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The Relationships between Internalized Heterosexism, Spirituality, and Mental Health in Lesbian, Gay, and Bisexual Young Adults

Jon Raymond Bourn

University of Tennessee - Knoxville, jbourn@utk.edu

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We have read this thesis and recommend its acceptance:

Brent Mallinckrodt, Dawn M. Szymanski

Accepted for the Council:

Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

The Relationships between Internalized Heterosexism, Spirituality, and Mental Health in
Lesbian, Gay, and Bisexual Young Adults

A Thesis Presented for the

Master of Science

Degree

The University of Tennessee, Knoxville

Jon Raymond Bourn

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Abstract

Minority stressors like internalized heterosexism have been found to be related to suicidality among lesbian, gay, and bisexual (LGB) individuals (e.g., Savin-Williams & Ream, 2003). Additional research is needed, however, to better understand the factors that may serve as moderators (i.e., protective factors) in the relationships between minority stressors and negative mental health outcomes, such as depression and suicidality (e.g., Szymanski et al., 2008). The current study attempted to examine the relationships between internalized heterosexism and two negative mental health outcomes associated with suicide, *psychache* (defined as unbearable psychological pain) and depression, in a sample of LGB young adults. Given that spirituality has been found to serve as a protective factor against suicide in other populations (e.g., Taliaferro et al., 2009), we also examined whether spiritual well-being served as a protective factor against psychache and depression in our LGB sample. Results showed significant, positive correlations between internalized heterosexism and both psychache and depression. Contrary to our hypotheses, spiritual well-being did not serve as a moderator of the relationships between internalized heterosexism and psychache or depression. Post-hoc mediation analyses revealed, however, that spiritual well-being serves as a partial mediator in the relationships between internalized heterosexism and both psychache and depression. Study limitations, implications, and future directions are considered.

Keywords: Psychache, internalized heterosexism, depression, suicidality, protective factors

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Chapter 1: Introduction

Suicidality among young adults represents a serious public health concern. For example, in 2007 (the most recent year for which data are available), over 2,400 young adults ages 18 to 22 years old committed suicide, making it the third leading cause of death for this age group (unintentional injuries ranked number one, followed by homicide; Centers for Disease Control and Prevention, 2010). Recent research suggests that lesbian, gay, and bisexual (LGB) young adults may be particularly at risk for suicidality (Bolton & Sareen, 2011; Eisenberg & Resnick, 2006; Haas et al., 2011). For example, a recent meta-analysis found lifetime prevalence of suicide attempts in lesbian and bisexual women to be two times that of suicide attempts in heterosexual women, and the lifetime prevalence of suicide attempts in gay and bisexual men to be four times that of suicide attempts in heterosexual men (Haas et al., 2011). Therefore, in order to prevent suicide among LGB young adults, it is important for researchers and mental health practitioners to gain a better understanding of the variables that may predict suicidality among LGB individuals, and of the unique factors that may serve to protect LGB individuals from suicidality.

Psychache

One variable that has been reliably identified as a strong predictor of suicidality in both the general population (Pereira, Kroner, Holden, & Flamenbaum, 2010; Troister & Holden, 2010), and in the population of LGB young adults (Crain-Gully, 2011) is *psychache*. Psychache, defined as unbearable psychological pain (Crain-Gully, 2011; Pereira et al., 2010; Troister & Holden, 2010), encompasses feelings of shame, guilt, humiliation, angst, dread, fear, loneliness, and anguish, and causes suicidal behavior when it exceeds an individual's coping ability (Pereira

et al., 2010). One empirically validated model of suicidality posits psychache as its most proximal cause (Pereira et al., 2010; Troister & Holden, 2010).

In fact, psychache may more strongly predict suicidality than depression or hopelessness (DeLisle & Holden, 2009; Pereira et al., 2010; Troister & Holden, 2010). For example, in a study of 1,475 undergraduate students, Troister and Holden (2010) found that psychache was the variable most strongly associated with suicidality, though both hopelessness and depression did contribute unique variance in some of the suicide criteria. Similarly, in a study of 73 male criminal offenders, 80 male undergraduates, and 80 female undergraduates, Pereira et al. (2010) found that psychache was a stronger predictor of suicidality and self-harming behavior than depression or hopelessness. Pereira et al. found that the link between psychache and suicidality was not moderated by either participant sex or criminal offender status, demonstrating the generalizability of psychache as a statistical predictor of suicidality. Likewise, in an investigation of 587 undergraduate students, DeLisle and Holden (2009), found that psychache was associated with the greatest range of suicide criteria, further indicating that psychache is a key variable linked with suicidality.

