s α from unpublished studies estimated to range from .37 to .71 and from .66 to .90 for one study (Tozer &amp; Hayes, 2004)</td>
<td>Four phases for individual and group identity: awareness, exploration, deepening/commitment, internalization/synthesis</td>
</tr>
<tr>
<td>Measure of Sexual Identity Exploration and Commitment (MoSIEC; Worthington et al.)</td>
<td>22-item self-report measure; 6-point Likert-type scale</td>
<td>Internal consistency estimates from .78-.91; supported by confirmatory factor analysis; 2-week test-retest reliability (r = .71-.90)</td>
<td>Four factors: exploration, commitment, sexual orientation identity uncertainty, and synthesis/integration</td>
</tr>
</tbody>
</table>
Religious and Spiritual Identity
Development

**Historical context.** There has been a history of tension in psychology regarding how to approach and conceptualize religion/spirituality (R/S) in individuals’ lives, tracing back to the early days of Freud (Freud & Strachey, 1975). Today, religion and spirituality are generally considered aspects of human diversity that require respect from a multicultural perspective (APA, 2003; Sue & Sue, 2013). William James (1902), the founding father of the field known as the psychology of religion and spirituality, defined religion as “the feelings, acts, and experiences of individual men in their solitude so far as they apprehend themselves to stand in relation to whatever they may consider divine” (p. 32). Contemporary scholars might read James’ definition as one of spirituality rather than religion; however, the two terms have been used similarly until more recently (Shafranske & Sperry, 2005). In the 1960s and 1970s, many baby boomers became more interested in personal transcendent or mystical experiences over institutionally sanctioned ones, which is one explanation for the delineation of the two terms (Roof, 1993). As thought shifted nearing the end of the last century, spirituality became a way to differentiate between the organizational, external, and objective concept now commonly labeled religion and the personal, internal, and subjective concept of spirituality (Pargament et al., 2013). Although this distinction has provided terminology that had furthered research in many ways, it has also been problematic, particularly when religion has been cast in a negative light and spirituality in a positive one when they are actually often interlinked and not mutually exclusive concepts (Zinnbauer et al., 1997). In this study, R/S was used to refer to this realm of experiences, and religion or spirituality specifically when referring to the concepts just defined (Pargament et al., 2013).
Research on R/S in psychology has increased in recent years. The “fourth force” of multiculturalism in the field of American psychology (Bartoli, 2007; Gelso, Williams, & Fretz, 2014) has highlighted a need for focus on R/S, considering them important aspects of identity that also have significant intersections with other areas of identity (Davis et al., 2015). Nevertheless, there has been historical neglect of research on experiences of R/S generally and specifically among sexual minorities. In fact, Phillips et al. (2003) conducted a 10-year content review of eight major counseling journals (e.g., *Journal of Counseling Psychology, The Counseling Psychologist, Journal of Consulting and Clinical Psychology, Professional Psychology: Research and Practice*) and found only 119 of 5,628 (2.1%) of articles published addressed sexual minorities, and only three of those (2.5% of 119; < .001% of 5,628) addressed R/S among sexual minorities. More recently and specifically to the field of counseling psychology, Lee et al. (2013) completed a multicultural content analysis of articles published ($N = 3,717$) in the *Journal of Counseling Psychology* from 1954-2009. Multicultural content has dramatically increased in recent years; however, sexual identity and R/S have been woefully under-researched, accounting for less than 1% of all articles published in the *Journal of Counseling Psychology* even when combined with research articles on disability and social class.

Of course, under-researched areas insignificant to individuals’ lives would not be pressing. However, this did not appear to be the case with R/S in the lives of sexual minorities. Results of the 2014 Religious Landscape Study (Pew Research Center, 2016) indicated approximately 76% of the U.S. population considered themselves religious—70% identified as Christian and 6% identified as members of other religious groups (e.g.,
Jewish, Buddhist, Muslim). From over 35,000 respondents to this survey, about 5% self-identified as lesbian, gay, or bisexual (Murphy, 2015). Approximately 59% of those LGB respondents identified as religious; nearly half (48%) self-identified as Christian and a smaller percentage (11%) identified as members of other religious communities. While the data suggested sexual minorities were less religiously involved compared to the general population (e.g., Herek et al., 2010; Pew Research Center, 2016), it appeared religion played a significant role for the majority of LGBQ individuals.

Due to the current demographic landscape of the United States, much of the research on the religious and spiritual experiences of sexual minorities has focused on Christian experiences (e.g., Hamblin & Gross, 2013; Sowe et al., 2014). The scant research on LGBQ individuals from other faith traditions is subsequently summarized. A recent survey (Pew Research Center, 2013) that focused on sexual minority Americans found lopsided majorities (73%-84%) described major religions and religious denominations (i.e., evangelical Christian, Catholic, Mormon, Muslim) as unwelcoming to LGBTQ people. Considering that data suggested the majority of sexual minorities are raised in religious households (e.g., LeVay & Nonas, 1995; Schuck & Liddle, 2001), sexual and religious/spiritual (R/S) identity development might have reciprocally impacted each other, likely influenced by prejudicial beliefs.

Among the general population, research on R/S has shown positive correlations between religious practices and psychological well-being (e.g., Koenig, 2009; Smith et al., 2003). Explanations for these relationships included increased social support (Corrêa et al., 2011), opportunities for meaning making (Aten et al., 2013; Park et al., 2013), and provision of other coping resources (Gall & Guirguis-Younger, 2013). As the data
indicated, however, relationships to R/S among sexual minorities appeared more complicated (e.g., Brewster et al., 2016; Fontenot, 2013). Across cultures, religious beliefs appeared to significantly influence views of homosexuality (van den Akker et al., 2013) with personal religious beliefs being particularly influential in the United States (Adamczyk & Pitt, 2009). Religiosity generally and conservative religious beliefs specifically have been consistently connected to negative views of sexual minorities (e.g., Balkin et al., 2009; Cragun & Sumerau, 2015; Finlay & Walther, 2003; Herek, 1994; Schulte & Battle, 2004). For sexual minorities, moral values learned in religious and spiritual contexts are likely to affect sexual identity development (Worthington, 2004). Thus, understanding how sexual minorities experience R/S remains a crucial area of research.

**Religious and spiritual experiences of sexual minorities.** Due to many religious groups holding stigmatizing views of LGBTQ people, the experiences of sexual minorities with R/S are often complex. Much of the research thus far has found and portrayed a sense of conflict or struggle among sexual minorities who engage in R/S (e.g., Fontenot, 2013; Lease et al., 2005). When religious conflict is experienced, sexual minorities have reported higher levels of depression, lower self-esteem, and higher levels of sexual orientation conflict (Dahl & Galliher, 2010) as well as higher levels of generalized anxiety (Hamblin & Gross, 2013). Thus, experiences of conflict at this intersection are a common phenomenon. More recent research has begun to explore some of the positive ways sexual minorities connect with R/S (e.g., Brewster et al., 2016) as subsequently discussed.
Research on the intersection of sexual and religious/spiritual (R/S) identities is in its infancy with many worthwhile areas open for future research (Rostosky et al., 2017). Much of the research examining this intersection from a developmental lens thus far has utilized rich and insightful qualitative methodologies (e.g., Dahl & Galliher, 2012; Levy, 2012), which indicated a need for larger samples and statistically rigorous research methods to confirm qualitative themes and obtain more generalizable data (Hamblin & Gross, 2014). The following review of quantitative and qualitative literature related to the intersection of sexual and R/S identities informed the current study.

Qualitative studies and qualitative portions of mixed methods studies examining the experiences of sexual minorities with R/S found significant conflict between these identities (e.g., Barton, 2010) with very few individuals being unaffected by involvement in non-affirming religious communities (e.g., Subhi & Geelan, 2012). Numerous studies have found that when this conflict occurred, depression appeared to be perhaps the most common negative mental health outcome (e.g., Barnard, 2009; Beagan & Hattie, 2015; Kubicek et al., 2009; Schuck & Liddle, 2001; Subhi & Geelan, 2012). Anxiety, low self-esteem, self-harming behaviors, and suicidality were also reactions to negative experiences with R/S (e.g., Beagan & Hattie, 2015; Schuck & Liddle, 2001; Subhi & Geelan, 2012). Feelings of shame (Beagan & Hattie, 2015; Buser et al., 2011; Lytle et al., 2013; Murr, 2013), experiences of discrimination (Bowers et al., 2010; Nadal et al., 2011), and experiences of familial, religious, and LGBQ communal rejection (Beagan & Hattie, 2015; Dahl & Galliher, 2012; Gold & Stewart, 2011; Jeffries et al., 2008; Murr, 2013; Subhi & Geelan, 2012) likely influenced negative mental health outcomes reported by sexual minorities regarding their experiences with R/S. Due to the conflict
experienced between these identities, some sexual minorities have unsuccessfully attempted to change their sexual orientation (Beckstead & Morrow, 2004; Dahl & Galliher, 2012; Murr, 2013). While there was evidence LGBQ individuals might disengage from non-affirming religious communities (e.g., Dahl & Galliher, 2012; Schuck & Liddle, 2001) or disconnect from their spirituality (e.g., Gold & Stewart, 2011), other evidence indicated many desired to maintain both their sexual and R/S identities (e.g., Halkitis et al., 2009; Subhi & Geelan, 2012).

Other qualitative studies and qualitative portions of mixed methods studies have begun to show potentially positive experiences of sexual minorities with R/S. Few (3 out of 35) of Beagan and Hattie’s (2015) interviewees chose to walk away or reject R/S completely in the face of conflict with most finding ways to make R/S positive for themselves. One common strategy to reduce internal conflict and promote positive experiences with R/S appeared to be questioning and deeply studying religious texts used to portray homosexuality in a negative light in order to contextualize them and understand the ambiguity of interpretation many scholars recognized (Beagan & Hattie, 2015; Dahl & Galliher, 2012; Kubicek et al., 2009; Levy, 2012; Murr, 2013; Schuck & Liddle, 2001; Yip, 2005). Other studies showed positive experiences with R/S when sexual minority individuals found affirming faith communities that supported their relationships (e.g., Barrow & Kuvalanka, 2011; Murr, 2013; Rodriguez & Ouellette, 2000; Rostosky et al., 2017; Schuck & Liddle, 2001). Asakura and Craig (2014) noted how some of their interviewees found resilience in collective meaning making with other LGBTQ individuals after leaving hostile environments, some of which were religious. Schuck and Liddle (2001) found interviewees expressed a sense of internal strength for
having to deeply question their beliefs. Some sexual minorities experiencing conflict with R/S used their beliefs to comfort themselves (e.g., “God made me gay for a reason”) in the face of social rejection (e.g., Jeffries et al., 2008; Kubicek et al., 2009).

Quantitative studies and quantitative portions of mixed methods studies generally supported many of the above qualitative findings. Some research in this area explored levels of internalized heterosexism (IH; e.g., Brewster et al., 2016) or endorsement of negative societal views against sexual minorities by sexual minorities. Lesbian, gay, bisexual, and queer individuals attending non-affirming religious services have been found to have higher levels of IH (Barnes & Meyer, 2012; Herek et al., 2009; Shilo & Savaya, 2012; Sowe et al., 2014), which have been shown to negatively impact mental health (e.g., Lehavot & Simoni, 2011; Rosser, Bockting, Ross, Miner, & Coleman, 2008; Rowen & Malcolm, 2003) and increase willingness to pursue sexual orientation change efforts (Tozer & Hayes, 2004). Multiple studies have also connected higher levels of IH to earlier phases of sexual identity development (e.g., Mayfield, 2001; Mohr & Fassinger, 2000; Rowen & Malcolm, 2003; Welch, 1998), suggesting those reporting more mature identity statuses might hold less stigmatized views of self. Notably, even sexual minority Christians who had left non-affirming faith communities were found to have higher levels of IH than their nonreligious counterparts (Sowe et al., 2014). Sexual minority young adults who grew up in non-affirming religious contexts were also found to have had over twice the odds of reporting a recent suicidal attempt than sexual minorities who did not grow up in such contexts (Gibbs & Goldbach, 2015).

Not specifically related to R/S, Newcomb and Mustanski (2010) conducted a meta-analysis of IH and found small to moderate effect sizes between IH and anxiety and
depression. In support of some of the qualitative literature, the meta-analysis indicated IH was more strongly correlated with depression than anxiety. Alternatively, Hamblin and Gross (2013) found attending non-affirming religious services was associated with higher general anxiety but not depression. Some evidence suggested even non-religious spirituality could negatively influence sexual minority identity (Wright & Stern, 2016); however, more research is required to explore such findings. While future research might further explore which negative mental health outcomes are more severe, it seemed clear that attendance of non-affirming faith communities could negatively impact the mental health of sexual minorities.

Some of the quantitative literature has begun finding positive experiences of sexual minorities with R/S. On the other side of their findings, Hamblin and Gross (2013) did not find higher general anxiety symptoms experienced by those attending affirming faith communities. In fact, attending a religious community that affirmed and accepted diversity of sexual orientation was linked to positive mental health outcomes (e.g., Lease et al., 2005; Yakushko, 2005). Brewster et al. (2016) also found that turning to a higher power for support, forgiveness, and guidance (i.e., forms of positive religious coping) mitigated negative effects of IH among religious and spiritual sexual minorities. For some LGBQ individuals, successfully integrating religious and sexual identities appeared possible (Dahl & Galliher, 2009) and might be the outcome associated with the most positive mental health over rejection or compartmentalization of sexual identity (Dehlin et al., 2015). Research exploring religion as a protective factor also found higher religiosity might reduce risky sexual behavior, substance abuse, and suicide ideation among male sexual minority adolescents (Rosario, Yali, Hunter, & Gwadz, 2006) and
reduce hazardous alcohol and drug use among sexual minority women (Drabble, Trocki, & Klinger, 2016). In addition to this research, some evidence suggested conservative religious denominations are becoming more open and less stigmatizing toward LGBQ individuals even if they are not fully affirming (Paul, 2017). On the whole, growing evidence for positive aspects of R/S in the lives of sexual minorities indicated a need for further research to better understand these dynamics. In the current study, assessment of affirming/non-affirming stance of religious communities was included as a demographic variable based on the conceptualization of Nugent and Gramick (1989) as this appeared to be a significant factor (see Appendix A).

It is important to note much of the literature reviewed focused on the experiences of sexual minorities from Christian denominations. While LGBQ individuals have faced criticism and rejection from the vast majority of religious groups in the United States (Sherkat, 2002), data were less available on the religious and spiritual experiences of sexual minorities from faith traditions other than Christianity. Research on followers of Islam—the second largest world religion—suggested LGBQ Muslims were also likely to experience considerable conflict integrating their identities (Jaspal, 2012; Siraj, 2012). For followers of Judaism, research indicated sexual minorities experienced more conflict when attending Orthodox communities than when attending Reform communities (Abes, 2011; Barrow & Kuvalanka, 2011; Kissil & Itzhaky, 2015; Lytle et al., 2013; Schnoor, 2006). Research on non-monotheistic religions, e.g., Buddhism, Hinduism, and Native American spirituality, generally found more welcoming stances toward sexual diversity (e.g., Porter et al., 2013; Schnoor, 2006; Westerfield, 2012). Due to this insightful, yet limited research, the current study sought to further the potential for gaining knowledge
about non-Christian sexual minorities by using measures applicable to individuals from all faith traditions.

**Faith development.** With the review of previous literature in mind on the importance R/S could play in the lives of sexual minorities, the current study utilized the framework of religious styles (Streib, 2001) to gain deeper understanding of this intersection of identities. Built upon Fowler’s (1981) stages of faith theory, Streib’s (2001) conceptualization of religious styles sought to address many of the conceptual and empirical criticisms of Fowler’s work while pushing the developmental study of R/S further. In overviewing this line of research, it was important to distinguish amongst religion, spirituality, and faith. Religion and spirituality maintained the definitions previously given while Fowler saw faith as a universal, not necessarily religious (e.g., Hood, 2003) way of seeking after and making meaning of the transcendent (e.g., Park, 2005). Or more comprehensively, Fowler stated:

> In the most formal and comprehensive terms I can state it, *faith is:* People’s evolved and evolving ways of experiencing self, others and world (as they construct them) as related to and affected by the ultimate conditions of existence (as they construct them) and shaping their lives’ purpose and meanings, trusts and loyalties, in the light of the character of being, value and power determining the ultimate conditions of existence (as grasped in their operative images—conscious and unconscious—of them). (pp. 92-93)

From this perspective, Fowler outlined a developmental stage theory he saw being universally applicable.
Similar to Cass’ (1979) theory of homosexual identity formation, Fowler’s (1981) conceptualization of faith development is a six-stage process (see Table 3). These stages of faith are grounded in Erikson’s (1950) stages of psychosocial development, Piaget’s (1970) stages of cognitive development, and Kohlberg’s (1976) stages of moral development. The influence of these previous theorists was evident in the cognitive focus of Fowler’s framework as well as the original age guidelines offered for the stages. This developmental lens for approaching religious and spiritual growth has inspired more than 50 unique research projects on faith development (Streib, 2003, 2005).

The most comprehensive measure for researching Fowler’s (1981) theory was the Faith Development Interview (FDI; Fowler, Streib, & Keller, 2004), which used a semi-structured interview format and in-depth categorization procedures to assess various aspects of faith and to determine the current stage of an individual’s faith development. The FDI has been used in multiple countries (the United States, Israel, and Finland) and with members of multiple faith traditions (e.g., Christians, Jews, Buddhists, and non-theistic Israelis; Fowler, 1981; Furushima, 1985; Snarey, 1991; Tamminen, 1994). It has shown the best evidence of reliability and validity of any measures of faith development (Parker, 2006) but its lengthy interview process (generally two to three hours per participant) made it unrealistic for the current study.
### Table 3

*Fowler’s Stages of Faith*

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-stage: Undifferentiated/Primal Faith</td>
<td>“Seeds of trust, courage, hope and love…contend with sensed threats of abandonment, inconsistencies and deprivations in an infant’s environment” (p. 121)</td>
</tr>
<tr>
<td>Stage 1: Intuitive-Projective Faith</td>
<td>“Fantasy-filled, imitative phase in which the child can be powerfully and permanently influenced by examples, moods, actions and stories of the visible faith of primally related adults” (p. 133)</td>
</tr>
<tr>
<td>Stage 2: Mythical-Literal Faith</td>
<td>“Person begins to take on for him- or herself the stories, beliefs, and observances that symbolize belonging to his or her community. Beliefs appropriated with literal interpretations, as are moral rules and attitudes” (p. 149)</td>
</tr>
<tr>
<td>Stage 3: Synthetic Conventional Faith</td>
<td>“Typically has its rise and ascendency in adolescence, but for many adults it becomes a permanent place of equilibrium…person has an ‘ideology’…but he or she has not objectified it for examination and in a sense is unaware of having it. Differences of outlook with others are experienced as differences in ‘kind’ of person. Authority is located in the incumbents of traditional authority roles…or in the consensus of a valued, face-to-face group” (pp. 172-173).</td>
</tr>
<tr>
<td>Stage 4: Individuative-Reflective Faith</td>
<td>“Most appropriately takes form in young adulthood…self (identity) and outlook (world view) are differentiated from those of others and become acknowledged factors in the reactions, interpretations and judgments one makes on the actions of the self and others” (p. 182).</td>
</tr>
<tr>
<td>Stage 5: Conjunctive Faith</td>
<td>“Unusual before mid-life…what the previous stage struggled to clarify, in terms of boundaries of self and outlook, this stage now makes porous and permeable. Alive to paradox and the truth apparent in contradictions, this stage strives to unify opposites in mind and experience. It generates and maintains vulnerability to the strange truths of those who are ‘other’” (p. 198).</td>
</tr>
<tr>
<td>Stage 6: Universalizing Faith</td>
<td>“Exceedingly rare. The persons best described by it have generated faith compositions in which their felt sense of an ultimate environment is inclusive of all being. They have become incarnators and actualizers of the spirit of an inclusive and fulfilled human community…Universalizers are often experienced as subversive of the structures (including religious structures) by which we sustain our individual and corporate survival, security and significance…their community is universal in extent” (p. 200).</td>
</tr>
</tbody>
</table>
While trailblazing in its own right, faith development theory has been critiqued in similar fashion as other stage theories in that it creates a linear series of a priori categories into which individuals must fit (e.g., Power, 1991; Streib, 2001), which might not be appropriate considering evidence that the thinking of children and adults regarding R/S is not wholly distinct (e.g., Boyatzis, 2005). Numerous quantitative measures have been developed to assess faith development (e.g., the Faith Styles Scale, the Faith Development Scale) but have been critiqued for only measuring aspects of the theory rather than individuals’ current stage of faith (Parker, 2006). Of the quantitative measures of religious/spiritual (R/S) growth available during previous reviews, the Faith Development Scale (FDS; Leak, Loucks, & Bowlin, 1999) has shown perhaps the greatest promise in terms of its simplicity and psychometric properties but it notably lacks evidence of correlations with FDI outcomes (Parker, 2006). The FDS uses eight forced choice questions to provide an overall index of development with a single score that is meant to indicate level of faith maturity but it does not specifically allow for distinction between stages.

The FDS (Leak et al., 1999) was more recently revised with the specific intention of focusing its application and providing greater evidence of internal reliability overall and with specific populations. This Revised Faith Development Scale (RFDS; Harris & Leak, 2013) sought to move away from the language of R/S “maturity” to measure the less value-laden postconventional religious reasoning or “the ability to critically evaluate religious ideas rather than depend primarily on outsiders authorities” (p. 1). Postconventional religious reasoning is thought to be representative of stages 4-5 of Fowler’s theory and there is research indicating it is correlated with lower levels of
anxiety (e.g., Atkinson & Malony, 1994; Malony, 1998). Specific to sexual minorities, postconventional religious reasoning has been shown to correlate with higher levels of sexual identity development and lower levels of internalized heterosexism (Harris, Cook, & Kashubeck-West, 2008). The original FDS showed weaker internal consistency (alphas = .56-.74) with some populations including LGBQ individuals (Harris et al., 2008, Leak, 2003; Leak et al., 1999). For the RFDS, the original eight forced choice questions were revised to 16 Likert-style questions and the word *family* in some items was clarified to mean *family of origin* as the original could have been misinterpreted by sexual minorities, especially whose perceived family might be a family of choice. The new coefficient alpha for the RFDS increased to .78 for the overall sample and .80 for the LGBQ participants (Harris & Leak, 2013). Early evidence for convergent validity with theoretically related measures was also provided. The RFDS shows promise as a measure of postconventional religious reasoning, specifically with LGBQ individuals, but only a single validation study exists and it maintains a Christian bias of wording (using “God” without the possibility of another higher power) as has been a critique of the original FDS (e.g., Streib, 2005). For these reasons, it was not used for the current study.

**Religious styles and schemata.** To address concerns of cognitive development age guidelines and multicultural applicability in faith development research, Streib (2001) proposed a new framework for the study of R/S development: religious styles. Streib’s model emphasized interpersonal factors and environmental contexts across the life span and removed the focus on a priori development boxes based on age into which a person might or might not fit. Religious styles have been defined as the repetitive use of interpretive and relational patterns in the context of religion:
Religious styles are distinct modi of practical–interactive (ritual), psychodynamic (symbolic), and cognitive (narrative) reconstruction and appropriation of religion, that originate in relation to life history and life world and that, in accumulative deposition, constitute the variations and transformations of religion over a life time, corresponding to the styles of interpersonal relations. (Streib, 2001, p. 149)

From Streib’s (2001) conceptualization, five religious styles were initially created as related to but distinct from Fowler’s (1981) stages of faith: (a) subjective, (b) instrumental–reciprocal, (c) mutual, (d) individuative–systemic, and (e) dialogical. In many ways, these original styles aligned with Fowler’s stages while integrating phenomenological, interpersonal, and psychodynamic elements of other theorists.

In operationalizing this theory of religious styles, Streib et al. (2010) found a three-factor solution in the form of the Religious Schema Scale (RSS). While conducting a cross-cultural study in the United States and Germany, the authors gave a large sample (\(N = 822\)) of both American (69%) and German (31%) participants numerous measures. Using factor analytic procedures, responses to 78 theoretically related items were reduced to 15 items that loaded onto three distinct factors. Confirmatory factor analyses were conducted on the United States (\(N = 567\)) and German (\(N = 255\)) samples as well as on the combined sample (\(N = 822\)); the three-factor structure was supported.

Streib and colleagues (2010) saw these factors, which ultimately became subscales of the RSS, as schemata that undergirded the theory of religious styles. Schemata describe “structural patterns of interpretation and praxis” while styles “emerge from the repetitive use of specific schemata” (Streib et al., 2010, p. 154). An individual can potentially incorporate all of the schemata into practice of R/S but will likely favor
one or more. In this sense, repetitive use of specific interpretative lenses (schemata) translates into a religious style, which Streib and colleagues suggested were related to but distinct from Fowler’s (1981) stages of faith. These three schemata were truth of text and teachings (ttt); fairness, tolerance, and rational choice (ftr), and xenosophia/interreligious dialog (xenos); they were seen to exist “on the spectrum between a more fundamentalist orientation on the one hand and tolerance, fairness, and openness for dialog on the other” (Streib et al., 2010, p. 155; see Table 4).

Table 4

**Religious Schemata**

<table>
<thead>
<tr>
<th>Religious Schemata</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Truth of Text and Teachings (ttt)</td>
<td>Perspective and strong belief in one’s own religion and its unchallenged integrity. Indicative of Fowler’s (1981) mythic-literal faith and Streib’s (2001) instrumental-reciprocal religious style (e.g., “What the texts and stories of my religion tell me is absolutely true and must not be changed”).</td>
</tr>
<tr>
<td>Fairness, Tolerance, and Rational Choice (ftr)</td>
<td>Perspective and concern for fairness and coexistence of religions. Indicative of Fowler’s (1981) individuative-reflective faith and Streib’s (2001) individuative-systemic religious style (e.g., “We should resolve differences in how people appear to each other through fair and just discussion”).</td>
</tr>
<tr>
<td>Xenosophia/Interreligious Dialog (xenos)</td>
<td>Perspective and concern for openness in regarding other religions and learning from them. Indicative of Fowler’s (1981) conjunctive faith and Streib’s (2001) dialogical religious style (e.g., “The truth I see in other worldviews leads me to re-examine my current views”</td>
</tr>
</tbody>
</table>

Source: Streib et al., 2010.
Theoretical and empirical evidence generally supported the religious styles perspective and use of the RSS (Streib et al., 2010). Research and discussions on religious fundamentalism and authoritarianism suggested that focus on a spectrum of religiosity was appropriate, especially in an increasingly interconnected and multicultural world (e.g., Altemeyer & Hunsberger, 1992, 2005). The validation and subsequent usage of the RSS in cross-cultural samples (Hathcoat & Fuqua, 2014; Kamble et al., 2014; Streib et al., 2010; Streib & Klein, 2014) provided evidence of its psychometric strengths and emerging multicultural utility. Kamble et al. (2014) found unique differences among interrelationships of the RSS factors in a predominantly Hindu sample from India and recommended that future studies utilize the RSS to better understand differences in cultural views of R/S. Based on Hill’s (2005) criteria for evaluating measures of R/S, the subscales of the RSS could be considered acceptable (ftr), good (xenos), and excellent (ttt), which provided additional evidence for their utility. Although Streib et al. (2010) viewed the factors of the RSS as interrelated and dynamic, current precedent appeared to be interpretation based on the three unique interpretive lenses (Hathcoat & Fuqua, 2014; Kamble et al., 2014; Streib & Klein, 2014) and they were utilized in the current study in a similar fashion. Importantly, considering the development or maturity of R/S identities could be considered value laden (Zinnbauer, 2013) so these schemata were interpreted in the current study as representative of current religious styles with no schema seen as inherently more mature or mentally healthy.

**Measures of religious and spiritual development.** Based on this overview of literature on religious/spiritual (R/S) development, Streib’s (2001) model of religious styles, as measured using the RSS (Streib et al., 2010), appeared to be the most advanced
and well-researched (see Table 5 for an overview of measures of R/S development).

Fowler’s (1981) original model of faith development provided the overall structure and progression used by subsequent models but the FDI (Fowler, 1981; Fowler et al., 2004) required in-depth interviews, which were outside the scope of this study. Multiple brief measures subsequently created to assess Fowler’s stages (e.g., the Faith Styles Scale, the Faith Development Scale) were limited in scope and contained Christian bias in language. The religious styles perspective and the RSS addressed many of the criticisms of previous measures, allowed for a more multicultural approach to the study of experiences with R/ and, therefore, were utilized in the current study. As the RSS had not been specifically utilized with LGBQ participants, the current study could provide initial evidence for its use among sexual minorities.
Table 5

**Major Measures of Religious and Spiritual Development**

<table>
<thead>
<tr>
<th>Measure</th>
<th>No. of Items/Scaling</th>
<th>Psychometric Data</th>
<th>Factors Included</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faith Development Interview (FDI; Fowler, 1981; Fowler et al., 2004)</td>
<td>Semi-structured interview, takes two to three hours to complete</td>
<td>Subsequent studies provide evidence of construct validity; inter-rater reliability .85-.90; significantly correlated with educational and occupational level, social class, work complexity, moral development</td>
<td>Placement into Stages 1-6 of faith</td>
</tr>
<tr>
<td>Faith Development Scale (FDS; Leak et al. 1999)</td>
<td>Eight-item forced choice questionnaire (responses representative different stages of faith)</td>
<td>Cronbach’s α .56-.74 (.67 for LGBQ participants); confirmatory factor analysis conducted; significantly correlated with openness, extrinsic religiosity, quest orientation, scriptural literalism</td>
<td>Provides index score of faith “maturity”</td>
</tr>
<tr>
<td>Revised Faith Development Scale (RFDS; Harris &amp; Leak, 2013)</td>
<td>16-item self-report inventory; 4-point Likert-type scale</td>
<td>Cronbach’s α .78 (.80 for LGBQ participants); significantly correlated with FDS, question orientation, scriptural literalism, religious commitment</td>
<td>Provides index score of faith “maturity”</td>
</tr>
<tr>
<td>Religious Schema Scale (Streib, Hood, &amp; Klein, 2010)</td>
<td>15-item self-report inventory; three factors or subscales; 6-point Likert-type scale</td>
<td>Cronbach’s α: <em>tti</em> (.72-.93), <em>ftr</em> (.53-.75), <em>xenos</em> (.65-.73); confirmatory factor analysis conducted; subscales significantly correlated with religious fundamentalism, openness, personal growth, relatedness, religious prejudice, and FDI scores</td>
<td>Truth of Text and Teachings (<em>tti</em>), Fairness, Tolerance, and Rational Choice (<em>ftr</em>), and Xenosophia/Interreligious Dialog (<em>xenos</em>)</td>
</tr>
</tbody>
</table>
Religious and Spiritual Struggles

Overview and context. In the literature of the psychology of R/S, religion and spirituality have been found to have significant relationships with many positive mental health outcomes (e.g., Granqvist & Kirkpatrick, 2013; McCullough & Willoughby, 2009). While the field has begun acknowledging the potential for positive outcomes based on experiences with R/S, continued research has also explored the potential for negative outcomes (e.g., Abu-Raiya, Pargament, Weissberger, & Exline, 2016; Exline, Yali, & Sanderson, 2000). Research on R/S struggles has outlined three general types: supernatural, interpersonal, and intrapersonal (e.g., Exline, 2013; Exline et al., 2014). Supernatural struggles include individuals’ experiences with the divine and the demonic based on their views of R/S, interpersonal struggles consider potential negative influences of individuals and institutions surrounding R/S, and intrapersonal struggles involve inward and internal negative experiences individuals can experience with R/S.

Studies indicated religious/spiritual (R/S) struggles are relatively common (e.g., Exline et al., 2011; McConnell et al., 2006). For example, Fitchett et al. (2004) found nearly one-sixth (15%) of their sample of patients with various medical conditions (N = 238) experienced moderate to high levels of R/S struggles while Johnson and Hayes (2003) found a quarter (25%) of their large sample of college students (N = 5,472) reported experiencing significant distress regarding R/S. Additionally, experiences of R/S struggles and strain were shown to have consistent negative correlations with mental health outcomes (e.g., Abu-Raiya et al., 2010, 2015; Ano & Vasconcelles, 2005; Exline, 2013).
Based on the current review of the literature, strong evidence indicated significant struggles in integrating R/S identities with sexual minority identities. Schuck and Liddle (2001) specifically acknowledged that experiences of conflict with R/S could negatively impact sexual identity development for sexual minorities such as delaying the coming out process or being more distressed throughout it. Organizational bias and discrimination in religious settings could also lead to experiences of R/S struggles in sexual minorities (Smith & Freyd, 2014). Qualitative (e.g., Beagan & Hattie, 2015; Dahl & Galliher, 2012; Gold & Stewart, 2011; Jeffries et al., 2008; Murr, 2013; Subhi & Geelan, 2012) and quantitative (e.g., Barnes & Meyer, 2012; Herek et al., 2009; Shilo & Savaya, 2012; Sowe et al., 2014) evidence indicated conflict at the intersection of these identities was relatively common and research with quantitative measures specifically designed to assess R/S struggles might provide additional insights into the prevalence and types of struggles. Thus, the current study furthered exploration of religious struggles and strain among sexual minorities.

Measurement of religious and spiritual struggles. Numerous measures exist to assess experiences of religious/spiritual (R/S) struggles. Divine struggle appears the most focused on type with assessments available to assess attachment to God (e.g., Beck & McDonald, 2004; Rowatt & Kirkpatrick, 2002), attitudes toward God (e.g., Wood et al., 2010), and anger toward God (e.g., Exline et al., 2011). The majority of items on the commonly used measure of religious coping also focused on the divine (Brief RCOPE; Pargament, Smith, Koenig, & Perez, 1998). Measures of intrapersonal struggle included assessments of meaning in life (Steger, Frazier, Oishi, & Kaler, 2006) and religious doubt (e.g., Altemeyer & Hunsberger, 1997; Krause & Ellison, 2009) while measures of
interpersonal considerations included aspects such as size of religious community (e.g., Ellison, Krause, Shepherd, & Chaves, 2009). Evidence for the validity and reliable of scores produced by these measures were generally good but most were limited in scope to which R/S struggles they assessed (Exline et al., 2014). Measures assessing multiple R/S struggles were the focus of the current study (see Table 6).

Table 6

**Major Measures of Religious and Spiritual Struggles**

<table>
<thead>
<tr>
<th>Measure</th>
<th>No. of Items/Scaling</th>
<th>Psychometric Data</th>
<th>Factors Included</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCOPE (Pargament, Koenig, &amp; Perez, 2000)</td>
<td>105-item self-report measure; 4-point Likert-type scale</td>
<td>Cronbach’s α .65–.80 for most subscales; moderately supported by confirmatory factor analysis; numerous significant correlations of particular subscales</td>
<td>21 subscales (e.g., pleading for direct intercession, spiritual connection, seeking support from clergy/members, spiritual discontent)</td>
</tr>
<tr>
<td>Brief RCOPE (Pargament et al., 1998)</td>
<td>14-item self-report measure; 4-point Likert-type scale</td>
<td>Cronbach’s α .69–.90; positive religious coping significantly correlated with stress-related growth and negative religious coping significantly correlated with depression, lower quality of life</td>
<td>Positive religious coping, negative religious coping</td>
</tr>
<tr>
<td>Religious Comfort and Strain Scale (Exline et al., 2000)</td>
<td>20-item self-report measure; 8-point Likert-type scale</td>
<td>Cronbach’s α .52–.87; numerous significant correlations of particular subscales</td>
<td>Religious comfort, alienation from G-d, religious fear and guilt, religious rifts</td>
</tr>
<tr>
<td>Religious and Spiritual Struggles (RSS) Scale (Exline et al., 2014)</td>
<td>26-item self-report inventory; 5-point Likert-type scale</td>
<td>Cronbach’s α .85–.93; supported by confirmatory factor analysis; good evidence of convergent and discriminant validity with other measures of R/S; higher RSS scores found among sexual minorities</td>
<td>Full scale score and six factor scores relating to types of religious/spiritual struggles: divine, demonic, interpersonal, moral, doubt, meaning</td>
</tr>
</tbody>
</table>
More comprehensive measures of religious/spiritual (R/S) struggles seem particularly useful in studies of sexual minorities due to the current lack of research in this area. The RCOPE (Pargament et al., 2000) and its shorter version (Brief RCOPE; Pargament et al., 1998) are the most widely used measures of religious coping. They both measure positive and negative styles of coping using religion with the standard RCOPE also measuring numerous other factors. Conceptually, negative religious coping could be connected to experiences of R/S struggle (Exline et al., 2014). While useful measures, the RCOPE is quite lengthy (105 items) and the Brief RCOPE (14 items) focuses on supernatural struggle with no items on intrapersonal struggle and only one item related to interpersonal struggle. The Religious Comfort and Strain Scale (20 items; Exline et al., 2000) also assesses areas of R/S struggle but it does not include elements of demonic struggle (part of the supernatural struggle).

With limitations of previous measures in mind, Exline et al.’s (2014) RSS Scale provided a relatively concise (26-item) measure of three major areas of struggle: supernatural, interpersonal, and intrapersonal. Initial validation and subsequent studies provided early evidence of its sound psychometrics (Abu-Raiya et al., 2015, 2016; Exline et al., 2014). In the initial validation study for the RSS Scale (Exline et al., 2014), those who self-identified as homosexual reported significantly higher levels of struggles; yet no research to date appears to have used this measure to specifically explore the experiences of sexual minorities. One limitation of the RSS Scale was its use of “God” in relation to divine struggle. To increase inclusivity, “God (or a higher power)” was used in the current study as recommended by J. Exline (Personal communication, June 23, 2016).
The RSS Scale could serve as a well-rounded, yet focused measure of R/S struggles and was thus the measure of choice for the current study.

**Life Satisfaction**

**Measurement of life satisfaction.** While this review of the literature demonstrated significant evidence of the potential for conflict between sexual minority and R/S identities (e.g., Hamblin & Gross, 2013; Sowe et al., 2014), it also showed evidence for the potential successful integration of these identities (e.g., Brewster et al., 2016; Rostosky et al., 2017). With this in mind, the current study also incorporated measurement of life satisfaction as a construct to assess sexual minorities’ current reported level of contentment with their lives. Vaughan and Rodriguez (2014) called for positive perspectives to be incorporated into research regarding sexual minorities. Exploring life satisfaction in the current study was one way for participants to not only report the potential absence of R/S struggles but also the presence of current life contentment (or perhaps both simultaneously).

The Satisfaction with Life Scale (SWLS; Diener et al., 1985) is a brief, five-item self-report measure of subjective global life satisfaction (single factor). Responses are recorded to 7-point Likert-style questions (e.g., “In most ways my life is close to my ideal,” “If I could live my life over, I would change almost nothing”). It has been widely used with scores showing strong evidence of reliability and validity (e.g., Cronbach’s α in .80s or higher, stability of scores over time, convergent validity with conceptually related measures; see Diener et al., 2013; Pavot & Diener, 1993, 2008). Scores on the SWLS were moderately to strongly negatively correlated with Beck Depression Inventory scores (Blais, Vallerand, Pelletier, & Briere, 1989; Schimmack et al., 2004) and negatively
correlated with every symptom on the Symptom Checklist-90 (e.g., anxiety, depression, hostility; Arrindell et al., 1991). Specific to research of R/S struggles, SWLS scores were shown to be positively correlated with Rosenberg Self-Esteem Scale scores and negatively correlated with measures of anxiety and depression (Wilt et al., 2016). Exline et al. (2014) and Abu-Raiya et al. (2015) found SWLS scores to be negatively correlated with RSS scores. It has been used with a wide variety of populations—from college students to contemplative nuns to U.S. Marines (e.g., Hindelang, Schwerin, & Farmer, 2004; Joy, 1990; McGarrahan, 1991). In the current study, the SWLS was used as a positive outcome measure to better understand the relationships between sexual minority and R/S identity development.

Summary and Integration of Research Support

In this chapter, theoretical and empirical overviews were presented as the constructs of interest to the current study. Relevant literature on sexual minority identity development and religious/spiritual (R/S) identity development was presented as well as pertinent data on the outcome measures of R/S struggles and life satisfaction. Although it was possible the completed literature review contained limitations (e.g., literature search methods, search terms utilized, human error in interpreting and integrating sources), it was conducted with every intention of comprehensively and accurately reviewing available sources regarding the research topic.

Based on a historical overview of theory and empirical data, a universal process of sexual identity development was presented (Dillon et al., 2011). Measurement of this model using the sexual identity development factors of the MoSIEC (Worthington et al., 2008) appeared to allow for greater understanding of how sexual minorities currently
identify with their sexual identities in relation to various other factors, such as depressive symptoms and perceived stress, and changes in identity status over time (e.g., Borders et al., 2014; Moreira et al., 2015; Morgan et al., 2010; Preciado et al., 2013; Worthington & Reynolds, 2009). In the current study, the sexual identity development factors of the MoSIEC were implemented in relation to R/S identity development to explore the impact on the outcome variables.

A review of the literature on sexual minorities’ experiences with R/S revealed a complex picture of potentially negative and potentially positive relationships. The framework of religious styles (Streib, 2001) and its measurement using the RSS (Streib et al., 2010) were presented as a way of understanding how sexual minority individuals approached R/S on a spectrum from holding fundamentalist views to holding views of interreligious openness. Based on the precedent set in previous literature (e.g., Hathcoat & Fuqua, 2014; Kamble et al., 2014; Streib & Klein, 2014), religious schemata were measured in the current study to better understand sexual minority individuals’ current interpretive lenses for R/S and how they related to sexual identity development and influenced outcome variables.

The outcome variables of R/S struggles and life satisfaction were then presented theoretically and empirically. With previous research in mind, Exline et al.’s (2014) measure of religious/spiritual struggles (RSS Scale) was selected for the current study as it offered a brief measure that included an overall total score of R/S struggles and three important domains of struggle (supernatural, interpersonal, intrapersonal) that have been linked to negative mental health outcomes (e.g., Abu-Raiya et al., 2010, 2015; Ano & Vasconcelles, 2005; Exline, 2013). Understanding the extent of religious/spiritual (R/S)
struggles in relation to sexual and R/S identity development was a focus as it could provide significant insight for the field. Finally, a brief measure of global life satisfaction (SWLS; Diener et al., 1985) was presented as a positive outcome measure for the intersection of sexual and R/S identity development. With its widespread use and correlations to positive mental health outcomes in mind (e.g., Blais et al., 1989; Diener et al., 2013; Exline et al., 2014; Pavot & Diener, 1993, 2008; Schimmack et al., 2004; Wilt et al., 2016), it was chosen to assess sexual minority individuals’ current perceived satisfaction.

Given the importance of R/S to individuals’ lives and the current dearth of literature addressing sexual minorities’ experiences with R/S (e.g., Hamblin & Gross, 2014; Lehavot & Simoni, 2011), the current study utilized lenses of identity development to provide deeper understandings of the negative and positive outcomes found in this area. Previous literature supported the theoretical connections at this intersection of identities. Dillon et al. (2011) proposed that those in the identity status of synthesis/integration in terms of sexual identity would be more integrated across their identities including R/S identities. Konik and Stewart (2004) found sexual minority college students reported more active exploration of and commitment to religious identities than heterosexual peers but the impact of these processes on R/S struggles and life satisfaction had not been explored.

Other researchers suggested using development perspectives to understand this intersection. Wood and Conley (2014) conceptualized potential positive and negative mental health outcomes through a combination of Cass’ (1979) theory of homosexual identity formation and Fowler’s (1981) stages of faith, upon which the measures for the
current study were built. In developing recommendations for counselors seeing clients who struggle with this intersection of identities, Ginicola and Smith (2011) also utilized Cass’ and Fowler’s models to provide insight. Others attempted to understand this intersection with various conceptual lenses (e.g., Bayne, 2016; Bozard & Sanders, 2011; Buchanan, Dzelme, Harris, & Hecker, 2001; Haldeman, 2004; Kocet, Sanabria, & Smith, 2011; Roseborough, 2006) but no quantitative research to date appears to have examined this intersection from the developmental framework presented in this chapter. Rodriguez (2010) overviewed much of the qualitative literature at this intersection of sexual and R/S identities and specifically recommended that quantitative research with larger sample sizes be conducted. The current study sought to answer this call.
CHAPTER III

METHODS

The current study used a non-experimental correlation research design (Remler & Van Ryzin, 2015) to examine relationships among sexual identity development factors, religious schemata, religious/spiritual (R/S) struggles, and life satisfaction. Sexual minority adults who currently or previously identified as religious or spiritual were recruited through a variety of university, religious, and social media outlets (see Appendix B) to complete a survey of the measures subsequently described using online survey software (i.e., Qualtrics, 2016). Steps were taken to prevent inclusion of invalid responses in data analyses as online survey methods could pose threats to validity (e.g., multiple participation, inattentive responding, missing responses, inconsistent responses; Johnson, 2005).

In this study, the following measures were used to operationalize the constructs of interest supported by previous theoretical and empirical research (see Chapter II). The four-factor Measure of Sexual Identity Exploration and Commitment (MoSIEC; Worthington et al., 2008) was utilized to operationalize the Dillon et al. (2011) model of sexual identity development as had been conceptually supported (e.g., Borders et al., 2014; Moreira et al., 2015; Morgan et al., 2010; Morgan & Thompson, 2011; Parent et al., 2015; Preciado et al., 2013; Thompson & Morgan, 2008; Worthington et al., 2005; Worthington & Reynolds, 2009). Streib et al.’s (2010) three-factor Religious Schema
Scale (RSS) was incorporated to operationalize religious/spiritual (R/S) identity in the current study. Research supported use of this measure in cross-cultural samples of adults (e.g., Hathcoat & Fuqua, 2014; Kamble et al., 2014; Streib & Klein, 2014), and the current study sought to provide evidence for its utility among sexual minorities.

Religious/spiritual (R/S) struggles were operationalized using the RSS Scale (Exline et al., 2014), which showed initial promise as a psychometrically sound, relatively brief measure of these experiences (Abu-Raiya et al., 2015, 2016). Specific to sexual minorities, the RSS Scale found higher reports of R/S struggles among self-identifying homosexuals and the current study sought to more deeply explore these initial findings. Finally, life satisfaction was operationalized using Diener et al.’s (1985) brief Satisfaction with Life Scale, which has been widely used and supported (e.g., Arrindell et al., 1991; Blais et al., 1989; Diener et al., 2013; Hindelang et al., 2004; Joy, 1990; McGarrahan, 1991; Pavot & Diener, 1993, 2008; Schimmack et al., 2004; Wilt et al., 2016). Satisfaction with life was found to be negatively correlated with R/S struggles in studies not focusing on sexual minorities (Abu-Raiya et al., 2015; Exline et al., 2014) and the current study sought to examine these relationships specifically among sexual minority individuals.

Participants

When estimating minimum necessary sample size for multiple regression analyses, Tabachnick and Fidell (2007) highlighted the need for consideration of “desired power, alpha level, number of predictors, and expected effect size” (p. 123). The authors offered two rule-of-thumb equations that could help in this process: $N \geq 50 + 8m$ and $N \geq 104 + m$ (where $m$ equals the number of predictors in the model), when $\alpha = .05$ and $\beta =$
.20. Power (found with the equation $1 - \beta$) is the ability to detect statistical differences when they exist and has been widely accepted as being set at .8 in the field (Cohen, 1992). The current study included 13 predictor variables in total: eight for the demographic categories of interest (age, level of education, relationship status) after dummy coding categorical variables, four related to sexual identity development (exploration, commitment, sexual orientation identity uncertainty, synthesis/integration), and one related to religious/spiritual (R/S) identity ($tti$). Using the above equations, the minimum required sample size for the current study was between 117 and 154 participants. G*Power (Faul, Erdfelder, Buchner, & Lang, 2009) was used to verify these results. When power = .80, $\alpha = .05$, effect size = .15 (Cohen, 1992), and 13 predictor variables, the minimum sample size recommended was 131 participants. Based on the most conservative of these results, the targeted minimum sample size was 154 participants; the final sample exceeded this minimum by some margin.

Participants for the current study were recruited via the distribution of an online survey created through Qualtrics (2016). Each participant voluntarily provided informed consent by being shown a consent form approved by the University of Northern Colorado’s Institutional Review Board (IRB) and clicking the statement, “By clicking here, I affirm that I am at least 18 years of age and voluntarily agree to participate,” and finally clicking the “Next” button to begin the survey. Responses to the survey consisting of the measures below were stored on Qualtrics’ (2016) secure servers before being downloaded to the researcher’s password-protected computer and imported into the statistical software package SPSS (International Business Machines Corporation, 2016). Chapter IV details the current sample and provides descriptive statistics.
Instrumentation

Demographics

The demographic questionnaire (see Appendix A) included factors related to the constructs of interest: age, race/ethnicity, nationality, region of residence, gender, self-identified sexual orientation, openness regarding sexual orientation identity, sexual attractions, sexual behaviors, current relationship status, current religion, religion of childhood, stance of current religious community toward sexual minorities and same-sex relationships, stance of childhood religious community toward sexual minorities and same-sex relationships, current personal stance toward sexual minorities and same-sex relationships, level of religiosity, level of spirituality, frequency of R/S practices, frequency of R/S scriptural study, personal highest level of education completed, and highest level of education completed by parent(s)/guardian(s); e.g., Barnes & Meyer, 2012; Bybee, Sullivan, Zielonka, & Moes, 2009; Dahl & Galliher, 2009; Diamond, 2014; Exline et al., 2014; Hamblin & Gross, 2014; Hathcoat & Fuqua, 2014; Henrickson, 2007; Johnstone et al., 2012; Kubicek et al., 2009; Li, Johnson, & Jenkins-Guarnieri, 2013; Nugent & Gramick, 1989; Rodriguez, 2010; Rosario et al., 2006; Savin-Williams & Cohen, 2015; Sexual Minority Assessment Research Team, 2009; Sowe et al., 2014; Streib & Klein, 2014). Of the demographic variables significantly correlated with the dependent variables of R/S struggles and life satisfaction, age \( (r = -0.399 \text{ and } 1.86, \text{ respectively}) \) and education \( (r = -0.303 \text{ and } 2.86, \text{ respectively}) \) were the most highly correlated and did not share high conceptual overlap with the independent variables (e.g., sexual orientation openness and sexual minority identity development). Thus, age and education were entered at step one of the regressions. Relationship status was also
entered at step one as previous research indicated it correlated with the dependent variables (e.g., Exline et al., 2014; Wight, LeBlanc, & Badgett, 2013).

**Sexual Identity Development**

Sexual identity development was measured using MoSIEC (Worthington et al., 2008). The MoSIEC consists of 22 items measured on a 6-point Likert-type scale ranging from 1 (*Very uncharacteristic of me*) to 6 (*Very characteristic of me*); higher scores indicated higher levels of the respective construct (see Appendix C). The measure produced four subscales or factors: exploration (eight items), commitment (six items), sexual orientation identity uncertainty (three items), and synthesis/integration (five items). Dillon et al. (2011) viewed exploration (e.g., “I am actively trying new ways to express myself sexually”) and sexual orientation identity uncertainty (e.g., “My sexual orientation is not clear to me”) as representing two dimensions related to Marcia’s (1966) conceptualization of identity exploration. Commitment (e.g., “I have a firm sense of what my sexual needs are”) and synthesis/integration (e.g., “The ways I express myself sexually are consistent with all of the other aspects of my sexuality”) were seen as representing two dimensions of Marcia’s identity commitment (Dillon et al., 2011).

Evidence of construct validity and support for use of the MoSIEC (Worthington et al., 2008) and its subscales with sexual minority adults ages 18 or older were demonstrated in the literature (Borders et al., 2014; Dillon et al., 2008; Moreira et al., 2015; Morgan et al., 2010; Morgan & Thompson, 2011; Parent et al., 2015). There was also some support for use of the MoSIEC with religious and spiritual individuals as one exploratory factor analysis for the measure was conducted on a religiously diverse sample (Worthington et al., 2008). Worthington et al. (2008) also found evidence of two-week
test-retest reliability and Moreira et al. (2015) found evidence of logical changes in participants’ scores in an 18-month longitudinal study of sexual minority emerging adult men. The MoSIEC demonstrated adequate internal consistency estimates for all subscales (Cronbach’s $\alpha$ estimates .72-.90) in multiple independent adult samples of sexual minorities (Borders et al., 2014; Morgan et al., 2010; Morgan & Thompson, 2011; Parent et al., 2015; Worthington & Reynolds, 2009).

Internal consistency reliabilities for all MoSIEC subscales in the present study ($\alpha = .85-.86$) were very good (Kline, 2016). An exploratory factor analysis with the current sample produced a five-factor model that split the exploration subscale based on questions related to current/future exploration (six items; $\alpha = .868$) and past exploration (two items; $\alpha = .672$). Otherwise, the original factor structure was supported. The four-factor structure supported by previous research was used in the current study. Future studies could reexamine the factor structure of this measure in more depth. Participants could score high or low on any of the subscales (after some items are reverse scored); high scores indicated higher levels of that construct. No permissions were required to reproduce or distribute this measure.

**Religious and Spiritual Identity Development**

Religious/spiritual identity development was measured using the RSS (Streib et al., 2010), a 15-item measure (see Appendix D) with three subscales of five items each: truth of text and teachings (ttt); fairness, tolerance, and rational choice (ftr), and xenosophia/interreligious dialog (xenos). Each of these three subscales was seen as lenses or schemata through which individuals interpreted and practiced their religious tradition with repetitive use of a particular schema resulting in a religious style.
Participants responded to items regarding these concepts on a 6-point Likert-type scale from 1 (Strongly disagree) to 6 (Strongly agree); high scores indicated higher alignment with that schema. Sample items included “When I have to make a decision, I take care that my plans are acceptable by my religious teachings” (ttt), “It is important to understand others through a sympathetic understanding of their culture and religion” (ftr), and “We need to look beyond the denominational and religious differences to find the ultimate reality” (xenos).

The initial creation and validation through confirmatory factor analysis of the RSS in a large, cross-cultural sample (Streib et al., 2010) provided evidence of its psychometric strengths and multicultural utility. Subsequent uses of the RSS in the United States (Hathcoat & Fuqua, 2014), Germany (Streib & Klein, 2014), and India (Kamble et al., 2014) provided additional evidence of construct related validity with diverse samples. Based on Hill’s (2005) criteria for evaluating measures of R/S—considering theoretical basis, sample representativeness/generalization, reliability, and validity—the subscales of the RSS could be considered acceptable (ftr), good (xenos), and excellent (ttt), which provided additional evidence for their utility.

Strong positive correlations between ttt and a measure of religious fundamentalism ($r = .80, p < .001$ for German sample; $r = .81, p < .001$ for U.S. sample; Altemeyer & Hunsberger, 1992) and negative correlations between ttt and openness to experience from the Big Five (NEO-FFI version; Costa & McCrae, 1985) suggested this schema could be conceptualized as one end of a spectrum of religious styles (Streib et al., 2010). Negative correlations were also found between xenos and religious fundamentalism ($r = -.68, p < .001$ for German sample; $r = -.42, p < .001$ for U.S.)
Positive correlations between \emph{ftr} and openness to experience \((r = .28, p < .001\) for German sample; \(r = .32, p < .001\) for U.S. sample) and stronger positive correlations between \emph{xenos} and openness to experience \((r = .41, p < .001\) for German sample; \(r = .35, p < .001\) for U.S. sample) indicated those schemata approached the other end of the spectrum of religious styles (Streib et al., 2010). Streib and colleagues (2010) also provided initial evidence of predictive validity between the RSS subscales and Faith Development Interview (FDI) scores (Fowler, 1981; Fowler et al., 2004), which other measures of religious/spiritual (R/S) development have lacked.

Internal consistency reliability in the current study sample for the \emph{ttt} subscale \((\alpha = .88)\) was very good, although less than adequate for the \emph{ftr} subscale \((\alpha = .56)\) and the \emph{xenos} subscale \((\alpha = .68; \text{Kline, 2016})\). The reliability coefficients for the \emph{ftr} and \emph{xenos} subscales indicated they were not be adequate for research purposes with the current sample (Groth-Marnat & Wright, 2016; Kline, 2016). Thus, only the psychometrically sound \emph{ttt} subscale was used in the current study. An exploratory factor analysis with a Promax rotation produced a four-factor model that supported the item structure of the \emph{ttt} subscale and generally supported the item structure of the \emph{ftr} and \emph{xenos} subscales; however, one item from each the \emph{ftr} and \emph{xenos} subscales related to decision making (Items 6 and 13; see Appendix D) added a fourth factor. The internal consistency reliabilities for the new factors produced by the factor analysis were all less than adequate \((\alpha \text{ ranged from .45-.69})\), indicating only \emph{ttt} would produce reliable scores with the current sample. Future studies could reexamine the factor structure and explore the population applicability of this measure in more depth. Permission to use this measure was granted by Dr. Heinz Streib (see Appendix E).
Religious and Spiritual Struggles

Religious/spiritual struggles were measured using the RSS Scale (Exline et al., 2014). The RSS Scale is comprised of 26 items (see Appendix F) and six subscales of R/S struggles: divine (five items), demonic (four items), interpersonal (five items), moral (four items), doubt (four items), and ultimate meaning (four items). The items were created using exploratory and confirmatory factor analytic procedures to arrive at a relatively concise, broad measure of R/S struggles. Exline et al. (2014) utilized prompts with varying time frames (i.e., past month, past few months, past year) and found similar results across multiple large samples of adults and college students (smallest—N = 400; largest—N = 1,141). In the current study, participants were prompted with “Over the past year, to what extent have you struggled with each of the following?” They then responded to items using a 5-point Likert-type scale from 1 (Not at all/does not apply) to 5 (A great deal); higher scores indicated stronger experiences of R/S struggles.

Exline et al. (2014) provided strong initial evidence for reliability and validity of scores for the RSS Scale with internal consistency (Cronbach’s α ranged from .85-.93 for the six subscales) and correlations with theoretically appropriate measures adequately supported. Abu-Raiya et al. (2016) found similar evidence of internal consistency (Cronbach’s α ranged from .76-.92 for the six subscales) among a sample of Jewish participants from Israel and a similar six-factor structure with a very good fit to the data using confirmatory factor analytical procedures. All of the subscales had been significantly correlated with negative mental health symptoms (e.g., depression, anxiety) among diverse samples (Exline et al., 2014; Abu-Raiya et al., 2016). Notably, self-identified homosexuals, but not bisexuals, reported higher levels of R/S struggles.
compared to heterosexual peers (Exline et al., 2014). The current study might provide further insight into the relation of sexual identity and R/S struggles.

Internal consistency reliability for the RSS Scale with the present study sample ($\alpha = .94$) was excellent, and very good to excellent for all six subscales ($\alpha = .85-.93$; Kline, 2016). An exploratory factor analysis with a Promax rotation produced a six-factor model that fully supported the factor structure provided by previous research. Permission to use this measure was granted by Dr. Julie Exline (see Appendix E).

**Life Satisfaction**

Life satisfaction was determined using the SWLS (Diener et al., 1985)—a five-item, single-factor measure that assesses subjective life satisfaction (see Appendix G). Participants responded to the five items (e.g., “The conditions of my life are excellent,” “I am satisfied with my life”) using a 7-point Likert-type scale from 1 (*Strongly disagree*) to 7 (*Strongly agree*); higher scores indicated more subjective life satisfaction. Strong evidence of validity and reliability of scores have been consistently found (e.g., Diener et al., 2013; Pavot & Diener, 1993, 2008). Recently, Exline et al. (2014) reported a Cronbach’s $\alpha$ of .87 for their large sample of college students ($N = 1,141$). Scores on the SWLS have also been negatively correlated with depression and anxiety (Arrindell et al., 1991; Blais et al., 1989; Schimmack et al., 2004; Wilt et al., 2016) and positively correlated with self-esteem (Wilt et al., 2016). The SWLS scores have also been found to be negatively correlated with experiences of R/S struggle (Abu-Raiya et al., 2016; Exline et al., 2014).