Psychache among LGB young adults. To our knowledge, only one study to date, an unpublished dissertation, has examined the relationship between psychache and suicidality in LGB young adults (Crain-Gully, 2011). This mixed-methods investigation found that a strong, positive correlation between psychache and suicidality among LGB young adults, but did not find significant correlations between psychache or suicidality and gay identity formation. Additionally, through in-depth interviews, Crain-Gully (2011) found evidence that suicidality and psychache develop, in part, as a result of prejudice and discrimination related to one's stigmatized identity as a sexual minority. Many of these LGB participants also reported

experiencing high levels of oppression based on their sexual orientation (i.e., *heterosexism*), which, in turn, they cited as a key underlying factor in increased suicidality. Unfortunately, the sample in the Crain-Gully (2011) study was small, and so caution needs to be made when interpreting the quantitative results. In addition, Crain-Gully (2011) did not explicitly examine the quantitative relationship between IH and either psychache or suicidality, so additional research is needed in this area. Additional research is also needed on factors that may serve to buffer LGB individuals against the harmful effects of IH (e.g., Szymanski, Kashubeck-West, Meyer, 2008).

Even given its limitations, however, the Crain-Gully (2011) study highlights that it is not an LGB identity, itself, that is related to suicidality among LGB young adults, but rather that suicide is attributable to the minority stressors associated with an oppressive, heterosexist society (e.g., Savin-Williams & Ream, 2003). For example, LGB individuals face heterosexism in the forms of verbal or physical violence (e.g., Herek, 1990), subtle sexual orientation microaggressions (e.g., Smith, Shin, & Officer, 2012), and biased institutional policies (e.g., state bans on same-sex marriage). Constant exposure to these external forms of heterosexism may also result in the internalization of heterosexist messages (e.g., Herek, 2007). Internalized heterosexism (IH) is a form of minority stress that has been found to relate to a wide-range of negative psychosocial outcomes for LGB individuals (e.g., Szymanski et al., 2008).

While we could not locate any other studies of psychache in among the LGB population, there is a growing body of research that shows that an increased risk for suicidality among LGB young adults is not caused by their sexual orientation, but rather can be attributed to a combination of generic life stressors (i.e., common stressors faced by all individuals, regardless of their sexual orientation), and minority stressors (i.e., stressors like IH, which are related to

one's identification with a stigmatized minority group)(Savin-Williams & Ream, 2003). That is, there is nothing inherently pathological in an LGB identity that makes these identities risk factors for suicidality. Rather, both the unique stressors that accompany a sexual minority identity in a heterosexist society, and generic life stressors faced by all people may be better indicators of suicide risk (Savin-Williams & Ream, 2003).

Additional research is needed, however, in order for psychologists to better understand the relationships between heterosexism, in its various forms (e.g., internalized, externalized, institutional), and psychache, because it is a proximal predictor of suicidality (e.g., DeLisle & Holden, 2009; Pereira et al., 2010). An understanding of the factors that contribute to (and buffer against) psychache will help counseling psychologists develop interventions aimed at prevention of suicidality. Internalized heterosexism has been found to relate to a wide range of mental health outcomes (D'Augelli, Grossman, Hershberger, & O'Connell, 2001; Meyer, 2003; Szymanski et al., 2008), but has not been examined as a potential predictor of psychache. Therefore, in the current study, we chose to examine the relationship between IH and psychache.

Internalized Heterosexism

Internalized heterosexism results when LGB individuals direct the negative messages about homosexuality that they receive inward (Szymanski et al., 2008). Given the prevalence of heterosexist messages in society, LGB individuals are susceptible to subtle, negative and invalidating messages (e.g., sexual orientation microaggressions; Sue, 2010), in addition to blatant prejudice. Anger, resentment, and shame may result from exposure to negative societal messages about one's sexual orientation, regardless of whether one experiences outright prejudice. Internalized heterosexism, then, is the term for the net result of an LGB individual turning the anger, shame, and resentment, experienced from life in a heterosexist society inward.

According to Meyer (2003), as a form of minority stress, IH is likely to result in serious negatives effects on both physical and mental health.