Internal consistency reliability for the SWLS in the present study ($\alpha = .89$) was very good (Kline, 2016). An exploratory factor analysis produced a one-factor model
that fully supported the factor structure provided by previous research. No permissions were required to reproduce or distribute this measure.

**Procedures**

**Participant Recruitment**

The current study was approved by the IRB of the University of Northern Colorado prior to data collection (see Appendix H). A web-based survey was created using Qualtrics (2016) and distributed to participants appropriate for the study. Participants were self-identified sexual minority adults (18 years of age or older) who also currently or previously identified as religious/spiritual and were recruited through university Listservs, religious communities in the Rocky Mountain region and through online religious groups for sexual minorities (see Appendix B). When potential participants followed the link they received, they were presented with an introduction page where they reviewed informed consent and were given the opportunity to decline participation. While sexual minorities could be a difficult population to sample, the current study followed best practice guidelines offered by Meyer and Wilson (2009) through implementation of snowball sampling procedures where participants were asked to send the survey to others they knew to whom it might apply. This allowed for larger samples as it increased access to the social networks of members of stigmatized groups (see Table 7 for a breakdown of where participants heard about the study survey).

Since the late 1990s, using the internet to distribute web-based surveys has become increasingly popular (Gosling & Mason, 2015). Although significant concerns have been raised about the quality of data based on internet samples (e.g., lack of racial/ethnic diversity in sample, mental health differences between participants recruited
online versus in-person), most research on this topic indicated these concerns were unfounded (e.g., Gosling & Mason, 2015; Gosling et al., 2004; Hewson, 2014; Riggle et al., 2005). How representative a sample is of the population of interest has been a long-running question in psychological research and use of internet samples has shown them to be equally or more representative than traditional, in-person samples (Gosling & Mason, 2015). Samples collected over the internet allow for easier access to more diverse samples than typical undergraduate student samples of many psychological studies as well (Gosling et al., 2004). Specific to sexual minorities, anonymous web-based surveys might increase representation from participants who have not been publicly open about their sexual minority identity (Riggle et al., 2005). Hewson (2014) summarized:

Can psychological research studies conducted via the internet provide valid and reliable data? This is the question I posed in The Psychologist more than a decade ago (Hewson, 2003). Here I consider this question again, drawing upon the wealth of new examples and relevant research, and conclude that the answer is now a resounding ‘yes’. (p. 946)
Table 7

Where Participants Heard About the Study

<table>
<thead>
<tr>
<th>Grouped Write-In Responses</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Totals</td>
<td>655</td>
<td>100.0</td>
</tr>
<tr>
<td>Listserv/email group</td>
<td>201</td>
<td>30.7</td>
</tr>
<tr>
<td>Social media post</td>
<td>129</td>
<td>19.7</td>
</tr>
<tr>
<td>Friend/family member</td>
<td>83</td>
<td>12.7</td>
</tr>
<tr>
<td>Online group for sexual minority people of faith</td>
<td>77</td>
<td>11.7</td>
</tr>
<tr>
<td>Online other</td>
<td>68</td>
<td>10.4</td>
</tr>
<tr>
<td>Friend via social media</td>
<td>45</td>
<td>6.9</td>
</tr>
<tr>
<td>From researcher</td>
<td>30</td>
<td>4.6</td>
</tr>
<tr>
<td>Local group (e.g., church, PFLAG)</td>
<td>12</td>
<td>1.8</td>
</tr>
<tr>
<td>No response</td>
<td>10</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Informed Consent Process

Participants completed the IRB informed consent process online (see Appendix I). An introduction page described the topic of the study and presented potential participants with the informed consent page, which included details of the study, what participation entailed, compensation, and potential risks of participation. At the bottom of the informed consent page, participants needed to click the statement “By clicking here, I affirm that I am at least 18 years of age and voluntarily agree to participate” and the “Next” button to begin the survey. The survey measures were then presented with necessary instructions for completion (see Appendix A). Participants were notified that
participation was voluntary and they could decline participating and exit the survey at any time. After completion of the survey, participants were presented with a debriefing page that described the purpose of the study and offered resources and contact information in the case of need for counseling or emergency services as a result of participation in the study (see Appendix J). They were also offered the option to enter their email (separate from their survey responses) to be included in a drawing for one of five $25 Amazon gift cards. For online surveys, relatively small incentives have been shown to increase response and participation rates (LaRose & Tsai, 2014).

**Study Survey**

The survey for this study was created and distributed online using Qualtrics (2016) to create a web address that was included in a participant invitation email/post (see Appendix K). After potential participants have followed the link and completed the informed consent process, they were presented the study survey. Measures for the current study (see Appendices C, D, F, and G) were adapted to web-based format by typing in the information and creating Likert-type response options. Participants indicated their responses on these items by clicking bubbles corresponding to the Likert-type scales, which matched paper-and-pencil versions of the measures being used.

The measures used in the current study were presented in their entirety and in random order for each participant. For example, one participant initially received the MoSIEC, while another participant initially received the RSS. This approach was chosen to mitigate potential effects of response order as there was evidence the order of presentation of questions “may be critical in determining which options are likely to be chosen” (Couper, Tourangeau, Conrad, & Crawford, 2004, p. 125). The demographic
questionnaire was an exception to this randomization process as it was presented at the beginning of the survey for each participant. Although opinions differed around the ideal order of demographic questionnaires, this decision was made based on evidence that placing demographic items at the beginning of the survey increased response rates to demographic questions while not decreasing response rates to other survey questions (Teclaw, Price, & Osatuke, 2012).

Once participants completed the survey, which was estimated to take between 15 and 25 minutes, they were offered the opportunity to click a link to a separate page where they could enter their email address (separate from survey responses) to be included in a drawing for one of five $25 Amazon gift cards. Use of a separate page reduced the risk of participant email addresses being traced to their survey responses.

Review of Research Questions

The following research questions were created to explore how identity development in the domains of sexual identity and religion/spirituality might impact the experiences of religious/spiritual (R/S) struggles and life satisfaction:

Q1 Do sexual identity development factors and religious schemata explain a significant and unique amount of the variance in experiences of R/S struggles among adult sexual minority individuals with R/S experiences, accounting for demographic differences?

Q2 To what extent do sexual identity development factors explain a significant and unique amount of the variance in experiences of R/S struggles among adult sexual minority individuals with R/S experiences, accounting for the variance explained by religious schemata?

Q3 To what extent do religious schemata explain a significant and unique amount of the variance in experiences of R/S struggles among adult sexual minority individuals with R/S experiences, accounting for the variance explained by sexual identity development factors?
Q4. Do sexual identity development factors and religious schemata explain a significant and unique amount of the variance in experiences of life satisfaction among adult sexual minority individuals with R/S experiences, accounting for demographic differences?

Q5. To what extent do sexual identity development factors explain a significant and unique amount of the variance in experiences of life among adult sexual minority individuals with R/S experiences, accounting for the variance explained by religious schemata?

Q6. To what extent do religious schemata explain a significant and unique amount of the variance in experiences of life satisfaction among adult sexual minority individuals with R/S experiences, accounting for the variance explained by sexual identity development factors?

Data Analysis

After online data collection, data were downloaded and transferred into the statistical software package SPSS (Version 24; International Business Machines Corporation, 2016). Before hierarchical regression statistical procedures (also called sequential multiple regression; Tabachnick & Fidell, 2007) were used to answer the research questions, descriptive analyses were conducted to determine the reliability of scores produced by the measures in the current study and to produce other important descriptive information (e.g., means, standard deviations, ranges, correlation matrices). Dummy coded variables were created for the categorical demographic variables included in the regression analyses (i.e., education, relationship status).

Checks of the assumptions of multiple regression were also conducted following Pedhazur’s (1997) recommendations (see Chapter IV) based on the assumptions of variables that were independent of each other, variables that were normally distributed, linear relationships existing between predictors and outcome variable(s), and homoscedasticity. Independence of variables was assessed by examining the correlations between variables, variation inflation factor (VIF) scores, and tolerance scores.
Normality of distributions was assessed by visual inspection of histograms and linearity of relationships between independent and dependent variables and homoscedasticity was assessed by visual inspection of scatter plots. If these assumptions were not met and there was evidence of multicollinearity, multiple variables would have been logically collapsed into fewer variables to reduce variable overlap.

After examining the multiple regression assumptions and screening data for signs of multicollinearity, hierarchical multiple regression analytic procedures were used to analyze the data. Research questions 1 through 3 were tested with a single hierarchical regression model. Demographic variables were entered at step 1 and then the independent variables of sexual identity development factors and religious schemata were entered at step 2—all regressed on the dependent variable of religious/spiritual (R/S) struggles. The resulting $R^2$ at each step of the regression detailed the overall proportion of variance explained by the model, with $R^2$ change ($\Delta R^2$) showcasing the incremental variance uniquely explained by subsequent variables entered into the model at each step (Pedhazur, 1997). Thus, the variance explained by the independent variables could then be interpreted above and beyond the variance explained by demographic differences. Using the test procedure in SPSS—a procedure that allows for the examination of the variance explained by groups of variables—demographic variables of interest (i.e., age, education, relationship status) and the independent variables (i.e., sexual identity development factors, religious schemata) were grouped so the variance explained by those groups of variables could be interpreted.

Research questions 4 through 6 were tested in a similar fashion. The same demographic variables were entered at step 1 and then the independent variables of
sexual identity development factors and religious schemata were entered at step 2—all regressed on the dependent variable of life satisfaction. The $R^2$ and $R^2$ change ($\Delta R^2$) coefficients guided interpretation with the variance explained by the independent variables able to be interpreted above and beyond the variance explained by demographic differences. Using the test procedure in SPSS—a procedure that allows for the examination of the variance explained by groups of variables—demographic variables of interest (i.e., age, education, relationship status) and the independent variables (i.e., sexual identity development factors, religious schemata) were grouped so that the variance explained by those groups of variables could be interpreted.

Omnibus F-tests were examined to determine if the models including demographic variables, sexual identity development factors, and religious schemata were significantly associated with experiences of R/S struggles and life satisfaction. When F-tests were significant, the analysis of variance (ANOVA) results table was then examined to determine which groups of variables explained statistically significant portions of the variance in the dependent variable based on the calculated coefficients of determination ($R^2$). Depending on the significance of variables, the coefficients table was consulted to determine the direction and effect size of the statistically significant relationships.

The examination of these frameworks and their relation to R/S struggles and life satisfaction was supported by the comprehensive literature review presented in Chapter II. Measures of these frameworks were selected and then adapted to be used in a web-based survey created with Qualtrics (2016). For each of the constructs, psychometrically sound measures were chosen based on strong evidence of internal consistency and
validity and reliability of scores the measures produced. The following chapter presents the analysis of the collected data.
CHAPTER IV

RESULTS

In this chapter, an overview of the sample is provided with a focus on examination of outliers, missing data patterns, and descriptive statistics. Next, data regarding assumptions for multiple regressions analyses are examined. Finally, the results of the hierarchical regression analyses that answered the research questions are detailed. The chapter concludes with post hoc analyses that offer insight into the sample and provide data that could guide future research.

Overview of Sample

A total of 772 adult participants (18 years of age or older) completed at least some of the survey items for the current study. Of these participants, 25 identified as heterosexual—18 of those individuals did not indicate any same-sex attraction or sexual experience and were thus removed due to not meeting inclusion criteria; seven individuals who self-identified as heterosexual were retained due to indicating some amount of same-sex attraction. Another two participants were removed due to consistently answering demographic items with qualitative responses that appeared to be significant outliers (e.g., “Attracted to lamps”). Internet Protocol (IP) addresses for participants were examined to identify potential duplicate responses and seven participants were removed due to duplicate demographic data and highly similar
responses. An additional 79 individuals did not have data points from at least one entire measure for the study as a researcher error in selecting settings for the online survey via Qualtrics resulted in partial data not being recorded for the primary measures. The expectation maximization method or other recommended forms of data imputation for managing missing data (Schlomer, Baum, & Card, 2010) were thus not possible with the current data set and these participants were removed from the analysis. Finally, 11 participants were missing at least one demographic data point from variables included in the two primary regression analyses and were removed as imputing mean scores for data such as relationship status or ethnicity were determined to be problematic and not done; these constructs did not exist on numerical ranges that made mean imputation logical.

When using web-based surveys, higher rates of non-completion of survey items is common (e.g., Manfreda, Bosnjak, Berzelak, Haas, & Vehovar, 2008), perhaps due to more possible distractions than if a participant was to complete a paper survey.

The remaining sample of 655 participants (84.8% of the total sample) was well above the 154 participants recommended by the most conservative power analysis. A dummy variable (0 = included in analysis with zero missing data, 1 = not included in analysis due to at least one missing data point) was created to determine if there were patterns in the missing data based on demographic variables. Analysis of variance and chi-square post hoc analyses were conducted using this variable to better understand limitations of generalizability based on the current sample and possible explanations for missing data patterns that could guide future researchers.

Data were also analyzed to examine potential outliers. Sample size impacts criteria used to determine outliers; Tabachnick and Fidell (2007) noted that when $N <$
1000, influential outliers are likely to have standardized residuals larger than about $|3.3|$ (absolute value). A slightly more conservative $|3.0|$ was used to guide examination of potential outliers in the current study. Seven cases of participant data in the first regression and two cases in the second were found to have standardized residuals larger than $|3.0|$ (absolute values between 3.04 and 3.54) and were thus examined. Three of the cases in the regression onto religious/spiritual (R/S) struggles were found to be influential and were removed from that analysis. Notably, the grouped dummy-coded variables related to relationship status became statistically significant when these influential cases were removed. In terms of relationship status, one of the participants removed reported being single, one married, and one in a committed relationship. No other cases were found to be influential.

**Missing Data Patterns**

To better understand potential patterns of missing data and any differences between participants who were included in the regression analyses and those who were not, two ANOVA tests were conducted to determine if age was a significant factor with age set as the dependent variable and inclusion or exclusion in the regression models as the independent variables. For the regression onto R/S struggles, age was significantly different ($F (1, 725) = 4.379, p = .037$) and the mean age for those included in the analysis was 35.11-years-old, whereas the mean age for those not included was 31.37-years-old. While statistically significant, the partial eta squared statistic ($\eta^2 = .006$) for this difference was very small, suggesting little practical difference in age between those included and not included in this regression (Cohen, 1988). For the regression onto life
satisfaction, age was not significantly different between those included and excluded from the analysis.

Chi-squared tests were conducted to determine if those who were included in the regression models differed from those who were not by the categorical demographic variables (i.e., level of education, relationship status). Table 7 provides an overview of the chi-square analyses and associated Cramer’s V coefficient for each factor. For both the regression onto R/S struggles and onto life satisfaction, relationship status was not significantly different among those who were in the analysis versus those who were not. Whereas, for both regressions, level of education was significantly different between those who were included in the analysis and those who were not. Generally, more of those excluded from the analyses reported lower levels of education compared to those who were included. While statistically significant, Cramer’s V coefficient helped to better understand the practical significance of these differences. Cramer’s V ranges from 0 to 1 and explains the degree of association between variables. For level of education, Cramer’s V coefficient indicated a small effect regarding whether or not a participant was included in the analysis (Cohen, 1988; see Table 8).
Table 8

*Categorical Demographic Variables Related to Participant Inclusion/Exclusion in Regression Analyses*

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>df</td>
<td>$\chi^2$</td>
<td>Cramer’s V</td>
</tr>
<tr>
<td>Regression onto R/S</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Struggles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>716</td>
<td>3</td>
<td>15.764**</td>
<td>.148</td>
</tr>
<tr>
<td>Relationship Status</td>
<td>726</td>
<td>4</td>
<td>2.127</td>
<td>.054</td>
</tr>
<tr>
<td>Regression onto Life</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>716</td>
<td>3</td>
<td>16.746**</td>
<td>.153</td>
</tr>
<tr>
<td>Relationship Status</td>
<td>726</td>
<td>4</td>
<td>3.123</td>
<td>.066</td>
</tr>
</tbody>
</table>

*Note. *$p < .05$. **$p < .01$. ***$p < .001$.*

**Descriptive Statistics**

The remaining 655 participants were between the ages of 18 and 82 ($M = 35.03$, $SD = 14.91$) with 54.8% identifying as male, 29.5% as female, 7% as transgender, 6.9% as genderqueer/fluid, and 1.8% as some other gender. The majority of participants identified as White or of European descent (83.8%), followed by Multiracial/Other (5.3%), Asian/Pacific Islander or of Asian descent (5%), Latino/a/x or of Hispanic descent (4%), Black or of African descent (1.5%), and Native American or American Indian (0.2%). Based on U.S. Census regional divisions (see Appendix A), 39.1% of participants lived in the West, 19.7% lived in the South, 14.2% lived in the Midwest, 13.4% lived in the Northeast, and 13.6% lived outside of the United States. In terms of nationality, 82.4% identified as citizens of the United States, 5.2% were Canadian, 2.9% were Multinational, 2.7% were from European countries other than England, 1.7% were
Australian, 1.5% were English/British, 1.2% were from Asian countries other than India, 0.9% were New Zealander, and 0.6% were Indian. Regarding highest level of education, 0.6% responded some high school or less, 2.9% had a high school diploma or equivalent, 20.8% had some college, 23.1% had a bachelor’s degree, 12.2% had some graduate school, 28.4% had a master’s degree, and 12.1% had a doctoral degree.

Participants also reported their self-identified sexual orientation: 63.2% were lesbian or gay, 16.9% were bisexual, 12.2% were queer, and 0.8% were heterosexual (retained due to indicating some amount of same-sex attraction). Notably, 24.6% of participants had personally identified with their sexual orientation identity for 21+ years, 9.0% for 16-20 years, 12.4% for 11-15 years, 22.1% for 6-10 years, 17.7% for 3-5 years, 9.9% for 1-2 years, and 2.6% for less than a year. In terms of public openness about sexual orientation, 38.0% described themselves as very open, 30.5% were open, 18.9% were somewhat open, 8.2% were a little open, and 4.3% were not at all open.

Participants reported their current relationship status: 43.5% were single, 19.8% were married, 29.9% were in a committed relationship, 1.4% were divorced/separated, and 5.3% identified as other. For those in relationships, the length ranged from less than a year to 49 years ($M = 7.61, SD = 8.95$). Table 9 provides a breakdown of how participants responded when prompted: “Please select the statement most closely aligning with your current stance toward same-sex relationships and sexual minorities.”
Table 9

*Current Personal Stance on Same-Sex Orientations and Relationships*

<table>
<thead>
<tr>
<th>Personal Stance</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Totals</td>
<td>655</td>
<td>100.0</td>
</tr>
<tr>
<td>Same-sex orientations and relationships are immoral and not acceptable according to religious teachings and doctrines</td>
<td>3</td>
<td>0.5</td>
</tr>
<tr>
<td>Same-sex behaviors and relationships are immoral, but same-sex orientations are not inherently immoral</td>
<td>24</td>
<td>3.7</td>
</tr>
<tr>
<td>Same-sex relationships are acceptable, but less desirable than heterosexual ones</td>
<td>34</td>
<td>5.2</td>
</tr>
<tr>
<td>Same-sex relationships are equally acceptable as heterosexual ones</td>
<td>594</td>
<td>90.7</td>
</tr>
</tbody>
</table>

Regarding current religion, 3.1% identified as Buddhist, 47.6% were Christian, 2.7% were Hindu, 3.7% were Jewish, 1.1% were Muslim, 15.1% were agnostic, 11.8% were atheist, and 15.0% identified as other. Table 10 provides a breakdown of how often participants reported attending religious services and how they responded when prompted: “Please select the statement most closely aligning with the stance toward same-sex relationships and sexual minorities held by your primary **current or most recent** (last year) religious community (e.g., your church, your mosque).”
Table 10

Current Religious Service Attendance and Current Religious Stance on Same-Sex Orientations and Relationships

<table>
<thead>
<tr>
<th>Attendance</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Totals</td>
<td>655</td>
<td>100.0</td>
</tr>
<tr>
<td>Never</td>
<td>35</td>
<td>5.3</td>
</tr>
<tr>
<td>One time or a few times a year</td>
<td>68</td>
<td>10.4</td>
</tr>
<tr>
<td>Once every few months</td>
<td>57</td>
<td>8.7</td>
</tr>
<tr>
<td>A few times a month</td>
<td>70</td>
<td>10.7</td>
</tr>
<tr>
<td>Once a week</td>
<td>148</td>
<td>22.6</td>
</tr>
<tr>
<td>More than once a week</td>
<td>75</td>
<td>11.5</td>
</tr>
<tr>
<td>No response (optional question)</td>
<td>202</td>
<td>30.8</td>
</tr>
</tbody>
</table>

Stance of Religious Community

<table>
<thead>
<tr>
<th>Totals</th>
<th>655</th>
<th>100.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Same-sex orientations and relationships are immoral and not acceptable according to religious teachings and doctrines</td>
<td>76</td>
<td>11.6</td>
</tr>
<tr>
<td>Same-sex behaviors and relationships are immoral, but same-sex orientations are not inherently immoral</td>
<td>120</td>
<td>18.3</td>
</tr>
<tr>
<td>Same-sex relationships are acceptable, but less desirable than heterosexual ones</td>
<td>51</td>
<td>7.8</td>
</tr>
<tr>
<td>Same-sex relationships are equally acceptable as heterosexual ones</td>
<td>208</td>
<td>31.8</td>
</tr>
<tr>
<td>I do not attend a religious community currently</td>
<td>200</td>
<td>30.5</td>
</tr>
</tbody>
</table>

During childhood, 0.6% identified as Buddhist, 79.8% were Christian, 1.4% were Hindu, 3.5% were Jewish, 0.9% were Muslim, 3.2% were agnostic, 2.7% were atheist,
and 7.8% identified as other. Table 11 provides a breakdown of how often participants reported attending religious services during childhood and how they responded when prompted: “Please select the statement most closely aligning with the stance toward same-sex relationships and sexual minorities held by your primary religious community (e.g., your church, your mosque) during childhood.”

Table 11

**Childhood Religious Service Attendance and Childhood Religious Stance on Same-Sex Orientations and Relationships**

<table>
<thead>
<tr>
<th>Attendance</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Totals</td>
<td>655</td>
<td>100.0</td>
</tr>
<tr>
<td>Never</td>
<td>8</td>
<td>1.2</td>
</tr>
<tr>
<td>One time or a few times a year</td>
<td>22</td>
<td>3.4</td>
</tr>
<tr>
<td>Once every few months</td>
<td>26</td>
<td>4.0</td>
</tr>
<tr>
<td>A few times a month</td>
<td>70</td>
<td>10.7</td>
</tr>
<tr>
<td>Once a week</td>
<td>226</td>
<td>34.5</td>
</tr>
<tr>
<td>More than once a week</td>
<td>258</td>
<td>39.4</td>
</tr>
<tr>
<td>No response (optional question)</td>
<td>45</td>
<td>6.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Religious Stance</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Totals</td>
<td>655</td>
<td>100.0</td>
</tr>
<tr>
<td>Same-sex orientations and relationships are immoral and not acceptable according to religious teachings and doctrines</td>
<td>394</td>
<td>60.2</td>
</tr>
<tr>
<td>Same-sex behaviors and relationships are immoral, but same-sex orientations are not inherently immoral</td>
<td>130</td>
<td>19.8</td>
</tr>
<tr>
<td>Same-sex relationships are acceptable, but less desirable than heterosexual ones</td>
<td>32</td>
<td>4.9</td>
</tr>
<tr>
<td>Same-sex relationships are equally acceptable as heterosexual ones</td>
<td>18</td>
<td>2.7</td>
</tr>
<tr>
<td>I did not attend a religious community as a child</td>
<td>41</td>
<td>6.3</td>
</tr>
<tr>
<td>No response</td>
<td>40</td>
<td>6.1</td>
</tr>
</tbody>
</table>
Table 12 provides an overview of the extent to which respondents described themselves as spiritual and religious based on the definitions provided: “Spirituality is here defined as ‘a search for the sacred—elements of life that are seen as manifestations of the divine, transcendent, or ultimate, either inside or outside of a specific religious context’”; “Religion is here defined as ‘the search for significance that occurs within the context of established institutions [e.g., churches, mosques, faith communities] that are designed to facilitate spirituality.’

Table 12

<table>
<thead>
<tr>
<th>Options</th>
<th>Spiritual</th>
<th>Religious</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Totals</td>
<td>655</td>
<td>100.0</td>
</tr>
<tr>
<td>Not at all spiritual / religious</td>
<td>68</td>
<td>10.4</td>
</tr>
<tr>
<td>A little spiritual / religious</td>
<td>75</td>
<td>11.5</td>
</tr>
<tr>
<td>Somewhat spiritual / religious</td>
<td>102</td>
<td>15.6</td>
</tr>
<tr>
<td>Spiritual / religious</td>
<td>190</td>
<td>29.0</td>
</tr>
<tr>
<td>Very spiritual / religious</td>
<td>215</td>
<td>32.8</td>
</tr>
<tr>
<td>No response</td>
<td>5</td>
<td>0.8</td>
</tr>
</tbody>
</table>

Table 13 provides an overview of participants’ current self-reported level of spiritual practice and scripture reading. Spiritual practice was assessed by the question: “How often do you spend time praying, spiritually meditating, or engaging in some other personal religious or spiritual practice?” Scripture reading was assessed by the question:
“How often do you spend time reading/studying the scriptures or teachings of your faith tradition?”

Table 13

**Self-Reported Spiritual Practice and Scripture Reading**

<table>
<thead>
<tr>
<th>Options</th>
<th>Spiritual Practice</th>
<th>Scripture Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Totals</td>
<td>655</td>
<td>100.0</td>
</tr>
<tr>
<td>Never</td>
<td>67</td>
<td>10.2</td>
</tr>
<tr>
<td>Rarely</td>
<td>75</td>
<td>11.5</td>
</tr>
<tr>
<td>A few times a year</td>
<td>26</td>
<td>4.0</td>
</tr>
<tr>
<td>A few times a month</td>
<td>57</td>
<td>8.7</td>
</tr>
<tr>
<td>Once a week</td>
<td>34</td>
<td>5.2</td>
</tr>
<tr>
<td>A few times a week</td>
<td>140</td>
<td>21.4</td>
</tr>
<tr>
<td>Once a day</td>
<td>114</td>
<td>17.4</td>
</tr>
<tr>
<td>More than once a day</td>
<td>137</td>
<td>20.9</td>
</tr>
<tr>
<td>No response</td>
<td>5</td>
<td>0.8</td>
</tr>
</tbody>
</table>

**Examination of Statistical Assumptions**

Checks of the assumptions of multiple regression were conducted following Pedhazur’s (1997) recommendations based on the assumptions of variables that were independent of each other, variables that were normally distributed, linear relationships existing between predictors and outcome variable(s), and homoscedasticity.

Independence of variables was assessed by examining the correlations between variables,
VIF scores, and tolerance scores. Kline (2016) provided guidelines of bivariate correlations between variables >.9, VIF scores >10.0, and tolerance score <.10 as evidence of extreme multicollinearity. No bivariate correlations between variables in the regressions came near .9 (see Appendix L), providing no evidence for significant multicollinearity based on correlations between variables. The VIF scores on the variables used in the analyses ranged from 1.053-2.097, giving no indication of significant multicollinearity. Tolerance scores ranged from .477-.949, also giving no indication of significant multicollinearity. Even when using more conservative standards where VIF scores of 2.50 and tolerance scores in the range of .1 could be seen as problematic, there was no evidence of significant multicollinearity (Meyers, Gamst, & Guarino, 2006).

Normality of distributions was assessed by visual inspection of histograms and by examination of the skew and kurtosis of the distribution of residuals for each regression; no indications of non-normality were evident. For the regression onto religious/spiritual (R/S) struggles, residuals appeared normally distributed with skewness of .769 (SE = .096) and kurtosis of .835 (SE = .192). For the regression onto life satisfaction, residuals also appeared normally distributed with skewness of -.505 (SE = .095) and kurtosis of .140 (SE = .191). When skewness and kurtosis statistics are between -1.0 and +1.0, data are generally considered normally distributed (Huck, 2012). Linearity of relationships between independent and dependent variables and homoscedasticity were assessed by visual inspection of scatter plots with no indication of non-linear relationships between independent and dependent variables or of heteroscedasticity. Consequently, it was concluded assumptions for multiple regression were met.
Results of Hierarchical Multiple Regression Procedures

Research questions 1 through 3 were tested with a single hierarchical regression model (see Table 14). Demographic variables were entered at step 1 and then the independent variables of sexual identity development factors and religious schemata were entered at step 2; all regssrf onto the dependent variable of R/S struggles. As noted in Chapter III, age and level of education were included in the regression models as they were the most highly correlated demographic variables with the dependent variables that did not share considerable conceptual overlap (e.g., level of openness around one’s sexual orientation identity overlapping with sexual identity development factors). Relationship status was included as a demographic variable in the regression models due to previous research indicating a significant relationship with the dependent variables (e.g., Exline et al., 2014). As also discussed in Chapter III, only the psychometrically sound ttt subscale of the Religious Schema Scale was used in the regression analyses due to the less than adequate reliability coefficients for the ftr and xenos subscales. Using the test procedure in SPSS, demographic variables and the independent variables were grouped so the variance explained by those groups of variables could be interpreted.
Table 14

Hierarchical Regression Analysis Summary for Demographic Variables, Sexual Identity Development Factors, and Religious Schemata Explaining Religious/Spiritual Struggles

<table>
<thead>
<tr>
<th>Step</th>
<th>Predictor Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>R²</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Age***</td>
<td>-.331***</td>
<td>.051</td>
<td>-.258</td>
<td>.178</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Education***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bachelor’s</td>
<td>-8.531***</td>
<td>1.832</td>
<td>-.212</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Master’s</td>
<td>-10.981***</td>
<td>1.977</td>
<td>-.258</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Doctorate</td>
<td>-10.770***</td>
<td>2.668</td>
<td>-.184</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Relationship Status*</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>-3.842</td>
<td>1.986</td>
<td>-.080</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Committed relationship</td>
<td>-1.468</td>
<td>1.642</td>
<td>-.035</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Divorced/separated</td>
<td>6.162</td>
<td>6.025</td>
<td>.038</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>-7.476*</td>
<td>3.205</td>
<td>-.087</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Sexual Identity Development Factors***</td>
<td></td>
<td></td>
<td></td>
<td>.278</td>
<td>.100</td>
</tr>
<tr>
<td></td>
<td>Commitment</td>
<td>-.154</td>
<td>.143</td>
<td>-.052</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exploration</td>
<td>.268**</td>
<td>.079</td>
<td>.126</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SOI Uncertainty</td>
<td>.131</td>
<td>.236</td>
<td>.023</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Synthesis/Integration</td>
<td>-.695***</td>
<td>.172</td>
<td>-.197</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Religious Schemata***</td>
<td>¶</td>
<td></td>
<td></td>
<td>.579***</td>
<td>.100</td>
</tr>
</tbody>
</table>

Note. SOI Uncertainty = Sexual Orientation Identity Uncertainty. ttt = Truth of Text of Teachings. For categorical demographic variables, significant relationships are in comparison to the reference group for that variable. *p < .05  **p < .01  ***p < .001.

The omnibus F test was significant at both steps in the regression analysis (F (8, 639) = 17.355, p < .001 [step 1]; F (5, 634) = 17.502, p < .001 [step 2]), and the regression model explained a total of 27.8% of the variance in the dependent variable (R² = .278). Thus, research question 1 was answered in the affirmative: sexual identity development factors and religious schemata did explain a significant amount of the variance in experiences of R/S struggles among adult sexual minority individuals with R/S experiences accounting for demographic differences.
The demographic variables explained 17.8% of the variance in experiences of religious/spiritual (R/S) struggles among adult sexual minorities with R/S experiences ($R^2$ change = .178). Age explained the most variance in R/S struggles ($F (1, 639) = 44.036, p < .001; f^2 = .057$). Level of education accounted for the next most variance ($F (3, 639) = 11.802 p < .001; f^2 = .046$), followed by one’s relationship status ($F (4, 639) = 2.409, p = .048; f^2 = .012$). All three demographic variables were statistically significant in the regression; the effect sizes ($f^2$) for age and education were between small and medium while the effect size for relationship status was very small (Cohen, 1992).

Further analysis of the significant relationships on the coefficients table for this regression model at step 1 indicated the continuous variable of age was inversely related to R/S struggles; each year increase in age resulted in lower reports of R/S struggles ($B = -.331, t(639) = -6.484, p < .001$). On the categorical variable of level of education where the comparison group was those reported having a high school education or less, those with a bachelor’s degree ($B = -8.531, t(639) = -4.656, p < .001$), master’s degree ($B = -10.981, t(639) = -5.553, p < .001$), and doctoral degree ($B = -10.770, t(639) = -4.037, p < .001$) all reported lower levels of R/S struggles than the comparison group. In terms of relationship status, where the comparison group was those who reported being single, those who reported being in the other relationship category reported lower levels of R/S struggles ($B = -7.476, t(639) = -2.33, p = .020$). All other groups did not significantly differ from those who were single.

To answer research questions 2 and 3, the $R^2$ change statistic was examined at step two of the hierarchical regression and then the coefficients table was consulted to determine the unique variance explained by sexual identity development factors and
religious schemata. The independent variables explained an additional 10% of the variance in experiences of R/S struggles among adult sexual minorities with R/S experiences, accounting for the variance explained by the demographic variables in step 1 ($\Delta R^2 = .100$). Sexual identity development factors were statistically significant ($F (4, 634) = 11.835, p < .001; f^2 = .057$), exhibiting a small to medium effect (Cohen, 1992) and explaining 5.4% of the variance above and beyond the variance explained by demographic variables and religious schemata ($\Delta R^2 = .054$). Religious schemata were also statistically significant ($F (1, 634) = 33.261, p < .001; f^2 = .040$) with exhibiting a small to medium effect (Cohen, 1992) and explaining an additional 3.8% of the variance ($\Delta R^2 = .038$).

Results of the significant relationships on the coefficients table for this regression model at step 2 described how sexual identity development factors and related to religious/spiritual (R/S) struggles. Those who reported higher levels of exploration ($B = .268, t(634) = 3.376, p = .001$) reported higher levels of R/S struggles when accounting for all other variables in the model. The squared part correlation for exploration was .013, meaning the sexual identity development factor of exploration explained 1.3% of the variance in experiences of R/S struggle when accounting for all other variables. Inversely, those who reported higher levels of synthesis/integration ($B = -.695, t(634) = -4.039, p < .001$) reported lower levels of R/S struggles when accounting for all other variables in the model. The squared part correlation for synthesis/integration was .018, meaning the sexual identity development factor of synthesis/integration explained 1.8% of the variance in experiences of R/S struggle when accounting for all other variables. The sexual identity development factors of commitment and sexual orientation identity
uncertainty were not statistically significant in this model. Those who reported higher levels of \( ttt (B = .579, t(634) = 5.676, p < .001) \) reported higher levels of R/S struggles when accounting for all other variables in the model. This was a small to medium effect and uniquely explained 3.8% of the variance in experiences of R/S struggles as noted above.

Research questions 4 through 6 were tested in a similar fashion as research questions 1 through 3 using a second hierarchical regression model (see Table 15). The same demographic variables were entered at step 1 and then the independent variables of sexual identity development factors and religious schemata were entered at step 2; all regressed onto the dependent variable of life satisfaction. Using the test procedure in SPSS, demographic dummy-coded variables and the independent variables were grouped so the variance explained by those groups of variables could be interpreted.

The omnibus F test was significant at both steps in the regression analysis (\( F (8, 646) = 10.840, p < .001 \) [step 1]; \( F (5, 641) = 13.646, p < .001 \) [step 2]), and the regression model explained a total of 20.3% of the variance in the dependent variable (\( R^2 = .203 \)). Thus, research question 4 was answered in the affirmative: sexual identity development factors and religious schemata explained a significant amount of the variance in experiences of life satisfaction among adult sexual minority individuals with R/S experiences accounting for demographic differences.
Table 15

Hierarchical Regression Analysis Summary for Demographic Variables, Sexual Identity Development Factors, and Religious Schemata Explaining Life Satisfaction

<table>
<thead>
<tr>
<th>Step</th>
<th>Predictor Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>R²</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Age**</td>
<td>.051**</td>
<td>.019</td>
<td>.113</td>
<td>.118</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Education***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bachelor’s</td>
<td>2.556***</td>
<td>.663</td>
<td>.181</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Master’s</td>
<td>3.276***</td>
<td>.714</td>
<td>.219</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Doctorate</td>
<td>4.272***</td>
<td>.968</td>
<td>.207</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Relationship Status***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>2.167**</td>
<td>.723</td>
<td>.128</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Committed relationship</td>
<td>1.811**</td>
<td>.594</td>
<td>.123</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Divorced/separated</td>
<td>-4.143</td>
<td>2.194</td>
<td>-.072</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>-0.557</td>
<td>1.151</td>
<td>-.019</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Sexual Identity Development Factors***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Commitment</td>
<td>.061</td>
<td>.053</td>
<td>.059</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exploration</td>
<td>.006</td>
<td>.029</td>
<td>.007</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SOI Uncertainty</td>
<td>.008</td>
<td>.087</td>
<td>.044</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Synthesis/Integration</td>
<td>.356***</td>
<td>.063</td>
<td>2.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Religious Schemata*</td>
<td>.092*</td>
<td>.037</td>
<td>.094</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. SOI Uncertainty = Sexual Orientation Identity Uncertainty. ttt = Truth of Text of Teachings. For categorical demographic variables, significant relationships are in comparison to the reference group for that variable. *p < .05  **p < .01  ***p < .001.

The demographic variables explained 11.8% of the variance in overall life satisfaction among adult sexual minorities with R/S experiences (ΔR² = .118). Level of education explained the most variance of the demographic variables (F (3, 646) = 9.424, p < .001; f² = .041), followed by relationship status (F (4, 646) = 5.306, p < .001; f² = .012), and finally by age (F (1, 646) = 7.656, p = .006; f² = .010). The effect size (f²) for
age was very small while the effect sizes for relationship status and level of education were small and small to medium, respectively (Cohen, 1992).

Examining significant relationships on the coefficients table for this regression model at step 1 revealed demographic differences related to life satisfaction. Age was positively correlated with life satisfaction; each year increase in age resulted in slightly higher (.05 points on the Satisfaction with Life Scale) reports of life satisfaction ($B = .051$, $t(646) = 2.767$, $p = .006$). On the categorical variable of level of education, where the comparison group was those reported having a high school education or less, those with a bachelor’s degree ($B = 2.556$, $t(646) = 3.857$, $p < .001$), master’s degree ($B = 3.276$, $t(646) = 4.586$, $p < .001$), and doctoral degree ($B = 4.272$, $t(646) = 4.411$, $p < .001$) all reported higher levels of life satisfaction than the comparison group. In terms of relationship status, where the comparison group was those who reported being single, those who were married ($B = 2.167$, $t(646) = 2.998$, $p = .003$) and in a committed relationship ($B = 1.811$, $t(646) = 3.048$, $p = .002$) reported higher levels of life satisfaction. Those who reported being divorced/separated or in some other type of relationship did not significantly differ from those who were single.

To answer research questions 5 and 6, the $\Delta R^2$ statistic was examined at step two of the hierarchical regression and the coefficients table was consulted to determine the unique variance explained by sexual identity development factors and religious schemata. The independent variables explained an additional 8.5% of the variance in experiences of life satisfaction among adult sexual minorities with religious/spiritual (R/S) experiences, accounting for the variance explained by the demographic variables in step 1 ($\Delta R^2 = .085$). Sexual identity development factors were statistically significant ($F (4, 641) =$
16.816, \( p < .001; f^2 = .092 \), exhibiting a small to medium effect (Cohen, 1992) and explaining 8.4% of the variance above and beyond the variance explained by demographic variables and religious schemata (\( \Delta R^2 = .084 \)). Additionally, religious schemata were statistically significant (\( F(1, 641) = 6.162, p = .013; f^2 = .008 \)); exhibited a very small effect (Cohen, 1992) and explained .8% of the variance in experiences of life satisfaction above and beyond the variance explained by demographic variables and sexual identity development factors (\( \Delta R^2 = .008 \)).

Results of the significant relationships on the coefficients table for this regression model at step 2 described how sexual identity development factors and religious schemata related to life satisfaction. In terms of sexual identity development factors, those who reported higher levels of synthesis/integration (\( B = .356, t(641) = 5.613, p < .001 \)) also reported higher levels of life satisfaction when accounting for all other variables. The squared part correlation for synthesis/integration was .039, meaning this sexual identity development factor explained 3.9% of the variance in experiences of life satisfaction when accounting for all other variables. The sexual identity development factors of commitment, exploration, and sexual orientation identity uncertainty were not significant in this model. Regarding religious schemata, those who reported higher levels of \( ttt \) (\( B = .092, t(641) = 2.482, p = .013 \)) reported slightly higher levels of life satisfaction when accounting for all other variables in the model and this variable uniquely explained .8% of the variance in life satisfaction.
Results of Post Hoc Analyses

To better understand participants’ experiences of religious/spiritual (R/S) struggles in the past year, descriptive statistics were run for the R/S Struggles Total Scale and for each of the six factor scales among the total sample and the different current religious identities (see Table 16).

Changes in Religious Identity

Cross tabulations between childhood religious identity and current religious identity were conducted to explore changes in self-reported religious identity across time (see Table 17). Results are reported in terms of the percentage of how many individuals held that religious identity during childhood (e.g., 25% of those who identified as Buddhist in childhood currently identify as Buddhist).

Descriptive Differences Between Sexual Orientation Identity and Current Religious Identity

Cross tabulations between sexual orientation identity and current religious identity were conducted to explore any notable patterns in the sample (see Table 18). Results are reported in terms of percentage of how individuals identified in terms of sexual orientation identity (e.g., 53.6% of those who identified as lesbian/gay identified as Christian).

Descriptive Differences Between Sexual Orientation Identity and Gender Identity

Cross tabulations between sexual orientation identity and gender identity were conducted to explore any notable patterns in the sample (see Table 19). Results are reported in terms of the percentage of how individuals identified in terms of sexual
orientation identity (e.g., 91.5% of those who identified as lesbian identified as female/woman).

**Descriptive Differences Between Sexual Orientation Identity and Sexual Attraction**

Cross tabulations between sexual orientation identity and gender identity were conducted to explore any notable patterns in the sample (see Table 20). Results are reported in terms of the percentage of how individuals identified in terms of sexual orientation identity (e.g., 46.8% of those who identified as lesbian reported being only attracted to females/women).

**Descriptive Differences in Sexual Orientation Identity Across Age Groups**

Cross tabulations between sexual orientation identity and age groups were conducted to explore any notable patterns in the sample (see Table 21). Results are reported in terms of the percentage of those within an age group (e.g., 64.4% of those between the ages of 30-39 identified as lesbian/gay).

Discussion and implications of these results as well as recommendations for future research are presented in the following chapter.
Table 16

Descriptive Statistics of Religious/Spiritual Struggles for Total Sample and by Current Religious Identity

<table>
<thead>
<tr>
<th></th>
<th>Current Religious Identity</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Min</td>
<td>Max</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Total Scale</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Divine</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demonic</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpersonal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moral</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ultimate Meaning</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doubt</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 17

Cross Tabulations Between Childhood and Current Religious Identities (Percentages within Childhood Religious Identity)

<table>
<thead>
<tr>
<th>Childhood Religious Identity</th>
<th>Current Religious Identity</th>
<th>Total Childhood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buddhist</td>
<td>Buddhist</td>
<td>1</td>
</tr>
<tr>
<td>%</td>
<td>25.0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>50.0</td>
<td>4</td>
</tr>
<tr>
<td>Christian</td>
<td>N</td>
<td>15</td>
</tr>
<tr>
<td>%</td>
<td>2.9</td>
<td>295</td>
</tr>
<tr>
<td></td>
<td>56.4</td>
<td>523</td>
</tr>
<tr>
<td>Hindu</td>
<td>N</td>
<td>0</td>
</tr>
<tr>
<td>%</td>
<td>8.9%</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>88.9%</td>
<td>9</td>
</tr>
<tr>
<td>Jewish</td>
<td>N</td>
<td>1</td>
</tr>
<tr>
<td>%</td>
<td>4.3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>4.3</td>
<td>23</td>
</tr>
<tr>
<td>Muslim</td>
<td>N</td>
<td>0</td>
</tr>
<tr>
<td>%</td>
<td>0.0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>0.0</td>
<td>6</td>
</tr>
<tr>
<td>Agnostic</td>
<td>N</td>
<td>3</td>
</tr>
<tr>
<td>%</td>
<td>14.3</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>28.6</td>
<td>21</td>
</tr>
<tr>
<td>Atheist</td>
<td>N</td>
<td>0</td>
</tr>
<tr>
<td>%</td>
<td>0.0</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>22.2</td>
<td>18</td>
</tr>
<tr>
<td>Other</td>
<td>N</td>
<td>0</td>
</tr>
<tr>
<td>%</td>
<td>0.0</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>7.8</td>
<td>51</td>
</tr>
<tr>
<td>Total Current</td>
<td>N</td>
<td>20</td>
</tr>
<tr>
<td>%</td>
<td>3.1</td>
<td>312</td>
</tr>
<tr>
<td></td>
<td>47.6</td>
<td>655</td>
</tr>
</tbody>
</table>
Table 18

*Cross Tabulations Between Sexual Orientation Identity and Current Religious Identity (Percentages of Total)*

<table>
<thead>
<tr>
<th>Sexual Orientation Identity</th>
<th>Current Religious Identity</th>
<th>Total SOI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Buddhist</td>
<td>Christian</td>
</tr>
<tr>
<td>Lesbian/Gay</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>N</td>
<td>11</td>
<td>2.7</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bisexual</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>N</td>
<td>4</td>
<td>3.6</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Queer</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>N</td>
<td>4</td>
<td>5.0</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heterosexual</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>N</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>N</td>
<td>1</td>
<td>2.2</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Religious Identity</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>N</td>
<td>20</td>
<td>3.1</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. SOI = Sexual Orientation Identity.
Table 19

*Cross Tabulations Between Sexual Orientation Identity and Gender Identity (Percentages within Gender Identity)*

<table>
<thead>
<tr>
<th>Gender Orientation Identity</th>
<th>Female/Woman</th>
<th>Male/Man</th>
<th>Transgender</th>
<th>Genderqueer/Fluid</th>
<th>Other</th>
<th>Total SOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesbian</td>
<td>N</td>
<td>86</td>
<td>0</td>
<td>3</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>91.5</td>
<td>0.0</td>
<td>3.2</td>
<td>5.3</td>
<td>0.0</td>
</tr>
<tr>
<td>Gay</td>
<td>N</td>
<td>7</td>
<td>294</td>
<td>11</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>2.2</td>
<td>91.9</td>
<td>3.4</td>
<td>1.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Bisexual</td>
<td>N</td>
<td>59</td>
<td>34</td>
<td>8</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>53.2</td>
<td>30.6</td>
<td>7.2</td>
<td>8.1</td>
<td>0.9</td>
</tr>
<tr>
<td>Queer</td>
<td>N</td>
<td>26</td>
<td>20</td>
<td>11</td>
<td>20</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>32.5</td>
<td>25.0</td>
<td>13.8</td>
<td>25.0</td>
<td>3.8</td>
</tr>
<tr>
<td>Heterosexual</td>
<td>N</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>0.0</td>
<td>60.0</td>
<td>40.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Other</td>
<td>N</td>
<td>15</td>
<td>8</td>
<td>11</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>33.3</td>
<td>17.8</td>
<td>24.4</td>
<td>15.6</td>
<td>8.9</td>
</tr>
</tbody>
</table>

| Total Gender Identity       | N            | 193      | 359         | 46                | 45    | 12        | 655      |
|                             | %            | 29.5     | 54.8        | 7.0               | 6.9   | 1.8       | 100      |

*Note.* SOI = Sexual Orientation Identity.
Table 20

Cross Tabulations Between Sexual Orientation Identity and Sexual Attraction (Percentages within Sexual Orientation Identity)

<table>
<thead>
<tr>
<th>Sexual Orientation Identity</th>
<th>Only attracted to females/women</th>
<th>Mostly attracted to females/women</th>
<th>Equally attracted to females/women and males/men</th>
<th>Mostly attracted to males/men</th>
<th>Only attracted to males/men</th>
<th>Not currently sure</th>
<th>Not sexually attracted to other people</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesbian</td>
<td>N  44</td>
<td>% 46.8</td>
<td>% 52.1</td>
<td>% 0.0</td>
<td>% 0.0</td>
<td>% 0.0</td>
<td>% 0.0</td>
<td>% 1.1</td>
</tr>
<tr>
<td></td>
<td>94</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gay</td>
<td>N  2</td>
<td>% 0.6</td>
<td>% 1.6</td>
<td>% 0.0</td>
<td>% 18.8</td>
<td>% 78.1</td>
<td>% 0.0</td>
<td>% 0.6</td>
</tr>
<tr>
<td></td>
<td>320</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bisexual</td>
<td>N  0</td>
<td>% 0.0</td>
<td>% 19.8</td>
<td>% 35.1</td>
<td>% 33.3</td>
<td>% 0.0</td>
<td>% 3.6</td>
<td>% 8.1</td>
</tr>
<tr>
<td></td>
<td>111</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Queer</td>
<td>N  1</td>
<td>% 1.3</td>
<td>% 40.0</td>
<td>% 6.3</td>
<td>% 21.3</td>
<td>% 11.3</td>
<td>% 3.8</td>
<td>% 5.0</td>
</tr>
<tr>
<td></td>
<td>80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heterosexual</td>
<td>N  0</td>
<td>% 0.0</td>
<td>% 80.0</td>
<td>% 0.0</td>
<td>% 0.0</td>
<td>% 0.0</td>
<td>% 0.0</td>
<td>% 20.0</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>N  0</td>
<td>% 0.0</td>
<td>% 13.3</td>
<td>% 6.7</td>
<td>% 17.8</td>
<td>% 4.4</td>
<td>% 33.3</td>
<td>% 24.4</td>
</tr>
<tr>
<td></td>
<td>45</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total SA</td>
<td>N  47</td>
<td>% 7.2</td>
<td>% 18.0</td>
<td>% 7.2</td>
<td>% 18.6</td>
<td>% 39.8</td>
<td>% 1.1</td>
<td>% 3.2</td>
</tr>
<tr>
<td></td>
<td>655</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Note. SOI = Sexual Orientation Identity. SA = Sexual Attraction.
Table 21

Cross Tabulations Between Sexual Orientation Identity and Age Groups (Percentages within Age Groups)

<table>
<thead>
<tr>
<th>Age Groups</th>
<th>Total SOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-19</td>
<td>20-29</td>
</tr>
<tr>
<td>-----------</td>
<td>-----------</td>
</tr>
<tr>
<td>Lesbian/Gay</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>13</td>
</tr>
<tr>
<td>%</td>
<td>35.1</td>
</tr>
<tr>
<td>Bisexual</td>
<td>N</td>
</tr>
<tr>
<td>%</td>
<td>29.7</td>
</tr>
<tr>
<td>Queer</td>
<td>N</td>
</tr>
<tr>
<td>%</td>
<td>16.2</td>
</tr>
<tr>
<td>Heterosexual</td>
<td>N</td>
</tr>
<tr>
<td>%</td>
<td>5.4</td>
</tr>
<tr>
<td>Other</td>
<td>N</td>
</tr>
<tr>
<td>%</td>
<td>13.5</td>
</tr>
<tr>
<td>Total Age Groups</td>
<td>N</td>
</tr>
<tr>
<td>%</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Note. SOI = Sexual Orientation Identity.*
CHAPTER V

DISCUSSION

This chapter concludes the current study by offering a discussion of the results in context of previous literature. Results related to demographic variables are considered first, followed by a discussion of results related to the research questions and post hoc analyses. Theoretical and practical implications are then provided, tying the results into the broader context of psychological conceptualization and practice. Finally, limitations of the current study and possible directions for future research are described.

Relatively little research has explored the intersection of sexual minority and religious/spiritual (R/S) identities (e.g., Lee et al., 2013; Phillips et al., 2003). Most of the research thus far has focused on the deep, rich experiences of small numbers of individuals using qualitative methodologies (e.g., Dahl & Galliher, 2012; Levy, 2012). One of the strongest themes found by qualitative studies was the experience of tensions or conflicts with many participants reporting depression, anxiety, low self-esteem, self-harming behaviors, and suicidality (e.g., Barnard, 2009; Barton, 2010; Beagan & Hattie, 2015; Kubicek et al., 2009; Schuck & Liddle, 2001; Subhi & Geelan, 2012). Alternatively, research also found potentially positive experiences of sexual minorities with R/S including when sexual minority individuals found affirming faith communities that supported their relationships (e.g., Barrow & Kuvalanka, 2011; Lease et al., 2005; Murr, 2013; Rodriguez & Ouellette, 2000; Rostosky et al., 2017; Schuck & Liddle, 2001;
Yakushko, 2005). For some LGBQ individuals, successfully integrating R/S and sexual identities appeared possible (Dahl & Galliher, 2009) and might be the outcome associated with the most positive mental health over rejection or compartmentalization of sexual identity (Dehlin et al., 2015).

The current study sought to answer calls for larger samples and statistically rigorous research methods to explore themes from previous qualitative research and obtain more generalizable data around this unique intersection of identities (APA, 2012; Hamblin & Gross, 2014). Although no universal metric of effect size interpretation exists, Cohen’s (1992) guidelines are frequently used today (Barry et al., 2016; Ferguson, 2009) and helped provide context for the significance of the findings of the current study. Given the degree of variability in human experience, the effect sizes found in the current study provided support that the results held practical significance for the lives of sexual minorities with R/S experiences.

The regression models onto R/S struggles and life satisfaction showcased demographic factors that explained significant variance in the experiences of adult sexual minorities with R/S experiences. As these variables were entered in the first step of the hierarchical regression analyses, they were discussed before the results related to sexual identity development factors and religious schemata, which were entered at the second step in the respective regressions.

**Findings Regarding Demographic Variables**

**Age**

For the regression onto religious/spiritual (R/S) struggles, age was the strongest explanatory demographic variable; each year increase in age correlated with lower
reports of R/S struggles. This was contrary to some previous research. In the validation studies for the RSS Scale with diverse samples, age was not a significant variable (Exline et al., 2014). Additionally, data also indicated younger generations held more favorable views regarding the rights of sexual minority individuals (e.g., Diamond, 2014), suggesting younger LGBQ people might feel increasingly accepted by society if not in religious contexts. Because of this, the current findings that older LGBQ individuals experienced less R/S struggles might seem counterintuitive.

Sexual identity development experiences might help explain these findings. Among gay men, Bybee et al. (2009) found those in middle young adulthood and midlife reported better self-esteem, more emotional stability, and fewer mental health concerns (e.g., depression, anger) than their early young adult peers. Additionally, conceptual models of sexual minority identity development predicted that with age came an increased sense of self-understanding. Some data have positively correlated age with higher levels of the sexual identity development factors of Commitment and Synthesis/Integration (Worthington et al., 2008) and higher levels of satisfaction with one’s sexual minority identity (Henrickson & Neville, 2012). In a large LGBQ community sample \(N = 2,259\), older age was associated with lower levels of internalized homophobia or negativity regarding one’s sexual minority identity (Herek et al., 2009). As others have pointed out, environmental and circumstantial changes can also occur with age that lead to increased agency, which might reduce the number of negative factors in the daily lives of sexual minorities (Bybee et al., 2009). Increased autonomy to choose where one lives and with whom one interacts (e.g., more affirming friends and communities) might mitigate potential ongoing negative factors of familial,
religious, and/or societal discrimination. Thus, both increased self-acceptance and autonomy that tend to come with age might explain the current findings.

Age was also a statistically significant explanatory variable in experiences of life satisfaction—each year increase correlated with higher life satisfaction—although it had limited practical significance due to a very small effect size. Previous research with broader populations has found age to be significantly related to life satisfaction and subjective well-being. However, considerable debate exists on the degree of importance of this relationship, its general shape (e.g., U-shaped with lower levels of satisfaction in midlife), and how life satisfaction or subjective well-being are measured (e.g., one question with Likert scale, Satisfaction with Life Scale; Berenbaum, Chow, Schoenleber, & Flores, 2013; Blanchflower & Oswald, 2008; de Ree & Alessie, 2011). Specific to sexual minorities, age differences might be complicated by changing social views held toward LGBQ people across time in combination with different developmental stressors faced during certain periods of life (Perales, 2016). In a sizeable sample of LGB individuals (N = 396) where participants were grouped into three cohorts by age, Kertzner, Meyer, and Frost (2009) found young adults (18-29 years of age) reported lower levels of social well-being compared to the two older cohorts. The relatively minimal effect of age on life satisfaction in the current study could be explained by age being connected to both social cohort experiences and developmental lifespan experiences and the complex nature of what variables were studied.

**Education**

Level of reported education was a significant explanatory variable when looking at both experiences of R/S struggles and life satisfaction. Overall, those who reported
higher levels of education reported lower levels of R/S struggles and higher levels of life satisfaction. In terms of R/S struggles, level of education was the second most explanatory demographic variable after age and had a small to medium effect size. When explaining life satisfaction, level of education was the most meaningful demographic variable and also had a small to medium effect size.

In line with the current findings, Exline et al. (2014) found some evidence that when participants reported higher attained level of education, they also reported lower levels of R/S struggles. Other data indicated that higher levels of education correlated with greater societal and personal acceptance of sexual minorities, which could also explain reduced experiences of R/S struggles. At the societal level, higher educational attainment has been connected to more positive and accepting views of homosexuality across cultures among the general population (Adamczyk & Pitt, 2009; van den Akker et al., 2013). Specific to sexual minorities, Herek et al. (2009) found in their large sample ($N = 2,259$) that greater internalized homophobia was also correlated with less education. Greater societal and personal acceptance of sexual minority identities with more education might explain the current finding. In a qualitative study exploring resilience among sexual minorities, pursuing higher education at a university was one common path LGBQ individuals used to leave more negative or hostile environments and find more accepting and affirming communities (Asakura & Craig, 2014). Thus, higher levels of education might be connected to many other social factors for sexual minorities.

Regarding overall life satisfaction, more educated participants in the current sample reported greater contentment in their lives. The Institute of Medicine (2011) summarized how higher educational attainment was often associated with higher income
and socioeconomic status for the general population and the LGBQ population specifically. As the same report highlighted, social benefits that came with higher socioeconomic status were many including access to safer neighborhoods, better health care, and healthier food options. While data showed that higher levels of education did not prevent sexual minorities from facing discrimination, education did seem to increase protective factors and reduce barriers to safer, healthier living (Institute of Medicine, 2011). Among a large sample of sexual minority women (N = 1,381), higher levels of education were associated with more income, fewer experiences of discrimination, decreased substance use, lower reports of depression and anxiety, and higher reports of existential well-being (Lehavot & Simoni, 2011). White and Stephenson (2014) also found that having higher educational experience was connected to greater acceptance and openness of one’s sexual minority identity in their sample of gay and bisexual men. All of these data provided possible explanations for why higher educational attainment was correlated with higher reports of life satisfaction in the current study.

**Relationship Status**

In the current study, participants’ reported relationship status was a significant explanatory variable in the regression model onto religious/spiritual (R/S) struggles, although it had a very small effect size. Specifically, those who reported being in the “other” category in terms of relationship status reported lower levels of R/S struggles. As a relatively small group of participants were in the “other” category (n = 35), this finding could have been an artifact of the sample. Future research could explore the experiences of those in other forms of relationships. Write-in examples of this category included being in polyamorous relationships, open relationships, and non-committed dating.
relationships. In their study, Exline et al. (2014) found undergraduates who were not in a committed relationship reported higher levels of R/S struggles compared to those who were. The results with the current sample might not have directly aligned because relational options differed slightly with no write-in option seemingly provided in Exline et al.’s (2014) study. Additionally, participation in the current study was not limited to undergraduate students who might have experienced not being in a relationship differently due to particular developmental processes around R/S struggles and relationship status. Further exploration is warranted.