In a comprehensive review, Szymanski et al. (2008) examined research on correlates of IH, including mental, psychosocial, and physical health; substance use; sexual risk-taking behavior in gay and bisexual men; intimate relationships; gender roles; and religion. Among the studies reviewed, Szymanski et al. (2008) noted that research has consistently shown a negative relationship between IH and self-esteem, and a positive relationship between IH, and depression and psychological distress in LGB individuals (Szymanski et al., 2008). Similarly, D'Augelli, Grossman, Hershberger, and O'Connell (2001) found that IH was related to current mental health ($r = -.30$), lifetime suicidal ideation ($r = .26$), lifetime suicidal ideation related to sexual orientation ($r = .31$), suicidal ideation in the past year ($r = .19$), and suicidal ideation related to sexual orientation in the past year ($r = .36$), for an LGB population aged 60 and older.

In sum, research has supported a link between IH and depression, suicidality, difficulties with the coming-out process, self-esteem, psychological and psychosocial distress, physical health problems, issues with intimate and sexual relationship quality, and, for lesbian women, perceived career barriers (Szymanski et al., 2008). No research, however, has specifically examined the relationship between IH and psychache, which is a proximal predictor of suicidality e.g., DeLisle & Holden, 2009; Pereira et al., 2010). In addition, though research has examined the relationships between IH and mental health, much less research has examined potential moderating variables, or protective factors, which may serve to buffer LGB individuals from the negative impacts of IH (Szymanski et al., 2008).

Protective Factors

Given its relationship to suicidality, psychache is an important concern (e.g., DeLisle & Holden, 2009; Pereira et al., 2010). It is important to note, however, that, even given unique minority stressors like heterosexism, the majority of LGB young people do not make a suicide attempt (e.g., Crain-Gully, 2011; Haas et al., 2011; King & Merchant, 2008). And, while there is a growing body of research examining risk factors for suicidality among LGB young adults (e.g., Haas et al., 2011), and its proximal predictor, psychache (Crain-Gully), additional research is needed to understand the unique protective factors that may help *prevent* psychache (and by extension, suicidality) in LGB young adults.

Currently, no research has examined the factors that may serve to protect LGB young adults from psychache, however, some research has examined protective factors against suicidality in LGB young adults. For example, based on a review of the literature, Haas et al. (2011) point to the importance of being connected to an LGB community, indicating the importance of having a strong group identity, and possibly if having LGB role models. Similarly, Eisenberg and Resnick (2006) examined the role of interpersonal protective factors against suicidality among LGB youths by examining data collected from a 2004 survey of 9th and 12th grade students. In this study, 21,927 sexually active youth were categorized based on the sex of their partner(s) as LGB or non-LGB. The survey collected a large array of data reflecting health, safety, and academic issues, including information regarding school climate, substance use, violent behavior, and personal connections with community, school, and family. Eisenberg and Resnick found that family connectedness, adult caring, and school safety were all protective against suicidal ideation and attempts in the overall sample, but that LGB youths reported significantly lower levels of each of these protective factors.

While Eisenberg and Resnick (2006) found that strong support for the importance of various social and interpersonal factors (family connectedness, teacher caring, adult caring, and school safety) in protecting LGB individuals from suicidality, they concluded that, “the largest proportion of the variance was unexplained by variables used [in the study], indicating that many other factors influence suicide risk above and beyond a LGB orientation” (Eisenberg & Resnick, 2006, p. 666). Therefore, additional research is needed in order to more fully understand what factors protect the majority of LGB young adults from suicidality and psychache. One set of variables that have received little attention among LGB populations, but have received some support as protective factors against suicide in other populations (June et al., 2009; Taliaferro et al., 2009) are religion and spirituality.

Religion and spirituality. *Spirituality* may be conceptualized as a general sense of life satisfaction and purpose; a more inclusive and universal construct than religiosity (Taliaferro et al. (2009). Within this conceptualization, *spiritual well-being* (SWB) included two dimensions: *religious well-being* (RWB) and *existential well-being* (EWB). Religious well-being involves a relationship with a “God,” characterized by such qualities as gaining satisfaction from prayer, and finding a sense of strength and support from a God. Taliaferro et al. (2009) notes that religiosity often involves such characteristics as formal service attendance, commitment to religion, religious influence, prayer, commitment to religious text, intrinsic and extrinsic religiosity, and a religious education; an underlying theme in religiosity is a connection to a formal dogma and community, which is not necessarily present in spirituality. Existential well-being taps the construct of spirituality, and encompasses one’s assessment of life satisfaction and one’s ability to find meaning and purpose in life, and does not require a relationship with a God (Taliaferro et al., 2009).