When explaining life satisfaction, participants’ current relationship status was a significant explanatory variable and had a small effect; individuals who were married or in a committed relationship reported higher levels of life satisfaction compared with those who were single. Those who were single did not significantly differ in terms of life satisfaction from those who were divorced/separated or in some other type of relationship, accounting for all other variables in the regression. Research has generally found individuals who are married or in committed romantic relationships reported higher levels of subjective well-being on average than their non-partnered peers (e.g., Kamp Dush & Amato, 2005; Wight et al., 2013). Some research suggested this might also be true for same-sex couples (e.g., Wienke & Hill, 2009), while other research found marital and relationship status was not predictive of subjective well-being for sexual minorities (Barringer & Gay, 2016). Li et al. (2013) found Chinese lesbians in committed relationships were more open about their sexual identities and experienced greater levels of life satisfaction compared to those not in committed relationships, suggesting possible benefits of committed partnerships to personal identity and well-
being. The current study provided evidence that relationship status was significant in explaining life satisfaction among a sample of sexual minority adults with R/S experiences.

**Sexual Identity, Religious Schemata, and Religious/Spiritual Struggles**

The research questions for the current study revolved around how sexual minority identity development factors and religious schemata explained experiences of R/S struggles and life satisfaction. With this sample of sexual minority adults with R/S experiences, these factors were statistically and practically significant variables that provided unique explanatory power when accounting for demographic differences. Hierarchical regression analyses allowed for interpretation of the unique contribution of the grouped sexual identity development factors and religious schemata above and beyond demographic variables.

Specifically looking at sexual identity development factors and the small to medium effect size they had in explaining R/S struggles, participants who reported higher levels of exploration around their sexual identity reported higher levels of R/S struggles, while those who reported higher levels of synthesis/integration reported lower levels of R/S struggles. Higher levels of exploration aligned most closely with the identity status of active exploration (Dillon et al., 2011). Characterized by the potential for both mental and physical experimentation and evaluation of sexual values and behaviors, this status captured those currently in the process of questioning societal, cultural, and personal values around sexuality. Considering the majority of religious belief systems and communities are not affirming of sexual minority identities and same-sex relationships
(e.g., Pew Research Center, 2013; van den Akker et al., 2013), it seemed to make sense that individuals with R/S experiences who are currently exploring their sexuality would report higher levels of R/S struggles. Previous qualitative literature found sexual minority participants often felt tension and conflict when exploring their sexuality in relation to their R/S beliefs (e.g., Beagan & Hattie, 2015; Dahl & Galliher, 2012; Gold & Stewart, 2012). The current findings provided quantitative evidence from a relatively large sample that LGBQ individuals with R/S experiences who are in the process of understanding themselves and their values might be at increased risk for experiencing R/S struggles.

On the other hand, participants who reported higher levels of synthesis/integration reported lower levels of religious/spiritual (R/S) struggles. Questions that made up this factor most closely aligned with the sexual identity status of synthesis, which Dillon et al. (2011) proposed to be “the most mature and adaptive status of sexual identity” (p. 664). Synthesis is thought to capture those whose individual and social sexual identities are congruent (i.e., they are out to themselves and others) and who have integrated their sexual identity with other important identities they hold (e.g., race/ethnicity, gender, R/S). In a sample of college students (N = 791), Shepler and Perrone-McGovern (2016) found those who were determined to be in the synthesis status had lower levels of sexual and overall psychological distress compared to those in exploration status regardless of self-identified sexual orientation. Qualitative studies have found that studying and interpreting faith tradition teachings as affirming of sexual minorities and attending affirming faith communities—two potential signs of synthesis of these intersecting identities—could reduce experiences of tensions surrounding R/S for sexual minorities
The current findings provided additional quantitative evidence from a relatively large sample that sexual minorities with R/S experiences who had found ways to integrate their intersecting R/S and sexual identities were at decreased risk for experiencing religious/spiritual (R/S) struggles.

Interestingly, the sexual identity development factors of commitment and sexual orientation identity uncertainty were not significant in explaining experiences of R/S struggles with the current sample. Questions related to the commitment factor were meant to capture the deepening and commitment identity status (Dillon et al., 2011), which might not have significantly related to R/S struggles in the current study as it focused on understanding and appreciating one’s sexual identity without necessarily attempting to integrate it with other important identities (e.g., R/S). This more isolated focus on sexual identity might also explain why the factor of sexual orientation identity uncertainty was not significant in the current study. It could be that aspects related to the intersection of R/S and sexual identities might be more directly related to experiences of R/S struggles. Considering the majority of the current sample described themselves as open or very open in terms of their sexual orientation identity (cumulatively 68.5%), it was also possible that level of commitment to one’s sexual identity and level of uncertainty regarding one’s sexual orientation identity might have been relatively less important than current exploration of sexuality (including behaviors, values) and level of integration between one’s sexual identity and other identities.
In understanding the explanatory significance of religious schemata on experiences of R/S struggle, only the ttt (truth of text and teachings) schema was psychometrically sound and utilized in the regression models, providing mixed evidence for the utility of the RSS (Streib et al., 2010) among sexual minorities with R/S experiences. Seen as one end of a spectrum between fundamentalist interpretation of religion and openness to other religions/ideas, ttt was interpreted as indicative of a fundamentalist interpretive lens toward religion. Streib et al. (2010) found a strong positive correlation \((r = .81)\) between ttt and the Religious Fundamentalism Scale (Altemeyer & Hunsberger, 1992), supporting this interpretive strategy. Items such as “What the texts and stories of my religion tell me is absolutely true and must not be changed” made up this scale. In the current study, participants who reported higher levels of ttt also reported higher levels of R/S struggles, accounting for all other variables. This relationship had a small to medium effect size. In other words, sexual minorities with more fundamentalist interpretations of their religion tended to experience more tension around their R/S experiences.

As noted before, most denominations of the major faith traditions are not affirming of sexual minority identities and same-sex relationships. The process of studying and reinterpreting religious teachings as affirming that some LGBQ individuals employed (e.g., Beagan & Hattie, 2015; Dahl & Galliher, 2012; Murr, 2013) might be connected to a less fundamentalist, interpretive approach. Thus, it seemed to follow that those who identified as sexual minorities, experienced same-sex attractions, and interpreted their faith tradition in a more literal and definitive way might experience greater conflict between their intersecting sexual and R/S identities. The current study
provided evidence for this to be the case. Repetitive use of *ttt* when approaching one’s faith tradition and its teachings might increase the risk for experiences of R/S struggles for LGBQ individuals.

**Sexual Identity, Religious Schemata, and Life Satisfaction**

Sexual identity development factors and religious schemata also significantly explained experiences of life satisfaction with the current sample. The sexual identity development factors had a small to medium effect size in explaining life satisfaction; synthesis/integration was the sole factor that statistically and practically explained this dependent variable. Participants who reported higher levels of synthesis/integration also reported higher levels of life satisfaction when accounting for all other variables in the model. This relationship suggested that how integrated sexual identity was with other important identities (e.g., race/ethnicity, gender, religious/spiritual) might impact overall contentment or subjective well-being among sexual minorities. As synthesis has been proposed as the most mature of the sexual identity statuses, this finding seemed to fit with conceptual understandings of sexual identity development (Dillon et al., 2011).

High levels of synthesis/integration regarding sexual identity with other identities have been thought to be indicative of less negative self-views among sexual minorities. In addition to the finding noted above that college students who were determined to be in the synthesis status had lower levels of sexual and overall psychological distress compared to those in exploration status, it was also found those in the synthesis status reported higher levels of sexual and global self-esteem than those in the exploration status, both regardless of self-identified sexual orientation (Shepler & Perrone-
McGovern, 2016). With both a college student sample and the current sample of sexual minority individuals with R/S experiences, participants’ reported level of synthesis/integration around sexual identity was a meaningful explanatory factor of well-being and contentment. With a large sample of current and former Mormons with same-sex attractions ($N = 1,493$), Dehlin et al. (2015) found those who were categorized as having integrated their sexual and R/S identities reported greater quality of life than those who rejected one identity or compartmentalized them. Consistent with previous research, the current findings provided evidence that sexual minorities who reported more integrated sexual identities experienced greater contentment and overall life satisfaction. Future research could continue exploring different ways sexual minorities integrate their R/S and sexual identities.

Notably, the sexual identity development factors of commitment, exploration, and sexual orientation identity uncertainty were not significant in explaining experiences of life satisfaction with the current sample. Possible explanations given above for why commitment and sexual orientation identity uncertainty were not significant explanatory factors for R/S struggles could also apply here. It could be these factors were less intersectional in how they addressed sexual identity and thus were not as important for the current sample of participants. For all of these factors, it was also possible that the Satisfaction with Life Scale (Diener et al., 1985), as a more global evaluation of current and retrospective personal contentment, allowed participants to focus on the current positive state of their lives and make sense of difficult or negative life experiences in a meaningful way that did not lead to a desire to change past events. Although sampling from individuals who are earlier in their process of sexual identity development is
notably difficult (e.g., Hamblin & Gross, 2014; Moradi et al., 2009), it is possible these sexual identity development factors (particularly sexual orientation identity uncertainty) would be significant in explaining their experiences of life satisfaction.

Perhaps surprisingly given the relation of the religious schema to religious/spiritual (R/S) struggles with the current sample, those who reported higher levels of also reported slightly higher levels of life satisfaction. Notably, this statistically significant relationship had a very small effect size and thus might have minimal practical significance, perhaps being found due to the relatively large sample size (Tabachnick & Fidell, 2007). Other research has explored the relationship between more fundamentalist approaches to religion and well-being. Using a different measure religious fundamentalism, Abu-Raiya et al. (2016) did not find a significant relationship between level of fundamentalism and life satisfaction among a sample of Israeli Jews. Another study of a New Zealand sample found religious fundamentalism had a negative indirect effect on life satisfaction when mediated through personal locus of control; those who reported lower personal or internal locus of control reported lower levels of life satisfaction (Osborne, Milojev, & Sibley, 2016).

Alternatively, a study with a diverse South African sample indicated the relationship between religious fundamentalism and life satisfaction was mediated by present meaning in life (Nell, 2014). The author argued that religious fundamentalism might provide a framework for meaning making that enhances life satisfaction indirectly rather than directly. It is possible a firm religious belief system that provides definitive answers and a level of certainty to existential questions indirectly enhances overall contentment, which could be one explanation for the current statistically significant
findings. More recent research has begun exploring how those who hold security-focused religious beliefs (measured with a religious fundamentalism scale and related to the more fundamentalist lens of *ttt*) and growth-focused religious beliefs (measured with a quest religious orientation scale and related to the more tolerant and open lenses of *ftr* and *xenos*) differ (Van Tongeren, Davis, Hook, & Johnson, 2016). Among Christian samples, these authors have begun finding significant relationships between these two religious orientations: existential security (higher for those with security-focused beliefs) and tolerance for others who hold different beliefs (higher for those with growth-focused beliefs). It is possible future research utilizing these conceptually related frameworks of religious schemata and religious orientations might provide further clarity around the present findings.

**Post Hoc Findings**

**Religious/Spiritual Struggles Across Religious Groups**

To explore how participants from different faith traditions experienced religious/spiritual (R/S) struggles, descriptive statistics were run on the Total Scale and six subscales of the RSS Scale (Exline et al., 2014) across current R/S identity groups. Across the subscales, participants who identified as Christian and Muslim reported the highest levels of R/S struggles. Those who identified as Buddhist and atheist reported the lowest levels of R/S struggles and those who identified as Hindu, agnostic, and Other were in between the highest and lowest reports. Exline et al. (2014) found Christians had higher levels of R/S struggles when compared to those who identified as Jewish, “spiritual but not religious,” and atheist/agnostic/none. Regarding Christians, the data
here generally displayed a similar trend. Although the RSS Scale has been shown to have utility among samples of Jewish (Abu-Raiya et al., 2016) and Muslim (Abu-Raiya, Pargament, Exline, & Agrabria, 2015) participants, a comparative exploration of how R/S struggles were experienced by different R/S identity groups could not be found in the literature. Future research could examine similarities and differences among different R/S identity groups to better understand these exploratory findings.

Notably, there was also a trend of scores on the interpersonal subscale of the RSS Scale (Exline et al., 2014) being higher than other subscales among the current sample. This could be due to the social and interpersonal focus of questions on this subscale (e.g., ranking how much the statement “Felt rejected and misunderstood by religious/spiritual people” applied) compared to the more intrapersonal and supernatural focus of the other subscales. Given the previously stated context of many religious denominations not being affirming toward sexual minorities and their relationships, it is possible the interpersonal struggle felt more intense than other forms of R/S struggle. The current sample also described themselves as far more spiritual than religious (see Chapter III), which indicated a continued sense of connection to the divine with less importance placed on the organized aspects of religion. It is possible these experiences of interpersonal struggle impacted the extent to which participants identified as religious (i.e., connected to an established social institution). As these findings were exploratory, future studies could examine how sexual minorities experienced different types of R/S struggles in more depth.
Changes in Religious/Spiritual Identity and Stance of Religious/Spiritual Communities Attended Over Time

Post hoc exploration of R/S identity and R/S community stances toward sexual minority identities and relationships in both childhood and currently provided insight into trends among the current sample (see Chapter III for all descriptive data). Unsurprisingly given Christianity is the largest faith tradition in the United States (Pew Research Center, 2016), the large majority (79.8%) of the current sample identified as Christian during childhood and those who currently identified as Christian remained the single largest R/S identity group (47.6%). The second largest R/S identity group during childhood was the “other” write-in category (7.8%) and no other single group represented more than 3.5% of the sample, making meaningful hypotheses regarding changes around those R/S identities less feasible. It was notable that the only overall percentage decrease in R/S identification from childhood to the present was among Christians—from 523 participants to 312 participants (a 40.34% decrease). All other R/S identity groups increased in overall number of participants even if only slightly. The largest increases for R/S identity groups were among Buddhists (4 during childhood to 20 currently, a 400% increase), agnostics (21 during childhood to 99 currently, a 371.43% increase), and atheists (18 during childhood to 77 currently, a 327% increase). Presumably these numbers increased as those who grew up as Christian shifted in terms of their beliefs. Future research could explore different groups of sexual minority individuals who retained their childhood R/S identity and those who changed or left their faith traditions.
Notable trends were also found around stances toward sexual minority identities and same-sex relationships in religious/spiritual (R/S) communities where participants chose to be involved (see Chapter III for all descriptive data). During childhood, the majority of participants \( n = 394; 60.2\% \) attended R/S communities that saw same-sex orientations and relationships as immoral and not acceptable according to religious teachings and doctrine. Another 130 participants \( 19.8\% \) attended R/S communities during childhood that saw same-sex relationships as immoral but did not see same-sex orientations as inherently immoral. Participants who attended R/S communities that were accepting or affirming of sexual minority identities and relationships during childhood were in the significant minority as were those who did not actively attend a R/S community at all. Based on participants’ reports of current R/S community attendance, the breakdown was markedly different. A sizeable number of participants \( n = 208; 31.8\% \) attended R/S communities that framed same-sex relationships as equally acceptable as heterosexual ones. Close to the same amount \( n = 200; 30.5\% \) reported not currently attending a R/S community at all. Notably, 120 participants \( 18.3\% \) currently attended R/S communities that saw same-sex orientations and relationships as immoral and not acceptable according to religious teachings and doctrine and another 76 participants \( 11.6\% \) currently attended R/S communities that saw same-sex relationships as immoral but did not see same-sex orientations as inherently immoral. These data provided evidence of several potential groups of LGBQ individuals with R/S experiences regarding if and what kind of R/S communities they attended. Future research could explore these trends around changes in R/S identity and R/S community stances toward
sexual minority identities and same-sex relationships across time among sexual minority individuals in more depth.

**Sexual Orientation Identity and Current Religious/Spiritual Identity**

A cross tabulation of sexual orientation identity and current R/S identity provided further insight into the current sample and some evidence around potential trends in personal identification regarding these two major domains of identity. Christians made up the single largest R/S identity group in the current sample and unsurprisingly were the most represented R/S identity group by some margin when looking at most of the different sexual orientation identity groups (i.e., lesbian/gay, bisexual, other). Among the small number of those who identified as heterosexual and reported some amount same-sex attractions (n = 5), the “other” R/S identity group was more represented; however, the small number of self-identifying heterosexuals severely limited the generalizability of that outcome. More interestingly, among the sizeable number of those who identified as queer (n = 80), the “other” and Christian R/S identity groups were nearly equal in representation (22 and 21 participants, respectively). For much of the 20th century, “queer” was used as a derogatory term for sexual minorities (e.g., Barker, Richards, & Bowes-Catton, 2009). More recently, it has been reclaimed and argued as a suitable umbrella term for sexual and gender minorities (e.g., Drechsler, 2003; Mereish, Katz-Wise, & Woulfe, 2017) and as a unique sexual identity label worthy of empirical understanding (e.g., Garvey, 2017). Based on this context and as queer was a less represented identity label in the current sample, it was possible those who identified as queer had unique R/S experiences that warrant further exploration. These data provided
evidence for the need for deeper understandings around the intersection of sexual
minority and R/S identities.

**Sexual Orientation Identity and Gender Identity**

Comparisons between sexual orientation identity and gender identity provided a
snapshot of how these identity labels were being used by participants. The large majority
(>90%) of those who identified as lesbian also identified as women and a similar
percentage of those who identified as gay also identified as men. Among those who
identified as bisexual, slightly more than half identified as women and about one-third
identified as men. For individuals who identified as queer, about one-third identified as
women, one quarter as men, and one quarter as gender-queer/fluid. The other sexual
orientation identity option that allowed for write-in responses (e.g., asexual, pansexual)
was used more by those who also identified as women or transgender than by any other
gender identity categories. Future research could continue tracking the use of these
identity labels to better understand how their use has shifted over time.

Participants who reported their gender identity as transgender (n = 46) used gay,
queer, or the write-in response option to describe their sexual orientation identity in equal
numbers. Notably, two of the participants who identified as transgender also identified as
heterosexual. Although the current study was not focused on gender identities, the
demographic response options could have limited accurate representation of those who
had experienced life as gender minorities. The APA (2016) acknowledged current
limitations around wording of questions to accurately capture experiences of gender
minorities. It is recommended that future researchers review evidence-based best
practices for data collection around gender identity and consider following the lead of groups focused on this domain (e.g., the National Center for Transgender Equality (2019) and the National LGBTQ Task Force (2019). For example, adding a demographic question asking, “What sex were you assigned at birth, on your original birth certificate?” (Grant et al., 2010, p. 183) would better allow for identifying participants who have had gender minority experiences by comparing sex assigned at birth to current reported gender identity.

**Sexual Orientation Identity and Sexual Attraction**

A cross tabulation of sexual orientation identity and sexual attraction provided further insight into the relationships between these two areas for the current participants. Overall, there was greater variability of sexual attraction among those who identified as lesbian, bisexual, queer, and who provided a write-in response compared to those who identified as gay or heterosexual. In line with previous research, the groups with greater fluidity of sexual attraction also had higher percentages of those who identified as women (e.g., Diamond, 2007; Katz-Wise, 2015). Among those who identified as gay, the large majority (78.1%) reported being only attracted to males/men, whereas the slight majority of those who identified as lesbian (52.1%) reported being mostly attracted to females/women. Those who identified as bisexual and queer reported the greatest range in sexual attractions compared to the other identity label groups, which was consistent with how those identities are generally understood (e.g., Mereish et al., 2017). Even among identity labels like gay and lesbian, which are considered more monosexual (only attracted to a single sex/gender; Galupo, Mitchell, & Davis, 2015), these data provided
evidence for a range of sexual attraction that remains important to consider in understanding LGBQ people.

**Sexual Orientation Identity Labels Across Age Groups**

Another area of notable comparisons was how participants in different age groups reported their sexual orientation identities. Among the sexual minority individuals with religious/spiritual (R/S) experiences in the current study, there were trends toward greater usage of bisexual, queer, and other identities as self-identified sexual orientations among younger participants. In comparison, older participants were more likely to report their sexual orientation identity as lesbian or gay. Beginning in the 19th century, sexual orientation identity was conceptualized as a binary of homosexual or heterosexual. Whereas in recent decades, there has been a growing awareness of those who would not describe themselves with some non-binary label (Callis, 2014). As societal views have become more accepting of sexual minority identities, various potential sexual identity labels have grown, so much so that popular resource websites are frequently updating their lists of helpful terms and identities related to sexuality and gender. How participants in the current study self-identified in terms of sexual orientation seemed to follow this pattern. Future research might need to expand potential choices for sexual orientation identities on demographic questions and/or include write-in options for participants to self-identify as the possible number of labels continues to grow.

**Theoretical Implications**

The results of the current study generally corroborated the theoretical models of sexual and R/S identity development that guided the study, providing empirical support
that furthers research in these domains. Sexual identity was conceptualized using Dillon et al.’s (2011) universal model of sexual identity development and measured with the MoSIEC (Worthington et al., 2008). Significant findings around the identity exploration and synthesis/integration supported the overall model; participants who reported higher levels of identity exploration reported higher levels of R/S struggles and participants who reported higher levels of identity synthesis reported lower levels of R/S struggles and higher levels of life satisfaction. Although the conceptual model’s proposed dynamics between the identity statuses appeared logical (see Figure 1 in Chapter II), empirical data to support these relationships could not be found. Future research could clarify the current findings and explore possible path models around the identity statuses proposed by the model with empirical means (e.g., structural equation modeling, path analysis).

Regarding R/S identity development, the findings also provided support for some key concepts, although others were not able to be empirically explored. The religious styles perspective (Streib, 2001) measured using the RSS (Streib et al., 2010) provided the framework for higher levels of **tti**, indicating a more fundamentalist approach to R/S. As higher levels of **tti** explained higher levels of R/S struggles and slightly higher levels of life satisfaction among the current sample, there was evidence that a more fundamentalist religious style was related to both potentially negative and positive outcomes among sexual minorities. Gordon Allport (1954/1979), the famed personality psychologist, noted, “We cannot speak sensibly of the relation between religion and prejudice without specifying the sort of religion we mean and the role it plays in the personal life” (p. 456). This appeared more broadly true of how religion relates to many areas of life.
The *ftr* and *xenos* religious schemata (Streib et al., 2010) were not empirically explored because their respective subscales did not produce adequate levels of internal consistency reliability with the current sample. Previous studies have generally supported the factor structure of the RSS and found adequate to good internal consistency on its subscales among a range of participants (e.g., Melles & Frey, 2017). This was the first known study conducted using the RSS with a sample of sexual minority individuals. An exploratory factor analysis with the current sample added a fourth factor that focused on items regarding decision-making; however, the internal consistency reliabilities for all the factors except *tti* remained less than adequate (see Chapter III). Religious fundamentalism measured with *tti* was meaningful with the current sample and other R/S experiences conceptualized on the middle and other end of the R/S spectrum toward tolerance and openness were not.

**Practical Implications**

Exline et al. (2014) found self-identified homosexuals reported higher levels of religious/spiritual (R/S) struggles than other participants and a significant amount of qualitative research has added depth to some of those experiences (e.g., Beagan & Hattie, 2015; Dahl & Galliher, 2012; Gold & Stewart, 2011; Subhi & Geelan, 2012). The current study is the first known attempt to quantitatively explore and explain experiences of R/S struggles among sexual minorities. Sexual and R/S identity development significantly explained both experiences of R/S struggle and life satisfaction with the current sample. Thus, there are several practical implications of these findings.

Importantly, experiences of R/S struggle have been shown to have consistent negative correlations with mental health outcomes (e.g., Abu-Raiya et al., 2010, 2015;
Ano & Vasconcelles, 2005; Exline, 2013). Based on the current findings, sexual minority individuals currently exploring their sexuality and/or who hold more fundamentalist views of R/S might be at increased risk for R/S struggles, while those who have found ways to integrate their sexual and R/S identities might be at decreased risk. For psychologists practicing therapy, open exploration of how clients have experienced R/S in their lives and explored and potentially integrated their multiple identities is recommended. Creating opportunities for this exploration in context of a safe therapeutic relationship might reduce experiences of conflict and shame. Bozard and Sanders (2011) provided a conceptual model for counselors to help clients explore and integrate R/S and sexual minority identities using the acronym GRACE (goals, renewal, action, connection, and empowerment). The authors provided a case example of how this model could be applied in a therapeutic setting. Conceptualizing and attempting to understand where individuals might fit in terms of current sexual identity development status and approach to R/S might be helpful paths to increasing awareness and reducing tension around this intersection.

Based on the importance R/S plays in the lives of some sexual minorities, it is strongly recommended that psychologists consider and appropriately work with R/S beliefs as an area of human diversity (Sue & Sue, 2013). Whether working with individuals, couples, or families, growing evidence found at least some LGBQ individuals found exploring the role of R/S in their lives was vital (e.g., Rostosky et al., 2017). It is also recommended that psychologists consider how sexual minority individuals who hold R/S beliefs might face discrimination from within and without LGBQ communities. Thus, having appropriate referrals for affirming and/or supportive
R/S communities and other resources (e.g., literature on the integration of R/S and sexual identities) available for clients is recommended.

To promote the well-being of all individuals, religious/spiritual (R/S) communities and sexual and gender minority communities are encouraged to discuss and work toward fostering the growth of LGBQ people of faith who might feel marginalized by the communities to which they belong. Psychologists and other providers serving sexual minority individuals could provide spaces to explore and process through the intersection of R/S and sexual identities, perhaps in clinical or social formats (Shilo, Yossef, & Savaya, 2016). Beyond having referrals for affirming and/or supportive R/S communities, psychologists might need to develop and sustain relationships so they can encourage R/S communities to provide for the spiritual needs of LGBQ people of faith (Meanley, Pingel, & Bauermeister, 2016). Religious/spiritual communities could also explore for themselves theological literature surrounding the integration of sexual and gender minorities into faith communities as well as psychological literature to better understand and empathize with the experiences of their LGBQ members. Sexual and gender minority communities could create opportunities for community members to share and explore their experiences with R/S, perhaps through topical gatherings that could create visibility for LGBQ people of faith.

Additionally, a growing body of research pointed to the importance of intersectional understandings of human identities at the individual and systemic levels (Rosenthal, 2016). Within the psychological literature, there has been a history of researching and understanding identities in isolation with more recent research exploring the many fascinating intersections. The current findings provided further evidence of the
importance of intersectional understandings and approaches to human identity and
diversity. Given historical and current tensions between sexual minority and R/S
identities, this particular intersection seems ripe for further research and understanding
(APA, 2012). Psychologists are encouraged to continue exploring how sexual identities
intersect with R/S and other identities (e.g., race/ethnicity) to more fully understand these
interwoven and complex human experiences. It is also recommended that psychologists
provide space, opportunities, and challenges for clients, organizations, and society more
broadly to reflect on the multifaceted reality of human existence. Especially for
individuals facing chronic social stress due to stigmatization of one or more identities,
psychologists could uniquely provide support through evidenced-based psychotherapy
while also bringing awareness to negative impacts of discrimination and positive
perspectives by highlighting minority voices through research and advocacy.

In a presidential address to the American Psychological Association, Vasquez
(2012) clearly described how social justice is woven into the professional identity of
psychologists and written into the Ethics Code (Ethical Principles of Psychologists and
Code of Conduct; APA, 2017) through the principles of justice, respect for people’s
rights and dignity, and beneficence and nonmaleficence. While fairness in society might
be the broadest definition of social justice, a primary component of this movement is
specifically “fair and equitable distribution of both internal and external resources”
(Flores et al., 2014, p. 1001) including access to psychological resources and accurate
representation of experiences in psychological theory, research, and teaching. There is
considerable room for psychologists to enhance societal understandings and advocate for
just treatment of sexual minority people. The relatively under-researched R/S
experiences of sexual minorities is one major area where psychologists have the opportunity to provide greater clarity through their roles in teaching, research, and practice.

**Implications for Counseling Psychology**

For counseling psychologists, the calls for intersectional understandings of human experience and social justice advocacy are especially relevant. Counseling psychologists have a long history of being at the forefront of new understandings of human diversity as well as advocacy for minority groups, especially around race/ethnicity, sex and gender, and sexual orientation (e.g., Neville, Spanierman, & Lewis, 2012; O’Neil, 2012; Szymanski & Moffitt, 2012). In their text *Counseling Psychology*, Gelso et al. (2014) highlighted central values of counseling psychology including striving for holistic, developmental understandings of human growth that account for the relationships between individuals and their environment and culture. The authors also described three primary roles for counseling psychologists: remedial, preventative, and educative-developmental. The current study sought to add depth and complexity around understandings of sexual and R/S identity development while providing insights for counseling psychologists to integrate into their work.

From a remedial perspective seeking to alleviate human suffering, counseling psychologists are poised to help individuals process their intersecting R/S and sexual identities in therapeutic contexts. For example, sharing knowledge that LGBQ individuals currently exploring their sexual identities and/or who hold more fundamental religious beliefs might be at increased risk for R/S struggles could be normalizing for individuals in treatment. Counseling psychologists could also use the current findings to
further research, advocacy, and teaching that prevent human suffering, fulfilling their preventative and educative-developmental roles. Greater discussion around LGBQ people of faith in the psychological literature and educational contexts could further inclusivity and understanding while breaking down potential stereotypes that leave individuals feeling unseen and stigmatized. Dissemination of psychological findings around the intersection of sexual and R/S identities might encourage non-affirming R/S communities to reflect on how they provide support to their sexual minority members, hopefully preventing and/or reducing ongoing harm.

Thus far, research around the intersection of sexual and religious/spiritual (R/S) identities in counseling psychology has been very limited. The “fourth force” of multiculturalism in the field of American psychology (Gelso et al., 2014) has more recently brought attention to R/S (e.g., Davis et al., 2015), yet there is much room for further exploration. A multicultural content analysis of articles published in the Journal of Counseling Psychology between 1954-2009 revealed that less than 1% of articles had explored sexual identity and R/S even when combined with articles exploring disability and social class (Lee et al., 2013). The current study sought to add to the multicultural counseling psychology literature. Findings from the present study suggested important intersectional and developmental relationships between different domains of human identity. Future research ought to continue exploring the specific intersection of sexual and R/S identities and find creative methodological ways to explore additional identities (e.g., race, disability, socioeconomic status) and contextual factors (e.g., geographic region, R/S community attendance).
Limitations and Directions for Future Research

There were several important limitations of the current study. First, despite the large sample size, the results might not be wholly generalizable as nonprobability sampling methods were utilized; thus, results must be interpreted in context of the current sample (Remler & Van Ryzin, 2015). Sampling LGBQ participants has been historically difficult for a variety of reasons including high costs involved in probability sampling and potential biases introduced through non-probability sampling (Meyer & Wilson, 2009). Additionally, current sampling methods—even best practices like snowball sampling (Meyer & Wilson, 2009)—tend to skew toward those who are somewhat further along in sexual minority identity development and the current study was not free of this limitation. As being a research participant in studies focused specifically on sexual minorities involves a certain level of understanding of oneself as LGBQ (Eliason & Schope, 2007; Hamblin & Gross, 2014; Moradi et al., 2009), future research could look to gather data from individuals regardless of sexual identity with hopes of increasing participation from those who experienced some amount of same-sex attraction even though they might not openly identify with a sexual minority identity. Considering the social pressures of heterosexism from both faith communities and the wider culture that some individuals face (Herek et al., 2009), broadening the initial inclusion criteria might increase the number of participants who were earlier in their sexual minority identity development.

In terms of research methods, the current study utilized a cross-sectional design. Thus, the results were limited as they might not have captured true change across time for participants. Individuals who currently identify and/or previously identified as atheist or
agnostic were included as those individuals could have identified as religious or spiritual at some point in their lives outside the specific points asked about in the survey (i.e., childhood, currently). Future studies could include a binary question (yes/no) around whether participants had ever identified as religious/spiritual to clarify these experiences. Additionally, longitudinal research would provide greater understanding of how sexual and religious/spiritual (R/S) identities developed across the lifespan (Fontenot, 2013). Relatedly, as a current dearth of research exists regarding the intersection of R/S and sexual identities in counseling psychology broadly and specifically using longitudinal designs (see Lee et al., 2013), future research on R/S identity changes and R/S community attendance across time could provide practical insights around developmental changes (e.g., Hickey & Grafsky, 2017). Specific to researching R/S struggles, some recent research also indicated that current versus lifetime reports of R/S struggles might be tapping into unique experiences (Wilt, Grubbs, Pargament, & Exline, 2017), and longitudinal research designs might be one way to better understand these reports.

The use of self-report measures to explore the relationships between the constructs of interest might have also limited generalizability. The single method of self-report data collection could have also introduced bias (e.g., Donaldson & Grant-Vallone, 2002) so future studies could utilize multiple data collection methods (e.g., observational, self-report, in-depth interviews) to corroborate findings of the current study. It is possible the use of a web-based survey potentially introduced volunteer bias (Remler & Van Ryzin, 2015) or a possible skew in the data based on participants volunteering who were somehow different than the population of interest. However, most research indicated these concerns are unfounded (e.g., Gosling & Mason, 2015; Gosling et al.,
2004; Hewson, 2014; Riggle et al., 2005). Specific to sexual minorities, self-report research might lead to bias in terms of those who are more socially public about their LGBTQ identities, those who have not come out to various social groups, and perhaps those not open to being involved in research (Meyer & Wilson, 2009).

Based on other demographic variables, the current sample might not have been representative of the broader population of sexual minorities. As has been found with other non-probability samples of LGBTQ individuals, the current sample was highly educated, likely more so than the general population (e.g., Herek et al., 2010). In addition, individuals of different ages might not have been representative of the broader sexual minority population. Notably, the mean age of the current sample was 35.03-years-old. Almost 48% of the sample was between the ages of 20 and 29 and another 18% were between the ages of 30 and 39. While there were still sizeable numbers in most of the age ranges (18- to 19-year-olds made up 5.6%, 40- to 49-year-olds made up 8.9%, 50- to 59-year-olds made up 9.8%, 60- to 69-year-olds made up 7.5%, and 70+ year-olds made up 2.8%), future studies could attempt to find a balanced or representative sample of sexual minorities in terms of age. The current sample was also majority White, majority male, and the largest R/S identity group was Christian, which might have been an artifact of the snow ball sampling method, tapping into social networks of individuals who held more similar identities and backgrounds. Future research could benefit from more diverse samples to better determine the generalizability of the current findings. Using snowball sampling, this could be done by sending research participation requests to more organizations and communities that include members of underrepresented groups. Now that research regarding R/S struggles among sexual
minorities has found significant findings, future research could also explore more of the intersections of these identities with other identities (e.g., racial/ethnic identity, specific R/S identity group) to explore potential unique experiences (Rosenthal, 2016).

Another limitation was the lack of in-depth explorations of gender identity outside of inclusion as a demographic survey item. In light of the focus on sexual identity including sexual orientation identity, gender minorities might not have been appropriately represented in the results. Although individuals who identify as gender minorities (e.g., transgender, gender nonconforming) might share some similar experiences with sexual minorities around R/S in terms of stigma and conflicting identities (Moradi et al., 2009), the current study did not specifically explore the experiences of gender minorities; thus, the results cannot be generalized as they might neglect elements of transgender experiences. Further research is needed to explore the religious and spiritual experiences of gender minorities as sexual orientation and gender identity are often conflated and gender minorities are underrepresented in the psychological literature (APA, 2015; Benson, 2013; Sánchez & Vilain, 2013).

The measure of religious styles used for the current study (Streib et al., 2010) was not found to have been used specifically with sexual minorities. Although research supported its utility for exploring approaches to R/S in racially and religiously diverse samples from the United States, Germany, and India (Hathcoat & Fuqua, 2014; Kamble et al., 2014; Streib et al., 2010; Streib & Klein, 2014), the internal consistency reliability for the fr and xenos subscales for the current sample was less than adequate. The current study sought to extend the application of the measure and provide initial data for its use among LGBQ individuals with mixed results. Use of the ttt subscale was empirically
supported, but the other two were not. Research indicated the relationship LGBQ people had with R/S might be more complicated than for those in the general population (e.g., Brewster et al., 2016; Fontenot, 2013). It is possible sexual minority individuals had unique and varied experiences with R/S that were not captured with these items. Future studies could use the RSS (Streib et al., 2010) with different samples of sexual minorities to better understand its applicability. Additionally, engaging LGBQ people with R/S experiences specifically to elicit their thoughts and reactions when attempting to capture the more tolerant and open end of the R/S spectrum could help guide future research and potential scale development by incorporating qualitative community understandings (e.g., Rowan & Wulff, 2007).

Conclusions

Research on the intersection of sexual and religious/spiritual (R/S) identities has been a growing area of interest from qualitative lenses (e.g., Dahl & Galliher, 2012; Levy, 2012) and there have been calls to explore trends with larger samples using rigorous quantitative methods (e.g., Hamblin & Gross, 2014). Thus far, there has been little understanding of how identity development in these two domains relates to R/S struggles and life satisfaction. The current study provided evidence that sexual and R/S identity development related to mental health outcomes in meaningful ways. Considering the potential for discrimination and increased risk of mental health concerns around this intersection (e.g., Beagan & Hattie, 2015; Brewster et al., 2016; Fontenot, 2013), the current findings have important theoretical, practical, and research implications. In line with the APA’s (2012) call to explore R/S in the lives of LGBQ people, psychologists and other mental professionals seeking to better understand sexual minority populations
with R/S experiences might benefit from incorporating the current findings and developmental understandings of identity into future research, teaching, and practice.
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APPENDIX A

DEMOGRAPHIC QUESTIONNAIRE
Demographic Questionnaire

1. What is your age? _______

2. Please specify your ethnicity (or race):
   - [ ] Asian/Pacific Islander or of Asian Descent
   - [ ] Black or of African Descent
   - [ ] Latino/a/x or of Hispanic Descent
   - [ ] Native American or American Indian
   - [ ] White or of European Descent
   - [ ] Multiracial/Other

3. What is your primary nationality or citizenship (e.g., American, Canadian, Brazilian, Rwandan)? __________

4. Using the above map, in what region of the country do you reside?
   - [ ] Midwest
   - [ ] Northeast
   - [ ] South
   - [ ] West
   - [ ] Outside the United States (please specify country): ____________
5. How do you label your gender?
   - Female/Woman
   - Male/Man
   - Transgender
   - Genderqueer/fluid
   - Other (please specify): ________________

6. Do you consider yourself to be:
   - Lesbian
   - Gay
   - Bisexual
   - Queer
   - Heterosexual/straight
   - Other (please specify): ________________

7. How long have you personally identified (privately or publicly) with this sexual orientation (approximate)? Please use numerical values (e.g., 1, 5, 12). Use "0" for years if under one year.

   Years ___________  Months ___________

8. To what extent are you open or public about your sexual orientation?
   - Very open
   - Open
   - Somewhat open
   - A little open
   - Not at all open

9. People are different in terms of their sexual attractions to other people. Which feelings best describe your own?
   - Only attracted to females/women
   - Mostly attracted to females/women
   - Equally attracted to females/women and males/men
   - Mostly attracted to males/men
   - Only attracted to males/men
   - Not currently sure
   - Not sexually attracted to other people
   - Other (please specify): ________________

10. In the past year who have you had sex with:
    - Men only
    - Women only
    - Men and women
    - I have not had sex
    - Other (please specify): ________________
11. What is your current relationship status?
   - Single
   - Married
   - In a committed relationship
   - Divorced/separated
   - Other (please specify): ________________

12. How long have you been together (approximate)? Please use numerical values (e.g., 1, 5, 12). Use "0" for years if under one year. [Skipped if Single, Divorced/Separated, or Other is selected on item 11]
   Years ___________ Months ___________

13. Please select the statement most closely aligning with your current stance toward same-sex relationships and sexual minorities:
   - Same-sex orientations and relationships are immoral and not acceptable
   - Same-sex relationships are immoral, but same-sex orientations are not inherently immoral
   - Same-sex relationships are acceptable, but less desirable than heterosexual ones
   - Same-sex relationships are equally acceptable as heterosexual ones

14. How do you religiously identify currently?
   - Buddhist
   - Christian
   - Hindu
   - Jewish
   - Muslim
   - Agnostic
   - Atheist
   - Other (please specify): ________________

15. If currently Buddhist, Christian, Hindu, Jewish, Muslim, Other: What is your current denomination or religious subgroup (if applicable)?: ____ ____

16. Please select the statement most closely aligning with the stance toward same-sex relationships and sexual minorities held by your primary current or most recent (last year) religious community (e.g., your church, your mosque):
   - Same-sex orientations and relationships are immoral and not acceptable according to religious teachings and doctrine
   - Same-sex behaviors and relationships are immoral, but same-sex orientations are not inherently immoral
   - Same-sex relationships are acceptable, but less desirable than heterosexual ones
   - Same-sex relationships are equally acceptable as heterosexual ones
   - I do not attend a religious community currently or have not recently (past year)
17. How often do you attend religious services currently?
- More than once a week
- Once a week
- A few times a month
- Once every few months
- One time or a few times a year
- Never

18. How did you religiously identify during childhood?
- Buddhist
- Christian
- Hindu
- Jewish
- Muslim
- Agnostic
- Atheist
- Other (please specify): ____________

19. If Buddhist, Christian, Hindu, Jewish, Muslim, Other during childhood: What was your denomination or religious subgroup during childhood (if applicable)?: ____________

20. Please select the statement most closely aligning with the stance toward same-sex relationships and sexual minorities held by your primary childhood religious community (e.g., your church, your mosque):
- Same-sex orientations and relationships are immoral and not acceptable according to religious teachings and doctrine
- Same-sex relationships are immoral, but same-sex orientations are not inherently immoral
- Same-sex relationships are acceptable, but less desirable than heterosexual ones
- Same-sex relationships are equally acceptable as heterosexual ones
- I did not attend a religious community as a child
- I do not know

21. How often did you attend religious services during childhood?
- More than once a week
- Once a week
- A few times a month
- Once every few months
- One time or a few times a year
- Never

22. To what extent would you describe yourself as spiritual? Spirituality is here defined as “a search for the sacred—elements of life that are seen as manifestations of the divine, transcendent or ultimate, either inside or outside of a specific religious context.”
- Very spiritual
- Spiritual
- Somewhat spiritual
- A little spiritual
- Not at all spiritual
23. To what extent would you describe yourself as religious? Religion is here defined as “the search for significance that occurs within the context of established institutions [e.g., churches, mosques, faith communities] that are designed to facilitate spirituality.”
   - Very religious
   - Religious
   - Somewhat religious
   - A little religious
   - Not at all religious

24. How often do you spend time praying, meditating, or engaging in some other personal religious or spiritual practice?
   - More than once a day
   - Once a day
   - A few times a week
   - Once a week
   - A few times a month
   - A few times a year
   - Rarely
   - Never/Not applicable

25. How often do you spend time reading/studying the scriptures or teachings of your faith tradition?
   - More than once a day
   - Once a day
   - A few times a week
   - Once a week
   - A few times a month
   - A few times a year
   - Rarely
   - Never/Not applicable

26. What is the highest degree or level of school you have completed?
   - Some high school
   - High school diploma or equivalent
   - Some college
   - Bachelor’s degree
   - Some graduate school
   - Master’s degree
   - Doctoral degree

27. What is the highest degree or level of school completed by parent/guardian 1?
   - Some high school
   - High school diploma or equivalent
   - Some college
   - Bachelor’s degree
   - Some graduate school
   - Master’s degree
   - Doctoral degree
28. What is the highest degree or level of school completed by *parent/guardian 2*?

- [ ] Some high school
- [ ] High school diploma or equivalent
- [ ] Some college
- [ ] Bachelor’s degree
- [ ] Some graduate school
- [ ] Master’s degree
- [ ] Doctoral degree
- [ ] Not applicable

29. Where did you hear about this study (e.g., online article, email, conference)? Please specify: ___________________
APPENDIX B

LIST OF OUTLETS FOR DISTRIBUTION
OF RESEARCH SURVEY
Outlets for Distribution of Research Survey

University Listservs

University of Northern Colorado, Colorado State University, University of Colorado Boulder, Denver Seminary

Psychological Groups with LGBQ Focus Listservs

APA Division 44 (Society for the Psychology of Sexual Orientation and Gender Diversity) listserv, APA Division 17 (Society of Counseling Psychology) Section of Lesbian, Gay, Bisexual, and Transgender Issues (SLGBTI), LGBT Mental Health listserv

Religious/Spiritual Online Groups with LGBQ Focus

Q Christian Fellowship (formerly Gay Christian Network), Muslims for Progressive Values, LGBT Muslims and Their Allies, Gay Jews, Gay and Lesbian Vaishnava Association (GALVA)

Other Outlets

Local community contacts, community contacts in other locations
APPENDIX C

MEASURE OF SEXUAL IDENTITY EXPLORATION AND COMMITMENT
Measure of Sexual Identity Exploration and Commitment  
(MoSIEC; Worthington et al., 2008)

Commitment: Items 1-6 (6 items)  
Exploration: Items 7-14 (8 items)  
Sexual Orientation Identity Uncertainty: Items 15-17 (3 items)  
Synthesis/Integration: Items 18-22 (5 items)

Please read the following definitions before completing the survey items:

Sexual needs are defined as an internal, subjective experience of instinct, desire, appetite, biological necessity, impulses, interest, and/or libido with respect to sex.

Sexual values are defined as moral evaluations, judgments, and/or standards about what is appropriate, acceptable, desirable, and innate sexual behavior.

Sexual activities are defined as any behavior that a person might engage in relating to or based on sexual attraction, sexual arousal, sexual gratification, or reproduction (e.g., fantasy to holding hands to kissing to sexual intercourse).

Modes of sexual expression are defined as any form of communication (verbal or nonverbal) or direct and indirect signals that a person might use to convey her or his sexuality (e.g., flirting, eye contact, touching, vocal quality, compliments, suggestive body movements or postures).

Sexual orientation is defined as an enduring emotional, romantic, sexual, or affectional attraction to other persons that ranges from exclusive heterosexuality to exclusive homosexuality and includes various forms of bisexuality.

Using the following scale, please rate how much the following statements describe you:

<table>
<thead>
<tr>
<th>Very uncharacteristic of me</th>
<th>Very characteristic of me</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

1. I have a firm sense of what my sexual needs are.

2. I know what my preferences are for expressing myself sexually.

3. I have never clearly identified what my sexual needs are.

4. I have a clear sense of the types of sexual activities I prefer.

5. I do not know how to express myself sexually.
6. I have never clearly identified what my sexual values are.

7. I am actively trying new ways to express myself sexually.

8. I can see myself trying new ways of expressing myself sexually in the future.

9. I am open to experiment with new types of sexual activities in the future.

10. I am actively experimenting with sexual activities that are new to me.

11. I am actively trying to learn more about my own sexual needs.

12. My sexual values will always be open to exploration.

13. I went through a period in my life when I was trying different forms of sexual expression.

14. I went through a period in my life when I was trying to determine my sexual needs.

15. I sometimes feel uncertain about my sexual orientation.

16. My sexual orientation is not clear to me.

17. My sexual orientation is clear to me.

18. My sexual values are consistent with all of the other aspects of my sexuality.

19. The sexual activities I prefer are compatible with all of the other aspects of my sexuality.

20. The ways I express myself sexually are consistent with all of the other aspects of my sexuality.

21. My sexual orientation is compatible with all of the other aspects of my sexuality.

22. My understanding of my sexual needs coincides with my overall sense of sexual self.
APPENDIX D

RELIGIOUS SCHEMA SCALE
Religious Schema Scale  
(RSS; Streib et al., 2010)

**tti**: Items 1-5 (5 items)  
**fitr**: Items 6-10 (5 items)  
**xenos**: items 11-15 (5 items)

**Using the following scale, please rate the degree to which you currently agree or disagree:**

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
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<tr>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
</tr>
</tbody>
</table>

1. What the texts and stories of my religion tell me is absolutely true and must not be changed.
2. When people want to know how the world came to be, they need to hear a creation story.
3. When I have to make a decision, I take care that my plans are acceptable by my religious teachings.
4. The stories and teachings of my religion give meaning to the experiences of my life and reveal the unchangeable truth about God or the Divine.
5. The teachings of my religion offer answers to any question in my life, if I am ready to listen.
6. When I make a decision, I look at all sides of the issue and come up with the best decision possible.
7. Although every person deserves respect and fairness, arguments need to be voiced rationally.
8. We should resolve differences in how people appear to each other through fair and just discussion.
9. Regardless of how people appear to each other, we are all human.

10. It is important to understand others through a sympathetic understanding of their culture and religion.

11. We can learn from each other what ultimate truth each religion contains.

12. We need to look beyond the denominational and religious differences to find the ultimate reality.

13. When I make a decision, I am open to contradicting proposals from diverse sources and philosophical standpoints.

14. Religious stories and representations from any religion unite me with the ultimate universe.

15. The truth I see in other world views leads me to re-examine my current views.

Note: Developed by Heinz Streib, Ralph Wood, and Constantin Klein. Permission to use this measure was granted by Dr. Heinz Streib (see Appendix E).
APPENDIX E

AUTHOR PERMISSIONS TO USE MEASURES
From: Heinz Streib <hstreib@web.de>
Subject: AW: Request to use the RSS for Dissertation Study
Date: July 30, 2016 at 4:58 AM
To: Jeffrey Paul <paul3039@bears.unco.edu>

Dear Jeffrey Paul,

thanks for writing. I am glad that you consider the RSS for your research on sexual minorities.

If you can inform me when results are available, I would be interested…

Good luck with your research!
Best wishes
H. Streib

Prof. Dr. Heinz Streib
Archive for the Psychology of Religion, Editor
Work: Research Center for Biographical Studies in Contemporary Religion, Faculty for History, Philosophy and Theology, Abteilung Evang. Theologie, Universität Bielefeld, Postfach 100131, D-33501 Bielefeld, Germany, Phone: +49-521-106-3377; Fax: +49-521-106-15-3377; Personal HomePage, Research HomePage.
Home: Robert-Bosch-Str. 97, D-70192 Stuttgart, Germany; Phone: +49-711-6583265, Mobile: +49-176-4254816

On Thu, July 29, 2016 at 5:15 PM, Paul, Jeffrey <paul3039@bears.unco.edu> wrote:
Hello Dr. Streib,

My name is Jeff Paul and I am a Counseling Psychology doctoral student at the University of Northern Colorado. I am in the process of developing my dissertation study on the spiritual and religious experiences of sexual minorities and I am writing to ask permission to use the Religious Schema Scale (RSS) with my participants. Please let me know if you have questions or concerns or need more information about my dissertation.

Thank you for your time and I look forward to hearing from you!

Jeffrey Paul
Doctoral Student in Counseling Psychology
University of Northern Colorado
paul3039@bears.unco.edu
From: Julie Exline <jaj20@case.edu>
Subject: Re: Request to use the RSS Scale for Dissertation Study
Date: June 23, 2016 at 9:38 AM
To: Jeffrey Paul <paul3039@bears.unco.edu>

Jeffrey:

sure, that sounds great. thanks for checking.

in case it helps, here is a scrambled version along with some scoring instructions.

i hope that all goes well with your dissertation!

-Julie
--
Julie J. Exline, Ph.D.
Professor
Department of Psychological Sciences, Case Western Reserve University
10900 Euclid Avenue
Cleveland, Ohio 44106-7123
Office phone: (216) 368-8573
Faculty page: http://psychsciences.case.edu/faculty/julie-exline/

On Thu, Jun 23, 2016 at 8:08 AM, Paul, Jeffrey <paul3039@bears.unco.edu> wrote:
Hello Dr. Exline,

My name is Jeff Paul and I am a Counseling Psychology doctoral student at the University of Northern Colorado. I am in the process of developing my dissertation study on the spiritual and religious experiences of sexual minorities and I am writing to ask permission to use the Religious and Spiritual Struggles (RSS) Scale with my participants. Please let me know if you have questions or concerns or need more information about my dissertation.

Thank you for your time and I look forward to hearing from you!

Jeffrey Paul
Doctoral Student in Counseling Psychology
University of Northern Colorado
paul3039@bears.unco.edu
APPENDIX F

RELIGIOUS AND SPIRITUAL STRUGGLES SCALE
Religious and Spiritual Struggles Scale  
(RSS Scale; Exline et al., 2014)

_Divine_: Items 1-5 (5 items)  
_Demonic_: Items 6-9 (4 items)  
_Interpersonal_: Items 10-14 (5 items)  
_Moral_: Items 15-18 (4 items)  
_Ultimate Meaning_: Items 19-22 (4 items)  
_Doubt_: Items 23-26 (4 items)

At times in life, many people experience struggles, concerns, or doubts regarding spiritual or religious issues.

On the list of items below there are no right or wrong answers; the best answer is the one that most accurately reflects your experience.

Although the term “God or my higher power” is used in several of the questions below, feel free to substitute your own preferred word for God (or a Higher Power) as you respond.

Please select “not at all/does not apply” for any items that simply don't make sense within your belief system.

**Within the past year, to what extent have you had each of the experiences below?**

<table>
<thead>
<tr>
<th>Not At All/ Does Not Apply</th>
<th>A Little Bit</th>
<th>Somewhat</th>
<th>Quite a Bit</th>
<th>A Great Deal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

1. Felt as though God had let me down
2. Felt angry at God
3. Felt as though God had abandoned me
4. Felt as though God was punishing me
5. Questioned God’s love for me
6. Felt tormented by the devil or evil spirits
7. Worried that the problems I was facing were the work of the devil or evil spirits
8. Felt attacked by the devil or by evil spirits
9. Felt as though the devil (or an evil spirit) was trying to turn me away from what was good
10. Felt hurt, mistreated, or offended by religious/spiritual people
11. Felt rejected or misunderstood by religious/spiritual people
12. Felt as though others were looking down on me because of my religious/spiritual beliefs
13. Had conflicts with other people about religious/spiritual matters
14. Felt angry at organized religion
15. Wrestled with attempts to follow my moral principles
16. Worried that my actions were morally or spiritually wrong
17. Felt torn between what I wanted and what I knew was morally right
18. Felt guilty for not living up to my moral standards
19. Questioned whether life really matters
20. Felt as though my life had no deeper meaning
21. Questioned whether my life will really make any difference in the world
22. Had concerns about whether there is any ultimate purpose to life or existence
23. Struggled to figure out what I really believe about religion/spirituality
24. Felt confused about my religious/spiritual beliefs
25. Felt troubled by doubts or questions about religion or spirituality
26. Worried about whether my beliefs about religion/spirituality were correct

*Note:* Developed by Julie Exline, Kenneth Pargament, Joshua Grubbs, and Ann Marie Yali. Permission to use this measure was granted by Dr. Julie Exline (see Appendix E).
APPENDIX G

SATISFACTION WITH LIFE SCALE
Satisfaction With Life Scale
(SWLS; Diener et al., 1985)

Using the following scale, please rate the degree to which you currently agree or disagree:

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6</td>
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<td>5</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
</tr>
</tbody>
</table>

1. In most ways my life is close to my ideal.
2. The conditions of my life are excellent.
3. I am satisfied with my life.
4. So far I have gotten the important things I want in life.
5. If I could live my life over, I would change almost nothing.

*Note:* Developed by Ed Diener, Robert Emmons, Randy Larsen, and Sharon Griffin. No permission required to reproduce or use this measure for non-commercial research or educational purposes (see PsycTESTS).
APPENDIX H

INSTITUTIONAL REVIEW BOARD APPROVAL
Institutional Review Board

DATE: January 22, 2017

TO: Jeffrey Paul, B.A.
FROM: University of Northern Colorado (UNCO) IRB
SUBMISSION TYPE: New Project
ACTION: APPROVAL/VERIFICATION OF EXEMPT STATUS
DECISION DATE: January 22, 2017
EXPIRATION DATE: January 22, 2021

Thank you for your submission of New Project materials for this project. The University of Northern Colorado (UNCO) IRB approves this project and verifies its status as EXEMPT according to federal IRB regulations.

Thank you for an exceptionally clear and thorough IRB application. These materials and protocols are verified/approved exempt and you may begin participant recruitment and data collection.

Best wishes with your research.

Sincerely,

Dr. Megan Stellino, UNC IRB Co-Chair

We will retain a copy of this correspondence within our records for a duration of 4 years.

If you have any questions, please contact Sherry May at 970-351-1910 or Sherry.May@unco.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within University of Northern Colorado (UNCO) IRB’s records.
APPENDIX I

CONSENT FORM FOR HUMAN PARTICIPANTS
IN RESEARCH
CONSENT FORM FOR HUMAN PARTICIPANTS IN RESEARCH
UNIVERSITY OF NORTHERN COLORADO

Project Title: Religious and Spiritual Experiences of Sexual Minorities
Researcher: Jeffrey Paul, Counseling Psychology Department
E-mail: paul3039@bears.unco.edu
Faculty Sponsor: Brian Johnson, PhD; (970) 351-2209; brian.johnson@unco.edu

Purpose and Description: The researcher is interested in the religious and spiritual experiences of sexual minority individuals (e.g., those who identify as lesbian, gay, bisexual, queer). As a participant in this research, you will be asked to complete an anonymous web-based questionnaire. The items will offer you an opportunity to describe your sexual identity, your views of religion and spirituality, your religious and spiritual experiences, and your overall satisfaction with life through the use of a variety of rating scales. The questionnaire will take approximately 15 minutes to complete.

For the questionnaire, you will not provide your name, but will be asked to provide your age, gender, race/ethnicity, and other demographics. You must be age 18 or older, identify as a sexual minority, and currently or have previously identified as religious to participate. Questionnaire responses will be submitted and stored via a web-based survey program called Qualtrics and only the researcher will examine individual responses. Results will then be downloaded to an Excel document and randomly assigned a participant number. Data will then be imported into statistical software packages, all completed on the researcher’s password protected computer. While confidentiality cannot be guaranteed due to the electronic nature of data collection, the researcher will strive to protect the anonymity and confidentiality of your responses throughout the process.

Potential risks in this project are minimal. In fact, there are no foreseeable risks outside the time it takes to complete the survey. However, as with any questionnaire, mild discomfort may be experienced in responding to questions regarding your sexual identity, views of religion and spirituality, religious and spiritual experiences, and overall life satisfaction. This process is not expected to expose you to any other risk than what might occur during any survey of your perceptions. To minimize potential risks, you are able to decline participation at any time without consequence. At the end of the survey, you will also be provided with contact information for psychological and emergency services, should you experience any emotional discomfort as a result of participating. You will also be provided with a separate link to submit your email address if you so choose in
order to be included in a drawing for one of five $25 Amazon gift cards as incentive for participation in this study. There are no other direct benefits to you as a participant. However, the field of psychology is likely to benefit from this study, as it will assist us in better understanding religious and spiritual experiences of sexual minorities. Therefore, the benefits of this study are expected to far outweigh the risks.

Participation is voluntary. You may decide not to participate in this study and if you begin participation you may still decide to stop and withdraw at any time. Your decision will be respected and will not result in loss of benefits to which you are otherwise entitled. Having read the above and having had an opportunity to ask any questions, please communicate your consent by clicking “I agree to participate” if you would like to participate in this research. You may keep this form for future reference. If you have any concerns about your selection or treatment as a research participant, please contact Sherry May, IRB Administrator, in the Office of Sponsored Programs, Kepner Hall, University of Northern Colorado, Greeley, CO 80639; 970-351-1910.
APPENDIX J

PARTICIPANT DEBRIEFING FORM
DEBRIEFING FORM FOR HUMAN PARTICIPANTS IN RESEARCH
UNIVERSITY OF NORTHERN COLORADO

Project Title: Religious and Spiritual Experiences of Sexual Minorities
Researcher: Jeffrey Paul, Counseling Psychology Department
E-mail: paul3039@bears.unco.edu
Faculty Sponsor: Brian Johnson, PhD; (970) 351-2209; brian.johnson@unco.edu

Thank you for participating and sharing your experiences! Your responses could bring awareness and provide significant insight to an intersection of identities rarely discussed. As you might imagine, finding participants for LGBQ research can be challenging, so your help is greatly appreciated. Please share the link to the survey with friends, family, or others to whom it may apply:


If you would like to be entered for a chance to receive one of five $25 Amazon gift cards, please click the link below. You will be taken to a separate page and asked to enter your email address. Your information will in no way be connected to your survey responses or used for any marketing purposes.

http://bit.ly/ParticipationThanks

For this study, I am primarily interested in how your identity as a sexual minority and way of engaging in religion/spirituality relates to religious and spiritual struggles and overall life satisfaction. Specifically, I am interested in how those who are comfortable with their sexual identity may approach religion/spirituality differently. Additionally, I am curious about whether those factors may influence contentment. The information you shared may help the field of psychology better understand how sexual minorities experience religion and spirituality.

For further reading on this topic, I recommend:


If you have any questions or concerns about this project, or if you want to know how the results turn out, please contact Jeffrey Paul at paul3039@bears.unco.edu. You can also
contact the Office of Sponsored Programs, Kepner Hall, University of Northern Colorado, Greeley, CO 80639; (970) 351-2161.

**Resources:**
If after participating you feel as though you have been impacted emotionally or psychologically and are in Colorado, please contact the University of Northern Colorado’s Psychological Services Clinic at (970) 351-1645, where the first session is free and the cost for a semester of services is $60. If not in Colorado, please contact one of the following resources or another resource you know:

- The Trevor Project: 1-866-448-7386 or thetrevorproject.org
- National Gay and Lesbian Hotline: 1-888-843-4564 or glbthotline.org
- National Helpline: 1-800-662-HELP (4357)
- National Suicide Prevention Hotline: 1-800-273-TALK (8255)
- Find local mental health professionals: psychologytoday.com
- In the case of an emergency please call 911 or the local equivalent
APPENDIX K

PARTICIPANT INVITATION EMAIL/POST
Dear prospective participant,

I am contacting you regarding an online survey I am conducting on the religious and spiritual experiences of sexual minority individuals, or those who identify as lesbian, gay, bisexual, queer (LGBQ), or something else. This study has been approved by the Institutional Review Board (IRB) of the University of Northern Colorado (Approval Number: 992777-1). Even as we’re increasing our understanding of our diverse world, we know very little about how members of LGBQ communities experience religion and spirituality. It is my hope that your experiences can inform our understanding in the field of psychology as we strive to better understand, serve, and advocate for sexual minorities. I would greatly appreciate your help!

If you are 18 years or older, identify as a sexual minority (e.g., lesbian, gay, bisexual, queer), and currently identify or have identified in the past as religious or spiritual, please use the link below. You will be directed to an online survey that is anticipated to take approximately 15 to 20 minutes to complete. The survey is open to all faith traditions. To thank you for your participation, I am including the option for you to enter your email address (separately from your survey responses) in a drawing for one of five $25 Amazon gift cards! You are not required to participate in any way, and can exit the survey at any time.

Survey link:  

Thank you very much for your time and effort!

Jeffrey Paul  
Doctoral Candidate in Counseling Psychology  
University of Northern Colorado  
paul3039@bears.unco.edu
APPENDIX L

INTERCORRELATIONS BETWEEN DEMOGRAPHIC AND STUDY VARIABLES
**Intercorrelations Between Demographic and Study Variables (N = 655)**

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<thead>
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</table>

*Note. Committed rel. = In a committed relationship. Divorced/sep. = Divorced/separated. Sex. ID Development = Sexual Identity Development Factors. SOI Uncertainty = Sexual Orientation Identity Uncertainty. Synthesis/Int. = Synthesis/Integration. ttt = Truth of Text of Teachings. *p < .05 **p < .01 ***p < .001. Note: Developed by Roger Worthington, Rachel Navarro, Holly Belstein Savoy, & Dustin Hampton. No permission required to reproduce or use this measure for non-commercial research or educational purposes (see PsycTESTS)
APPENDIX M

MANUSCRIPT FOR PUBLICATION
Sexual Minority Identity and Religious Schemata: How Identity Development Explains Experiences of Religious and Spiritual Struggles and Life Satisfaction

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Abstract

A growing body of research indicates both potentially positive and negative experiences for sexual minorities with religious/spiritual (R/S) experiences. The current study sought to answer calls for larger samples and quantitative research methods at this intersection of identities by investigating the relationships between sexual minority identity development, religious schemata, R/S struggles, and life satisfaction among a sample of sexual minority adults with R/S experiences ($N = 655$). Hierarchical regression analyses were conducted to determine the variance explained by sexual identity development factors and religious schemata above and beyond the variance explained by demographic differences when explaining the outcome variables of R/S struggles and life satisfaction. Results showed participants with higher levels of sexual identity exploration and/or higher levels of religious fundamentalism reported higher levels of R/S struggles, whereas those with higher levels of sexual identity integration reported lower levels of R/S struggles. Additionally, participants with higher levels of sexual identity integration reported higher levels of life satisfaction. Interestingly, those with higher levels of religious fundamentalism also reported slightly higher levels of life satisfaction. However, this result had a very small effect size and might have minimal practical significance. Age, education level, and relationship status were significant explanatory demographic variables. These results suggested understanding sexual identity development and religious schemata might be important in promoting the well-being of sexual minority individuals with R/S experiences.

Keywords: sexual minority identity development, religious schemata, religious and spiritual struggles, life satisfaction
Introduction

Identity is considered “a coherent sense of one’s values, beliefs, and roles, including but not limited to gender, race, ethnicity, social class, spirituality, and sexuality” (Worthington, Navarro, Savoy, & Hampton, 2008, p. 22). Initially understood during adolescence (Erikson, 1968), the process of exploring and committing to identities has been extended across the lifespan (Marcia, 2002). The current study focused on sexual minority and religious/spiritual (R/S) identity development with the goal of increasing understanding at this important intersection of identities (Crenshaw, 1991; Rosenthal, 2016). As Worthington (2004) stated: “Religion and sexuality are inextricably intertwined for many people because virtually every religion regulates sexual behavior and dictates a specific set of values regarding human sexuality” (p. 741). A growing body of research around this intersection has begun to find potentially negative and positive mental health experiences (e.g., Beagan & Hattie, 2015; Brewster, Velez, Foster, Esposito, & Robinson, 2016; Dehlin, Galliher, Bradshaw, & Crowell, 2015).

Compared to heterosexual peers, lesbian, gay, bisexual, and queer (LGBQ) individuals have been found to have higher risks for negative mental and physical health outcomes (Institute of Medicine, 2011). From a minority stress perspective (Meyer, 1995, 2003), these experiences were seen as products of acute and chronic stress due to stigmatization of sexual minority identities and experiences of discrimination. A significant and increasing amount of research supported this perspective (e.g., Mereish & Poteat, 2015; Meyer, 2013), with LGBQ individuals reporting higher rates of depression and anxiety alongside experiences of discrimination and even sexual victimization (e.g., Conron, Mimiaga, & Landers, 2010; Semlyen, King, Varney, & Hagger-Johnson, 2016).
A recent longitudinal study (Everett, 2015) of a large sample of adolescents and young adults \(N = 11,727\) found changes in sexual orientation identity toward sexual minority identities increased reports of depressive symptoms, suggesting continued stigmatization of LGBQ individuals and a need to better understand the process of sexual minority identity development.

Religious/spiritual identity has been found to meaningfully relate to sexual identity for many sexual minorities. In the United States, data indicated approximately 76% of the population considered themselves religious with about 70% identifying as Christian and 6% identifying as members of other religious groups (e.g., Jewish, Buddhist, Muslim; Pew Research Center, 2016). From over 35,000 respondents to the 2014 Religious Landscape Study (Murphy, 2015), about 5% self-identified as lesbian, gay, or bisexual. Approximately 59% of those LGB respondents identified as religious with nearly half (48%) self-identifying as Christian and a smaller percentage (11%) identifying as members of other religious communities. Another national survey including 3,242 sexual and gender minorities found 53% of that group were considered “moderately” or “highly” religious (Newport, 2014). While data indicated sexual minorities were less religiously involved compared to the general population (e.g., Herek, Norton, Allen, & Sims, 2010; Pew Research Center, 2016), it appeared religion played a significant role in the lives of the majority of LGBQ individuals.

Among the general population, research on religion and spirituality (R/S) has shown positive correlations between religious practices and psychological well-being (e.g., Koenig, 2009; Smith, McCullough, & Poll, 2003). Explanations for these relationships included increased social support (Corrêa, Moreira-Almeida, Menezes,
Vallada, & Scazufoa, 2011), opportunities for meaning making (Aten, O’Grady, & Worthington, 2013; Park, Edmondson, & Hale-Smith, 2013), and access to other coping resources (Gall & Guirguis-Younger, 2013). For sexual minority individuals, however, experiences surrounding R/S appeared more complicated (e.g., Brewster et al., 2016; Fontenot, 2013), likely due to increased social pressures in religious communities that did not affirm or support same-sex identities and relationships.

Across cultures, religious beliefs significantly influenced views of homosexuality (van den Akker, van der Ploeg, & Scheepers, 2013) with personal religious beliefs being particularly influential in the United States (Adamczyk & Pitt, 2009). Religiosity generally and conservative religious beliefs specifically have been consistently connected to negative views of sexual minorities (e.g., Balkin, Schlosser, & Levitt, 2009; Cragun & Sumerau, 2015; Finlay & Walther, 2003; Herek, 1994; Schulte & Battle, 2004). For LGBQ individuals, moral values learned in R/S contexts likely influenced sexual identity development (Worthington, 2004). Some LGBQ people of faith experienced such rejection from their families and faith communities that they felt forced to walk away from their faiths to maintain positive sexual minority identities (Rodriguez & Ouellette, 2000). With longitudinal research suggesting religious coherence and stability was related to well-being in later life, these experiences of familial and communal rejection might have long-term consequences for sexual minority people of faith (Wink & Dillon, 2008). Devastatingly, evidence suggested such rejection significantly increased risk for suicide among sexual minorities (Haas et al. 2011; Woodward, Wingate, Gray, & Pantalone, 2014). Better understanding of sexual and R/S identity development might
provide psychologists insight into how they could better serve and advocate for sexual minorities with R/S experiences.

**Sexual Identity Development**

The current study utilized Dillon, Worthington, and Moradi’s (2011) universal model of sexual identity development. Conceptually, the model is applicable to individuals regardless of current self-identified sexual orientation, allowing for more diverse utility than other models (e.g., Morgan, Steiner, & Thompson, 2010; Morgan & Thompson, 2011; Parent, Talley, Schwartz, & Hancock, 2015). Sexual orientation identity was painted as one of six components of sexual identity: (a) perceived sexual needs, (b) preferred sexual activities, (c) preferred characteristics of sexual partners, (d) sexual values, (e) recognition and identification of sexual orientation, and (f) preferred modes of sexual expression. This robust view of sexual identity extended research beyond the process of self-identifying with a particular orientation identity to better capture the complexity of sexual identity.

The universal model built upon the work of Marcia (1966, 1980, 2002) to outline five identity statuses: (a) compulsory heterosexuality, (b) active exploration, (c) diffusion, (d) deepening and commitment, and (e) synthesis. Compulsory heterosexuality describes the earliest sense of sexual identity, which is often rooted in heteronormative cultural views and a lack of awareness around their influence. Individuals are portrayed as passing through periods of exploring sexual identity (active exploration), experiencing a more carefree or more distressing sense of apathy around sexual identity (diffusion), and feeling a deeper understanding, appreciation, and alignment with their sexual identity (deepening and commitment). Synthesis, proposed as the most mature of the statuses, is
described as a deep integration of sexual identity with other identities (e.g., one’s R/S identity) and into an overall sense of self. These statuses are considered generally developmental, but the model allows for circular reprocessing at any time throughout the lifespan (Dillon et al., 2011). Empirical research has begun accumulating in support of the breadth and specificity of this model (e.g., Morgan et al., 2010; Preciado, Johnson, & Peplau, 2013; Worthington et al., 2008).

**Religious and Spiritual Identity Development**

Streib’s (2001) model of religious styles served as the developmental framework for R/S identity in the current study. Built upon a re-envisioning of Fowler’s (1981) classic model of faith development, the religious styles perspective and its measurement of religious schemata (Streib, Hood, & Klein, 2010) explored how individuals approach R/S. Repetitive use of specific interpretative lenses (schemata) is seen as translating into a religious style, which Streib and colleagues suggested were related to but distinct from Fowler’s stages of faith. The three schemata were truth of text and teachings (*ttt*); fairness, tolerance, and rational choice (*ftr*); and xenosophia/interreligious dialog (*xenos*); they were seen to exist “on the spectrum between a more fundamentalist orientation on the one hand and tolerance, fairness, and openness for dialog on the other” (Streib et al., 2010, p. 155). For example, a repetitive use of the *ttt* schema might reflect a strong belief in the unchallenged integrity of one’s faith tradition and its teachings. This framework allowed for better understanding of the cognitive and interpersonal dynamics at play when approaching R/S and has been initially supported by empirical research (e.g., Hathcoat & Fuqua, 2014; Kamble, Watson, Marigoudar, & Chen, 2014; Streib et al.,
The current study sought to extend this framework to a sexual minority sample.

**Religious and Spiritual Struggles and Life Satisfaction**

Religious and spiritual struggles are relatively common among the general population and are linked consistently to numerous negative mental health outcomes such as increased anxiety, depression, and emotional distress (e.g., Abu-Raiya, Pargament, & Exline, 2015; Ano & Vasconcelles, 2005; Exline, 2013; Exline, Park, Smyth, & Carey, 2011). Specific to sexual minorities, there is strong evidence of struggles integrating sexual and R/S identities. Schuck and Liddle (2001) found conflict around R/S could negatively affect sexual identity development such as delaying the coming out process or increasing distress. Organizational bias and discrimination in religious settings could also increase R/S struggles for sexual minorities (Smith & Freyd, 2014). Qualitative (e.g., Beagan & Hattie, 2015; Dahl & Galliher, 2012; Gold & Stewart, 2011; Jeffries, Dodge, & Sandfort, 2008; Murr, 2013; Subhi & Geelan, 2012) and quantitative (e.g., Barnes & Meyer, 2012; Herek, Gillis, & Cogan, 2009; Shilo & Savaya, 2012; Sowe, Brown, & Taylor, 2014) evidence indicated conflict at the intersection of these identities was relatively common. Using the same measure employed in the current study, Exline, Pargament, Grubbs, and Yali (2014) found initial evidence of R/S struggles being higher among self-identified homosexuals compared to heterosexual peers.

Although the literature provided significant evidence for conflict between sexual minority and R/S identities (e.g., Hamblin & Gross, 2013; Sowe et al., 2014), it also offered evidence for potential successful integration of these identities (e.g., Brewster et al., 2016; Rostosky, Abreu, Mahoney, & Riggle, 2017). With this in mind, the current
study assessed life satisfaction (Diener, Emmons, Larsen, & Griffin, 1985) to explore current overall level of contentment. Vaughan and Rodriguez (2014) called for positive possibilities in research regarding sexual minorities and exploring life satisfaction allowed participants to report not only the potential absence of R/S struggles but also the presence of current life contentment (or both simultaneously). Research on life satisfaction suggested positive associations with self-esteem and negative associations with experiences of depression, anxiety, and R/S struggles (e.g., Abu-Raiya, Pargament, Krause, & Ironson, 2015; Exline et al., 2014; Wilt, Grubbs, Exline, & Pargament, 2016). In the current study, R/S struggles and life satisfaction assessed the potential negative and positive outcomes related to sexual identity development factors and religious schemata.

**Study Rationale and Purpose**

Relatively little research has explored the intersection of sexual minority and R/S identities (e.g., Lee, Rosen, & Burns, 2013; Phillips, Ingram, Smith, & Mindes, 2003) with most thus far focusing on the deep, rich experiences of small numbers of individuals using qualitative methodologies (e.g., Dahl & Galliher, 2012; Levy, 2012). One of the strongest themes found by qualitative studies was the experience of conflicts, with many participants reporting depression, anxiety, low self-esteem, self-harming behaviors, and suicidality based on those tensions (e.g., Barton, 2010; Beagan & Hattie, 2015; Kubicek et al., 2009; Schuck & Liddle, 2001; Subhi & Geelan, 2012). Feelings of shame, experiences of discrimination, unsuccessful attempts to change sexual orientation, and experiences of familial, religious, and LGBQ communal rejection likely influenced these negative mental health outcomes (e.g., Beckstead & Morrow, 2004; Bowers, Minichiello, & Plummer, 2010; Buser, Goodrich, Luke, & Buser, 2011; Gold & Stewart, 2011;
Jeffries et al., 2008; Lytle, Foley, & Aster, 2013; Murr, 2013). Few LGBQ individuals attending non-affirming R/S communities have been unaffected by such communal stances (e.g., Barnes & Meyer, 2012; Brewster et al., 2016; Herek et al., 2009; Shilo & Savaya, 2012; Sowe et al., 2014). Gibbs and Goldbach (2015) found sexual minority young adults who grew up in non-affirming religious contexts had over twice the odds of reporting a recent suicidal attempt than those who did not grow up in such contexts even after leaving such religious communities due to conflict.

Concurrently, research also found positive experiences of sexual minorities with R/S. Few (3 out of 35) of Beagan and Hattie’s (2015) interviewees rejected R/S completely in the face of conflict; most found ways to make R/S positive for themselves. Other studies showed positive experiences with R/S when sexual minorities found faith communities that supported their relationships (e.g., Barrow & Kuvalanka, 2011; Lease, Horne, & Noffsinger-Frazier, 2005; Murr, 2013; Rodriguez & Ouellette, 2000; Rostosky et al., 2017; Yakushko, 2005). Schuck and Liddle’s (2001) interviewees expressed a sense of internal strength for having to deeply question their R/S beliefs. Whereas Brewster et al. (2016) found that turning to a higher power for support, forgiveness, and guidance mitigated negative effects of internalized heterosexism among sexual minorities with R/S experiences. Successfully integrating R/S and sexual identities appeared possible (Dahl & Galliher, 2009) and might be the outcome most strongly associated with positive mental health over rejection or compartmentalization of sexual identity (Dehlin et al., 2015). Some conservative religious denominations were becoming less stigmatizing and more affirming toward LGBQ individuals and same-sex relationships, suggesting there might be fewer rejecting communities over time (Paul, 2017).
Consequently, understanding how sexual minorities experience R/S remains a crucial area of research. The current sparsity of quantitative research on this intersection of identities indicated a need for larger samples and statistically rigorous research methods to confirm qualitative themes and obtain more generalizable data (Hamblin & Gross, 2014). Additionally, the American Psychological Association’s (APA; 2012) Guidelines for Psychological Practice with Lesbian, Gay, and Bisexual Clients specifically encouraged psychologists “to consider the influences of religion and spirituality in the lives of lesbian, gay, and bisexual persons” (p. 20). Increasing psychological understanding at this intersection of identities could benefit psychological practice with sexual minority individuals in many settings (e.g., education, training, research, organizational change, practice). The current study sought to answer such calls.

Method

Participants and Procedures

The current sample was recruited to complete an online survey through university listservs, psychological and R/S online groups with LGBQ focus, and LGBQ and R/S local outlets in the Rocky Mountain region. Inclusion criteria for participants were (a) a minimum age of 18-years-old, (b) identifying as a sexual minority (e.g., lesbian, gay, bisexual, queer), and (c) identifying currently or in the past as religious or spiritual. Participants voluntarily responded after an Institutional Review Board approved the study and informed consent was obtained. After 18 participants were removed for not meeting inclusion criteria, nine for having duplicate responses or reporting extreme qualitative outliers (e.g., “Attracted to lamps”), and another 90 for missing data points necessary for inclusion, 655 participants were included in the final data set.
For this sample, the average age was 35.03 ($SD = 19.91$) with 54.8% identifying as male, 29.5% as female, 7% as transgender, 6.9% as genderqueer/fluid, and 1.8% as some other gender. The majority of participants identified as White or of European descent (83.8%), followed by multiracial/other race (5.3%), Asian/Pacific Islander or of Asian descent (5%), Latino/a/x or of Hispanic descent (4%), Black or of African descent (1.5%), and Native American or American Indian (0.2%). In terms of sexual orientation, 63.2% identified as lesbian or gay, 16.9% as bisexual, 12.2% as queer, and 0.8% as heterosexual (retained due to indicating some amount of same-sex attraction). Participants reported openness about sexual orientation as well; 38% described themselves as very open, 30.5% were open, 18.9% were somewhat open, 8.2% were a little open, and 4.3% were not at all open.

Regarding current religion, 3.1% identified as Buddhist, 47.6% as Christian, 2.7% as Hindu, 3.7% as Jewish, 1.1% as Muslim, 15.1% as agnostic, 11.8% as atheist, and 15.0% as other. During childhood, 0.6% identified as Buddhist, 79.8% as Christian, 1.4% as Hindu, 3.5% as Jewish, 0.9% as Muslim, 3.2% as agnostic, 2.7% as atheist, and 7.8% as other. Participants also reported their current relationship status: 43.5% single, 19.8% married, 29.9% in a committed relationship, 1.4% divorced/separated, and 5.3% other. Regarding highest level of education, 0.6% responded some high school or less, 2.9% had a high school diploma or equivalent, 20.8% had some college, 23.1% had a bachelor’s degree, 12.2% had some graduate school, 28.4% had a master’s degree, and 12.1% had a doctoral degree.
Measures

Demographics and validity-check items. Participants were asked to report demographics including age, gender, race/ethnicity, sexual orientation identity, level of openness around their sexual orientation identity, current and childhood R/S identity, relationship status, and level of education. One validity-check item (i.e., “Please select ‘None of the above’ to indicate you are paying attention”) was randomly embedded in the survey to assess inattentive responding. Of the demographic variables significantly correlated with the dependent variables of R/S struggles and life satisfaction, age \( r = -0.399 \) and 1.86, respectively) and education \( r = -0.303 \) and 2.86, respectively) were the most highly correlated and did not share high conceptual overlap with the independent variables (e.g., sexual orientation openness and sexual minority identity development). Thus, age and education were incorporated into data analysis as was relationship status due to previous research indicating it correlated with the dependent variables (e.g., Exline et al., 2014; Wight, LeBlanc, & Badgett, 2013). Table 1 provides for intercorrelations between the demographic and study variables.

Measure of Sexual Identity Exploration and Commitment. Sexual identity development was measured with the Measure of Sexual Identity Exploration and Commitment (MoSIEC; Worthington et al., 2008), which consisted of 22 items responded to on a 6-point Likert-type scale ranging from 1 (Very uncharacteristic of me) to 6 (Very characteristic of me) that gauged participants’ level of agreement around four factors: exploration (eight items), commitment (six items), sexual orientation identity uncertainty (three items), and synthesis/integration (five items). Dillon et al. (2011) viewed exploration (e.g., “I am actively trying new ways to express myself sexually”)
and sexual orientation identity uncertainty (e.g., “My sexual orientation is not clear to me”) as representing two dimensions related to Marcia’s (1966) conceptualization of identity exploration. Commitment (e.g., “I have a firm sense of what my sexual needs are”) and synthesis/integration (e.g., “The ways I express myself sexually are consistent with all of the other aspects of my sexuality”) were seen as representing two dimensions of Marcia’s identity commitment (Dillon et al., 2011). The MoSIEC has demonstrated adequate internal consistency estimates for all subscales (Cronbach’s $\alpha$ estimates .72-.90) in multiple independent adult samples of sexual minorities (Borders, Guillén, & Meyer, 2014; Morgan et al., 2010; Morgan & Thompson, 2011; Parent et al., 2015; Worthington & Reynolds, 2009). Internal consistency reliabilities for all MoSIEC subscales in the present study ($\alpha = .85-.86$) were very good (Kline, 2016).

**Religious Schema Scale.** Religious/spiritual identity development was measured with the Religious Schema Scale (RSS; Streib et al., 2010), which consisted of 15-items with three subscales of five items each: *ttt*, *ftr*, and *xenos*. Each of these subscales was seen as interpretive lenses or schemata that guided religious practice with repetitive use of a particular schema resulting in a religious style. Participants responded to items regarding these concepts on a 6-point Likert-type scale from 1 (*Strongly disagree*) to 6 (*Strongly agree*); high scores indicated higher alignment with that schema. Based on Hill’s (2005) criteria for evaluating measures of R/S—considering theoretical basis, sample representativeness/generalization, reliability, and validity—the subscales of the RSS could be considered acceptable (*ftr*), good (*xenos*), and excellent (*ttt*) based on their previous use (e.g., Hathcoat & Fuqua, 2014; Streib et al., 2010). Internal consistency reliability in the current study for the *ttt* subscale ($\alpha = .88$) was very good. The reliability
coefficients for the fir and xenos subscales (\(\alpha = .56\) and \(.68\), respectively) indicated they were not adequate for research purposes with the current sample (Groth-Marnat & Wright, 2016; Kline, 2016). Thus, only the psychometrically sound ttt subscale was used in the current study. A sample item for ttt included “What the texts and stories of my religion tell me is absolutely true and must not be changed.” Strong positive correlations between ttt and a measure of religious fundamentalism \((r = .80, p < .001\) for the German sample; \(r = .81, p < .001\) for the U.S. sample; Altemeyer & Hunsberger, 1992) and negative correlations between ttt and openness to experience from the Big Five (NEO-FFI version; Costa & McCrae, 1985) suggested that high scores on this schema could be interpreted as indicative of a more fundamentalist religious style (Streib et al., 2010).

**Religious and Spiritual Struggles Scale.** Religious/spiritual struggles were measured using the Religious and Spiritual Struggles Scale (Exline et al., 2014) comprised of 26 items and six subscales: divine (five items), demonic (four items), interpersonal (five items), moral (four items), doubt (four items), and ultimate meaning (four items). The Religious and Spiritual Struggles Total Scale was used in the current study as an outcome variable measuring current tensions around R/S. Exline et al. (2014) utilized prompts with varying time frames (i.e., past month, past few months, past year) and found similar results across multiple samples of adults and college students (smallest, \(N = 400\); largest, \(N = 1,141\)). In the current study, participants were prompted with “Over the past year, to what extent have you struggled with each of the following?” They then responded to items such as “Felt angry at God” using a 5-point Likert-type scale from 1 (Not at all/does not apply) to 5 (A great deal); higher scores indicated stronger experiences of R/S struggles. All of the subscales had been significantly correlated with
negative mental health symptoms (e.g., depression, anxiety) among diverse samples (Abu-Raiya, Pargament, Weissberger, & Exline, 2016; Exline et al., 2014). Notably, self-identified homosexuals reported higher levels of R/S struggles compared to heterosexual peers (Exline et al., 2014). Previous studies found strong evidence for reliability and validity of this measure (e.g., Abu-Raiya et al., 2016; Exline et al., 2014). Internal consistency reliability for the Religious and Spiritual Struggles Total Scale with the present study sample ($\alpha = .94$) was excellent (Kline, 2016).

**Satisfaction with Life Scale.** Life satisfaction was measured using the Satisfaction with Life Scale (SWLS; Diener et al., 1985), a 5-item, single-factor measure assessing subjective life satisfaction or overall contentment. Participants responded to the five items (e.g., “The conditions of my life are excellent,” “I am satisfied with my life”) on a 7-point Likert-type scale from 1 (Strongly disagree) to 7 (Strongly agree); higher scores indicated more subjective life satisfaction. Strong evidence of validity and reliability of scores have been consistently found (e.g., Diener, Inglehart, & Tay, 2013; Pavot & Diener, 1993, 2008). Scores on the SWLS have also been negatively correlated with depression and anxiety (Arrindell, Meeuwesen, & Huyse, 1991; Blais, Vallerand, Pelletier, & Briere, 1989; Schimmack, Oishi, Furr, & Funder, 2004; Wilt et al., 2016) and positively correlated with self-esteem (Wilt et al., 2016). The SWLS scores have also been found to be negatively correlated with experiences of R/S struggle (Abu-Raiya et al., 2016; Exline et al., 2014). Internal consistency reliability for the SWLS in the present study ($\alpha = .89$) was very good (Kline, 2016).
Results

Two hierarchical regressions were conducted to explain experiences of R/S struggles and life satisfaction. For both regressions, demographic variables were entered at step 1 and then the independent variables of sexual identity development factors and religious schemata were entered at step 2, allowing the variance explained by the independent variables to be interpreted above and beyond the variance explained by demographic differences. The demographic variables of interest (i.e., age, education, relationship status) and the independent variables were grouped so the variance explained by those groups of variables could be interpreted.

Regression onto Religious/Spiritual Struggles

As seen in Table 2, the demographic and independent variables together explained 27.8% variance in R/S struggles ($R^2 = .278$); the demographic variables explained 17.8% of the variance ($\Delta R^2 = .178$) and the independent variables explained an additional 10% of the variance ($\Delta R^2 = .100$). Of the demographic variables, age explained the most variance in R/S struggles ($F (1, 639) = 44.036, p < .001; f^2 = .057$), followed by level of education ($F (3, 639) = 11.802 p < .001; f^2 = .046$) and relationship status ($F (4, 639) = 2.409, p = .048; f^2 = .012$). All three demographic variables were statistically significant in the regression; effect sizes ($f^2$) for age and education were between small and medium while the effect size for relationship status was very small (Cohen, 1992).

Age was inversely related to R/S struggles with each year increase in age resulting in lower reports of R/S struggles ($B = -.331, t(639) = -6.484, p < .001$). On the categorical variable of level of education, those with a bachelor’s degree ($B = -8.531, t(639) = -4.656, p < .001$), master’s degree ($B = -10.981, t(639) = -5.553, p < .001$), and
doctoral degree ($B = -10.770$, $t(639) = -4.037$, $p < .001$) all reported lower levels of R/S struggles compared to those with high school education or less. In terms of relationship status, those who reported being in the other relationship category reported lower levels of R/S struggles ($B = -7.476$, $t(639) = -2.33$, $p = .020$) compared to those who were single. All other groups did not significantly differ from those who were single.

Sexual identity development factors were statistically significant ($F (4, 634) = 11.835$, $p < .001; f^2 = .057$), exhibiting a small to medium effect (Cohen, 1992) and explaining 5.4% of the variance above and beyond the variance explained by demographic variables and religious schemata ($\Delta R^2 = .054$). Those who reported higher levels of Exploration ($B = .268$, $t(634) = 3.376$, $p = .001$) reported higher levels of R/S struggles when accounting for all other variables in the model. Inversely, those who reported higher levels of Synthesis/Integration ($B = -.695$, $t(634) = -4.039$, $p < .001$) reported lower levels of R/S struggles when accounting for all other variables in the model. The sexual identity development factors of Commitment and Sexual Orientation Identity Uncertainty were not statistically significant in this model. Religious schemata were also statistically significant ($F (1, 634) = 33.261$, $p < .001; f^2 = .040$), with $ttt$ exhibiting a small to medium effect (Cohen, 1992) and explaining an additional 3.8% of the variance ($\Delta R^2 = .038$). Those who reported higher levels of $ttt$ ($B = .579$, $t(634) = 5.676$, $p < .001$) reported higher levels of R/S struggles when accounting for all other variables in the model.

**Regression onto Life Satisfaction**

As seen in Table 3, the demographic and independent variables together explained 20.3% variance in life satisfaction ($R^2 = .203$); the demographic variables explained
11.8% of the variance ($\Delta R^2 = .118$) and the independent variables explained an additional 8.5% of the variance ($\Delta R^2 = .089$). Of the demographic variables, level of education explained the most variance ($F (3, 646) = 9.424, p < .001; f^2 = .041$), followed by relationship status ($F (4, 646) = 5.306, p < .001; f^2 = .012$), and finally by age ($F (1, 646) = 7.656, p = .006; f^2 = .010$). The effect size ($f^2$) for age was very small while the effect sizes for relationship status and level of education were small and small to medium, respectively (Cohen, 1992).

Age was positively correlated to life satisfaction with each year increase in age resulting in slightly higher (.05 points on the Satisfaction with Life Scale) reports of life satisfaction ($B = .051, t(646) = 2.767, p = .006$). On the categorical variable of level of education, those with a bachelor’s degree ($B = 2.556, t(646) = 3.857, p < .001$), master’s degree ($B = 3.276, t(646) = 4.586, p < .001$), and doctoral degree ($B = 4.272, t(646) = 4.411, p < .001$) all reported higher levels of life satisfaction compared to those with high school education or less. In terms of relationship status, those who were married ($B = 2.167, t(646) = 2.998, p = .003$) and in a committed relationship ($B = 1.811, t(646) = 3.048, p = .002$) reported higher levels of life satisfaction compared to those who were single. Those who reported being divorced/separated or in some other type of relationship did not significantly differ from those who were single.

Sexual identity development factors were statistically significant ($F (4, 641) = 16.816, p < .001; f^2 = .092$), exhibiting a small to medium effect (Cohen, 1992) and explaining 8.4% of the variance above and beyond the variance explained by demographic variables and religious schemata ($\Delta R^2 = .084$). Those who reported higher levels of Synthesis/Integration ($B = .356, t(641) = 5.613, p < .001$) also reported higher
levels of life satisfaction when accounting for all other variables. The sexual identity development factors of Commitment, Exploration, and Sexual Orientation Identity Uncertainty were not significant in this model. Religious schemata were statistically significant \((F (1, 641) = 6.162, p = .013; f^2 = .008)\) with \(\Delta R^2\) exhibiting a very small effect (Cohen, 1992) and explaining .8% of the variance above and beyond the variance explained by demographic variables and sexual identity development factors \((\Delta R^2 = .008)\).

**Discussion**

The current study sought to answer calls for larger samples and statistically rigorous research methods to explore themes from qualitative research and obtain more generalizable data around the intersection of sexual minority and R/S identities (APA, 2012; Hamblin & Gross, 2014). The regression models showcased demographic factors, sexual identity development factors, and religious schemata that explained significant variance in the experiences of R/S struggles and life satisfaction among adult sexual minorities with R/S experiences.

**Findings Regarding Demographic Variables**

**Age.** For the regression onto R/S struggles, age was the strongest explanatory demographic variable with each year increase in age correlated with lower reports of R/S struggles. This was contrary to some previous research. In the validation studies for the Religious and Spiritual Struggles Scale (Exline et al., 2014) with diverse samples, age was not a significant variable. Additionally, data also indicated younger generations held more favorable views regarding the rights of sexual minority individuals (e.g., Diamond, 2014), suggesting younger LGBQ people might feel increasingly accepted by society if
not in religious contexts. Because of this, the current findings might seem counterintuitive.

Sexual identity development experiences might help explain these findings. Among gay men, Bybee, Sullivan, Zielonka and Moes (2009) found those in middle young adulthood and midlife reported better self-esteem, more emotional stability, and fewer mental health concerns (e.g., depression, anger) than their early young adult peers. Models of sexual minority identity development also predicted that with age came increased self-understanding. Some data have positively correlated age with higher levels of the sexual identity development factors of Commitment and Synthesis/Integration (Worthington et al., 2008) and higher levels of satisfaction with one’s sexual minority identity (Henrickson & Neville, 2012). In a large LGBQ community sample ($N = 2,259$), older age was associated with lower levels of internalized homophobia or negativity regarding one’s sexual minority identity (Herek et al., 2009). Increased autonomy to choose where one lived and who one interacted with (e.g., more affirming friends and communities) might mitigate potential ongoing negative factors of familial, religious, and/or societal discrimination (Bybee et al., 2009). Thus, both increased self-acceptance and autonomy that tended to come with age might explain the current findings.

Age was also a statistically significant explanatory variable in experiences of life satisfaction—each year increase correlated with higher life satisfaction—although it had limited practical significance due to a very small effect size. Previous research with broader populations has found age to be related to life satisfaction and subjective well-being. However, there has been considerable debate on the strength of this relationship,
its general shape (e.g., U-shaped with lower levels of satisfaction in midlife), and how life satisfaction or subjective well-being were measured (Berenbaum, Chow, Schoenleber, & Flores, 2013; Blanchflower & Oswald, 2008; de Ree & Alessie, 2011). Age differences might be complicated by social views toward LGBQ people changing across time in combination with different developmental stressors faced during certain periods of life (Perales, 2016). In a sizeable sample of LGB individuals ($N = 396$) where participants were grouped into three cohorts by age, Kertzner, Meyer, and Frost (2009) found young adults (18-29 years of age) reported lower levels of social well-being compared to the two older cohorts. The relatively minimal effect of age on life satisfaction could be explained by age being connected to both social cohort experiences and developmental lifespan experiences and the complex nature of what variables were studied.

**Education.** Level of reported education was a significant explanatory variable when looking at both experiences of R/S struggles and life satisfaction. Overall, those who reported higher levels of education reported lower levels of R/S struggles and higher levels of life satisfaction. In terms of R/S struggles, level of education was the second most explanatory demographic variable after age and had a small to medium effect size. When explaining life satisfaction, level of education was the most meaningful demographic variable and also had a small to medium effect size.

In line with the current findings, Exline et al. (2014) found evidence that when participants reported higher attained level of education, they also reported lower levels of R/S struggles. Other data indicated that higher levels of education correlated with greater societal and personal acceptance of sexual minorities, which could also explain reduced
experiences of R/S struggles. At the societal level, higher educational attainment has been connected to more positive and accepting views of homosexuality across cultures (Adamczyk & Pitt, 2009; van den Akker et al., 2013). Specific to sexual minorities, Herek et al. (2009) found in their large sample \((N = 2,259)\) that greater internalized homophobia was also correlated with less education. Greater societal and personal acceptance of sexual minority identities with more education might explain the current finding. In a qualitative study exploring resilience among sexual minorities, pursuing higher education at a university was one common path LGBQ individuals used to leave more negative or hostile environments and find more accepting and affirming communities (Asakura & Craig, 2014). Thus, higher levels of education might be connected to many other social factors for sexual minorities.

Regarding overall life satisfaction, more educated participants in the current sample reported greater contentment. The Institute of Medicine (2011) summarized how higher educational attainment was often associated with higher income and socioeconomic status (for the general population and the LGBQ population specifically). As the same report highlighted, social benefits that came with higher socioeconomic status were many including access to safer neighborhoods, better health care, and healthier food options. Although data showed more education did not prevent sexual minorities from discrimination, education seemed to increase protective factors and reduce barriers to safer, healthier living (Institute of Medicine, 2011). Among a large sample of sexual minority women \((N = 1,381)\), higher levels of education were associated with more income, fewer experiences of discrimination, decreased substance use, lower reports of depression and anxiety, and higher reports of existential well-being (Lehavot &
Simoni, 2011). White and Stephenson (2014) also found higher educational attainment was connected to greater acceptance and openness of one’s sexual minority identity in their sample of gay and bisexual men. These data provided possible explanations for why higher educational attainment correlated with higher reports of life satisfaction in the current study.

**Relationship status.** Participants’ reported relationship status was a significant explanatory variable in the regression model onto R/S struggles although it had a very small effect size. Specifically, those who reported being in the “other” relationship category reported lower levels of R/S struggles. As a relatively small group of participants were in the “other” category \( n = 35 \), this finding could have been an artifact of the sample. Future research could explore the experiences of those in other forms of relationships. Write-in examples of this category included being in polyamorous relationships, open relationships, and non-committed dating relationships. In their study, Exline et al. (2014) found undergraduates who were not in a committed relationship reported higher levels of R/S struggles compared to those who were. The results with the current sample did not directly align because relational options differed slightly with no write-in option as was provided in Exline et al.’s (2014) study. Additionally, participation in the current study was not limited to undergraduate students who might have experienced not being in a relationship differently due to particular developmental processes around R/S struggles and relationship status. Further exploration of this variable is warranted.

When explaining life satisfaction, relationship status was a significant explanatory variable and had a small effect; individuals who were married or in a committed
relationship reported higher levels of life satisfaction compared with those who were single. Research generally found individuals who were married or in committed romantic relationships reported higher levels of subjective well-being on average than their non-partnered peers (e.g., Kamp Dush & Amato, 2005; Wight et al., 2013). Some research suggested this might also be true for same-sex couples (e.g., Wienke & Hill, 2009) while other research found marital and relationship status was not predictive of subjective well-being for sexual minorities (Barringer & Gay, 2016). Li, Johnson, and Jenkins-Guarnieri (2013) found Chinese lesbians in committed relationships were more open about their sexual identities and experienced greater levels of life satisfaction compared to those not in committed relationships, suggesting possible benefits of committed partnerships to personal identity and well-being. The current study provided evidence that relationship status was significant in explaining life satisfaction among a sample of sexual minority adults with R/S experiences.

**Sexual Identity, Religious Schemata, and Religious/Spiritual Struggles**

Sexual minority identity development factors and religious schemata were statistically and practically significant variables that provided unique explanatory power for understanding R/S struggles and life satisfaction when accounting for demographic differences. Specifically looking at sexual identity development factors and R/S struggles, participants who reported higher levels of exploration around their sexual identity reported higher levels of R/S struggles while those who reported higher levels of synthesis/integration reported lower levels of R/S struggles. Higher levels of exploration aligned most closely with the identity status of active exploration (Dillon et al., 2011). Characterized by the potential for both mental and physical experimentation and
evaluation of sexual values and behaviors, this status captured those currently in the process of questioning societal, cultural, and personal values around sexuality. The majority of religious belief systems and communities were not affirming of sexual minority identities and same-sex relationships (e.g., Pew Research Center, 2013; van den Akker et al., 2013), which might explain why individuals with R/S experiences who were currently exploring their sexuality would report higher levels of R/S struggles. Previous qualitative literature found sexual minority participants often felt tension and conflict when exploring their sexuality in relation to their R/S beliefs (e.g., Beagan & Hattie, 2015; Dahl & Galliher, 2012; Gold & Stewart, 2011). The current findings provided quantitative evidence from a relatively large sample that LGBQ individuals with R/S experiences who were in the process of understanding themselves and their values might be at increased risk for experiencing R/S struggles.

On the other hand, participants who reported higher levels of synthesis/integration reported lower levels of R/S struggles. Questions that made up this factor most closely aligned with the sexual identity status of synthesis, which Dillon et al. (2011) proposed to be “the most mature and adaptive status of sexual identity” (p. 664). Synthesis was thought to capture those whose individual and social sexual identities were congruent (i.e., they are out to themselves and others) and who had integrated their sexual identity with other important identities they held (e.g., race/ethnicity, gender, R/S). In a sample of college students (N = 791), Shepler and Perrone-McGovern (2016) found in the synthesis status had lower levels of sexual and overall psychological distress compared to those in exploration status regardless of self-identified sexual orientation. Qualitative studies found that studying and interpreting faith tradition teachings as affirming of
sexual minorities and attending affirming faith communities—two potential signs of synthesis of these intersecting identities—could reduce experiences of tensions surrounding R/S for sexual minorities (e.g., Barrow & Kuvalanka, 2011; Beagan & Hattie, 2015; Dahl & Galliher, 2012; Kubicek et al., 2009; Levy, 2012; Murr, 2013; Rostosky et al., 2017; Schuck & Liddle, 2001; Yip, 2005). The current findings provided evidence that sexual minorities who reported more integrated sexual identities experienced greater contentment and overall life satisfaction. Future research could continue exploring different ways sexual minorities integrate their R/S and sexual identities.

In understanding the explanatory significance of religious schemata on experiences of R/S struggle, only the \textit{ttt} (truth of text and teachings) schema was psychometrically sound and utilized in the regression models, providing mixed evidence for the utility of the Religious Schema Scale (Streib et al., 2010) among sexual minorities with R/S experiences. Seen as one end of a spectrum between fundamentalist interpretation of religion and openness to other religions/ideas, \textit{ttt} was interpreted as indicative of a fundamentalist religious style. In the current study, participants who reported higher levels of \textit{ttt} also reported higher levels of R/S struggles. In other words, sexual minorities with more fundamentalist interpretations of their religion experienced more tension around their R/S experiences.

As noted before, most denominations of the major faith traditions were not affirming of sexual minority identities and same-sex relationships. The process of studying and reinterpreting religious teachings as affirming that some LGBQ individuals employed (e.g., Beagan & Hattie, 2015; Dahl & Galliher, 2012; Murr, 2013) might be
connected to a less fundamentalist, interpretive approach. The current study provided
evidence that those who identified as sexual minorities or experienced same-sex
attractions and interpreted their faith tradition in a more literal and definitive way might
have experienced greater conflict between their intersecting sexual and R/S identities.
Repetitive use of *ttt* when approaching one’s faith tradition and its teachings might
increase the risk for experiences of R/S struggles for LGBQ individuals.

**Sexual Identity, Religious Schemata, and Life Satisfaction**

Sexual identity development factors and religious schemata also significantly
explained experiences of life satisfaction. Of the four sexual identity development
factors, synthesis/integration was the sole factor that statistically and practically
explained this dependent variable. Participants who reported higher levels of
synthesis/integration also reported higher levels of life satisfaction. This relationship
suggested that how integrated sexual identity was with other important identities (e.g.,
race/ethnicity, gender, R/S) might impact overall contentment or subjective well-being
among sexual minorities. As synthesis was proposed as the most mature of the sexual
identity statuses, this finding seemed to fit with conceptual understandings of sexual
identity development (Dillon et al., 2011).

High levels of synthesis/integration regarding sexual identity with other identities
has been thought to be indicative of less negative self-views among sexual minorities. In
addition to the finding noted above that college students in the synthesis status had lower
levels of sexual and overall psychological distress compared to those in the exploration
status, it was also found those in the synthesis status reported higher levels of sexual and
global self-esteem than those in the exploration status, both regardless of self-identified
sexual orientation (Shepler & Perrone-McGovern, 2016). With a large sample of current and former Mormons with same-sex attractions ($N = 1,493$), Dehlin et al. (2015) found those who had integrated their sexual and R/S identities reported greater quality of life than those who rejected one identity or compartmentalized them. Consistent with previous research, the current findings provided evidence that sexual minorities who had found ways to integrate their R/S and sexual identities might experience greater contentment and overall life satisfaction.

Perhaps surprising given the relation of the $ttt$ schema to R/S struggles, those who reported higher levels of $ttt$ also reported slightly higher levels of life satisfaction. Notably, this statistically significant relationship had a very small effect size and minimal practical significance perhaps due to the relatively large sample size (Tabachnick & Fidell, 2007). Using a different measure of religious fundamentalism, Abu-Raiya et al. (2016) did not find a significant relationship between level of fundamentalism and life satisfaction among a sample of Israeli Jews. Another study of a New Zealand sample found religious fundamentalism had a negative indirect effect on life satisfaction when mediated through personal locus of control; those who reported lower personal or internal locus of control reported lower levels of life satisfaction (Osborne, Milojev, & Sibley, 2016).

Alternatively, a study with a diverse South African sample indicated the relationship between religious fundamentalism and life satisfaction was mediated by present meaning in life (Nell, 2014). The author argued that religious fundamentalism might provide a framework for meaning making that enhanced life satisfaction indirectly. It was possible a firm religious belief system that provided definitive answers to
existential questions indirectly enhanced overall contentment. More recent research has begun exploring how those who hold security-focused (related to \textit{tti}) and growth-focused (related to \textit{ftr} and \textit{xenos}) religious beliefs differ (Van Tongeren, Davis, Hook, & Johnson, 2016). Among Christian samples, these authors found significant relationships between these two religious orientations--existential security (higher for those with security-focused beliefs) and tolerance for others who hold different beliefs (higher for those with growth-focused beliefs). Future research utilizing the related frameworks of religious schemata and orientations might provide further clarity around the present findings.

**Theoretical Implications**

The results of the current study generally corroborated the theoretical models of sexual and R/S identity development that guided the study, furthering research in these domains. Significant findings around the sexual identity development factors of exploration and synthesis/integration supported the universal model of sexual identity development (Dillon et al., 2011). Future research could clarify the current findings and explore possible path models around the identity statuses proposed by the model with empirical means (e.g., structural equation modeling, path analysis).

Regarding R/S identity development, the findings provided support for some key concepts; however, others were not able to be empirically explored. The religious styles perspective (Streib, 2001) measured using the Religious Schema Scale (RSS; Streib et al., 2010) provided the framework for higher levels of \textit{tti}, indicating a more fundamentalist approach to R/S. As higher levels of \textit{tti} explained higher levels of R/S struggles and slightly higher levels of life satisfaction, there was evidence that a more fundamentalist religious style was influential in both potentially negative and positive outcomes among
sexual minorities. Gordon Allport (1954/1979), the famed personality psychologist, noted, “We cannot speak sensibly of the relation between religion and prejudice without specifying the sort of religion we mean and the role it plays in the personal life” (p. 456). This appeared more broadly true of how religion relates to many areas of life.

The ftr and xenos religious schemata (Streib et al., 2010) were not empirically explored because their respective subscales did not produce adequate levels of internal consistency reliability with the current sample. Previous studies have generally supported the factor structure of the RSS (Streib et al., 2010) and found adequate to good internal consistency on its subscales among a range of participants (e.g., Melles & Frey, 2017). This was the first known study conducted using the RSS with a sample of sexual minority individuals. An exploratory factor analysis with the current sample added a fourth factor that focused on the items regarding decision-making; however, the internal consistency reliabilities for all the factors except ttt remained less than adequate. Religious fundamentalism measured with ttt was meaningful with the current sample; other R/S experiences conceptualized on the middle and other end of the R/S spectrum toward tolerance and openness were not.

Practice Implications

Exline et al. (2014) found self-identified homosexuals reported higher levels of R/S struggles than other participants and a significant amount of qualitative research has added depth to those experiences (e.g., Beagan & Hattie, 2015; Dahl & Galliher, 2012; Gold & Stewart, 2011; Subhi & Geelan, 2012). The current study is the first known attempt to quantitatively explain experiences of R/S struggles among sexual minorities. Sexual and R/S identity development significantly explained both experiences of R/S
struggles and life satisfaction and there are several practical implications of these findings.

Experiences of R/S struggles have been shown to have consistent negative correlations with mental health outcomes (e.g., Abu-Raiya et al., 2015; Abu-Raiya, Pargament, & Magyar-Russell, 2010; Exline, 2013). Based on the current findings, sexual minority individuals currently exploring their sexuality and/or who hold more fundamentalist views of R/S might be at increased risk for R/S struggles, while those who have found ways to integrate their sexual and R/S identities might be at decreased risk. For psychologists practicing therapy, open exploration of how clients have experienced R/S their lives and explored and potentially integrated their multiple identities is recommended. Creating opportunities for this exploration in context of a safe therapeutic relationship might reduce experiences of conflict and shame. For example, Bozard and Sanders (2011) provided a conceptual model for counselors to help clients explore and integrate R/S and sexual minority identities using the acronym GRACE (goals, renewal, action, connection, and empowerment). Conceptualizing individuals’ current sexual identity development status and approach to R/S might be helpful to increasing awareness and reducing tension around this intersection.

Based on the importance R/S plays in the lives of some sexual minorities, it is strongly recommended that psychologists consider and appropriately work with R/S beliefs as an area of human diversity (Sue & Sue, 2013). Whether working with individuals, couples, or families, there is growing evidence that some LGBQ individuals find exploring R/S as vital (e.g., Rostosky et al., 2017). It is also recommended that psychologists consider how sexual minority individuals who hold R/S beliefs might face
discrimination from both within and without LGBQ communities. Thus, having appropriate referrals for affirming and/or supportive R/S communities and other resources (e.g., literature on the integration of R/S and sexual identities) is recommended.

To promote the well-being of all individuals, R/S communities and sexual minority communities are encouraged to work toward fostering the growth of LGBQ people of faith. Psychologists and other providers could provide spaces to explore and process through the intersection of R/S and sexual identities, perhaps in clinical or social formats (Shilo, Yossef, & Savaya, 2016). Beyond having referrals for affirming and/or supportive R/S communities, psychologists might need to develop and sustain relationships so they can encourage R/S communities to provide for the spiritual needs of LGBQ people of faith (Meanley, Pingel, & Bauermeister, 2016). Religious/spiritual communities could explore theological literature surrounding the integration of sexual minorities into faith communities as well as psychological literature to better understand and empathize with the experiences of their LGBQ members. Sexual minority communities could create opportunities for community members to share and explore their experiences with R/S, perhaps through topical gatherings that could create visibility for LGBQ people of faith.

Additionally, a growing body of research pointed to the importance of intersectional understandings of human identities (see Rosenthal, 2016) and the current study added to this literature. Given the historical tension between sexual minority and R/S identities, this particular intersection seems ripe for further research and understanding (APA, 2012). Psychologists are encouraged to continue exploring how sexual identities intersect with R/S and other identities (e.g., race/ethnicity) to more fully
understand these interwoven and complex human experiences. It is also recommended that psychologists provide space, opportunities, and challenges for clients, organizations, and society to more broadly reflect on the multifaceted reality of human existence. Especially for individuals facing chronic social stress due to stigmatization of one or more identities, psychologists could uniquely provide support through evidenced-based psychotherapy while also bringing awareness to negative impacts of discrimination and positive perspectives by highlighting minority voices through research and advocacy.

**Limitations and Directions for Future Research**

Several important limitations existed in the current study. First, despite the large sample size, the results might not be wholly generalizable as nonprobability sampling methods were utilized (Remler & Van Ryzin, 2015). Sampling LGBQ participants has been historically difficult for a variety of reasons including high costs involved in probability sampling and potential biases introduced through non-probability sampling (Meyer & Wilson, 2009). Additionally, current sampling methods—even best practices like snowball sampling—tend to skew toward those who are further along in sexual minority identity development and the current study was not free of this limitation. As being a research participant in studies focused specifically on sexual minorities involves a certain level of understanding of oneself as LGBQ (Eliason & Schope, 2007; Hamblin & Gross, 2014; Moradi, Mohr, Worthington, & Fassinger, 2009), future research could look to gather data from individuals regardless of sexual orientation identity with hopes of increasing participation from those who experienced some amount of same-sex attraction even though they might not openly identify with a sexual minority identity. Considering the social pressures of heterosexism from both faith communities and the wider culture
(Herek et al., 2009), broadening the initial inclusion criteria might increase the number of participants who are earlier in their sexual minority identity development.

In terms of research methods, the current study utilized a cross-sectional design. The results are thus limited as they might not capture true change across time for participants. Longitudinal research would provide greater understanding of how sexual and R/S identities develop across the lifespan (Fontenot, 2013). Relatedly, as there is a current dearth of research regarding the intersection of R/S and sexual identities in counseling psychology broadly and specifically using longitudinal designs (see Lee et al., 2013), future research on R/S identity changes and R/S community attendance across time could provide practical insights around developmental changes (e.g., Hickey & Grafsky, 2017). Specific to researching R/S struggles, some recent research also indicated that current versus lifetime reports of R/S struggles might be tapping into unique experiences (Wilt, Grubbs, Pargament, & Exline, 2017) and longitudinal research designs might be one way to better understand these reports.

The use of self-report measures to explore the relationships between the constructs of interest might have also limited generalizability. The single method of self-report data collection could have also introduced bias (e.g., Donaldson & Grant-Vallone, 2002) and future studies could utilize multiple data collection methods (e.g., observational, self-report, in-depth interviews) to corroborate findings of the current study. It is possible the use of a web-based survey potentially introduced volunteer bias (Remler & Van Ryzin, 2015) or a possible skew in the data based on participants volunteering who were somehow different than the population of interest. However, most research indicated these concerns were unfounded (e.g., Gosling & Mason, 2015;
Gosling, Vazire, Srivastava, & John, 2004; Hewson, 2014; Riggle, Rostosky, & Reedy, 2005). Specific to sexual minorities, self-report research might lead to bias in terms of those who are more socially public about their LGBQ identities, those who have not come out to various social groups, and those perhaps not open to being involved in research (Meyer & Wilson, 2009).

Based on other demographic variables, the current sample might not have been representative of the broader population of sexual minorities. As has been found with other non-probability samples of LGBQ individuals, the current sample was highly educated, likely more so than the general population (e.g., Herek et al., 2010). In addition, individuals of different ages might not have been representative of the broader sexual minority population. Notably, the mean age of the current sample was 35.03-years-old. Almost 48% of the sample was between the ages of 20 and 29 and another 18% was between the ages of 30 and 39. While there were still sizeable numbers in most of the age ranges (18- to 19-year-olds made up 5.6%, 40- to 49-year-olds made up 8.9%, 50- to 59-year-olds made up 9.8%, 60- to 69-year-olds made up 7.5%, and 70+ year-olds made up 2.8%), future studies could attempt to find a balanced or representative sample of sexual minorities in terms of age. The current sample was also majority White, majority male, and the largest R/S identity group was Christian. Future research could benefit from more diverse samples to better determine the generalizability of the current findings. Now that data regarding R/S struggles among sexual minorities have found significant findings, future research could also explore more of the intersections of these identities with other identities (e.g., racial/ethnic identity, specific R/S identity group) to explore potential unique experiences (Rosenthal, 2016).
Another limitation was the lack of in-depth exploration of gender identity. In light of the focus on sexual identity including sexual orientation identity, gender minorities might not have been appropriately represented in the results. Although individuals who identify as gender minorities (e.g., transgender, gender nonconforming) might share some similar experiences with sexual minorities around R/S in terms of stigma and conflicting identities (Moradi et al., 2009), the current study did not specifically explore the experiences of gender minorities; thus, the results cannot be generalized. Further research is needed to explore the R/S experiences of gender minorities as sexual orientation and gender identity are often conflated and gender minorities are underrepresented in the psychological literature (APA, 2015; Benson, 2013; Sánchez & Vilain, 2013).

The RSS (Streib et al., 2010) was not found to have been used specifically with sexual minorities. Although research supported its utility for exploring approaches to R/S in racially and religiously diverse samples from the United States, Germany, and India (Hathcoat & Fuqua, 2014; Kamble et al., 2014; Streib et al., 2010; Streib & Klein, 2014), the internal consistency reliability for the ftr and xenos subscales for the current sample were less than adequate. The current study sought to extend the application of the measure and provided initial data for its use among LGBQ individuals with mixed results. Use of the ttt subscale was empirically supported but the other two subscales were not. Research indicated the relationship LGBQ people had with R/S might be more complicated than for those in the general population (e.g., Brewster et al., 2016; Fontenot, 2013). It is possible sexual minority individuals have unique and varied experiences with R/S that could not be captured with these items. Future studies could
use the RSS with different samples of sexual minorities to better understand its applicability. Additionally, engaging LGBQ people with R/S experiences specifically to elicit their thoughts and reactions when attempting to capture the more tolerant and open end of the R/S spectrum could help guide future research and potential scale development by incorporating qualitative community understandings (e.g., Rowan & Wulff, 2007).

**Conclusions**

Research on the intersection of sexual and R/S identities has been a growing area of interest from qualitative lenses (e.g., Dahl & Galliher, 2012; Levy, 2012) with calls to explore trends with larger samples using rigorous quantitative methods (e.g., Hamblin & Gross, 2014). Thus far, there has been little understanding of how identity development in these two domains related to R/S struggles and life satisfaction. The current study provided evidence that sexual and R/S identity development related to mental health outcomes in meaningful ways. Considering the potential for discrimination and increased risk of mental health concerns around this intersection (e.g., Beagan & Hattie, 2015; Brewster et al., 2016; Fontenot, 2013), the current findings have important theoretical and practical implications. In line with the APA’s (2012) call to explore R/S in the lives of LGBQ people, psychologists and other mental professionals seeking to better understand sexual minority populations with R/S experiences might benefit from incorporating the current findings and developmental understandings of identity into future research, teaching, and practice.
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Table 1

**Intercorrelations Between Demographic and Study Variables (N = 655)**

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Table 2

*Hierarchical Regression Analysis Summary for Demographic Variables, Sexual Identity Development Factors, and Religious Schemata Explaining R/S Struggles (N = 648)*

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<th>β</th>
<th>R²</th>
<th>ΔR²</th>
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*Note.* *p < .05  **p < .01  ***p < .001.
Table 3

*Hierarchical Regression Analysis Summary for Demographic Variables, Sexual Identity Development Factors, and Religious Schemata Explaining Life Satisfaction (N = 655)*

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*Note.* *p < .05  **p < .01  ***p < .001.