While there is no research on religion and spirituality as protective factors relevant to psychache or suicide risk in LGB populations, recent research has examined religion and spirituality as protective factors in other populations. For example, June et al. (2009) examined the relationships between religiousness, perceptions of social support, and reasons for living among African American and European American older adults. They found a significant, positive relationship between religiousness and reasons for living, which was especially strong among the African American participants (though ethnicity, itself, did not account for the overall variance in reasons for living).

Taliaferro et al. (2009) also examined the relationships between religion and spirituality, and suicidality. Specifically, they examined whether two the dimensions of SWB (EWB and RWB) were related to suicidal ideation among a sample of 522 students enrolled in lecture courses at a large university. Taliaferro et al. found that RWB and involvement in organized religion were *not* significantly related to suicidal ideation in a general college student population, but that EWB *was* significantly, negatively related to levels of suicidal ideation. While the results of the June et al. (2009) and the Taliaferro et al. (2009) studies suggest that religion and/or spirituality may be protective factors against suicide in certain populations, research has not examined whether religion or spirituality may serve a similar protective function among LGB individuals.

While research has not examined the relationships between spirituality and suicidality in LGB individuals, some research suggests that spirituality may be related to other mental health outcomes, such as depression. For example, Lease, Horne, and Noffsinger-Frazier (2005) studied the effects of positive faith group experiences on the mental health of 583 LGB individuals LGB individuals. They found that positive faith group experiences were indirectly linked to

psychological health through decreased levels of IH, alongside higher spirituality endorsements. They argued that overt pro-LGB behaviors from a faith group counter the negative prevailing societal discourse regarding LGB identities. This may, in turn, prevent an LGB individual from developing high levels of IH, which is related to various negative mental health outcomes (Lease et al., 2005). Thus, Lease et al. suggested that IH mediates the relationship between positive religious experiences and mental health. They also argued that nurturing a personal spirituality, alongside or apart from a positive faith group, is beneficial for promoting increased psychological health.

The Current Study

King and Merchant (2008) identified the need for theoretically driven studies regarding young adult suicidality in general, allowing for hypothesis testing, integration of findings, and a means by which to determine future research directions. More specifically, there is a need to better understand the risk and protective factors of suicide in the LGB population (Haas et al., 2011; Eisenberg & Resnick, 2006) so that psychologists can develop interventions aimed at *preventing* suicidality and suicide.

Because psychache has been found to be a strong, proximal predictor of suicide (DeLisle & Holden, 2009; Pereira et al., 2010; Troister & Holden, 2010), it may serve as an important target for psychological intervention. Therefore, in the current study we sought to develop a better understanding of factors that contribute to psychache among LGB individuals.

Internalized heterosexism has been found to relate to a wide range of negative mental health outcomes (e.g., Szymanski et al., 2008), including suicidality (D'Augelli et al., 2001). However, we could find no research to date that empirically examined the relationships between IH and psychache. Therefore, a main aim of the current study was to examine the relationship

between IH and psychache among LGB individuals. Given that psychache is an understudied psychological variable in the LGB population, we also chose to examine depression in the current study. Based on the previous research, our first hypothesis was:

Hypothesis 1: IH will be positively related to psychache and to depression.

Previous research suggests that spirituality may be a protective factor against suicide in the general undergraduate population (Taliaferro et al., 2009), and against depression in LGB populations, specifically (Lease, Horne, & Noffsinger-Frazier, 2005). Therefore, the current study sought to examine whether spirituality (specifically, EWB) may serve as a protective factor against psychache (a proximal predictor of suicide) and depression among LGB young adults. Thus, our second and third hypotheses were as follows:

Hypothesis 2: EWB will moderate the relationship between IH and psychache, such that EWB will serve as a buffer against IH in relation to psychache. Specifically, for those low in EWB, we predicted a significant positive relationship between IH and psychache, and for those high in EWB, we predicted that the positive relationship between IH and psychache would be significantly diminished.

Hypothesis 3: EWB will moderate the relationship between IH and depression, such that EWB will serve as a buffer against IH in relation to depression. Specifically, for participants low in EWB, we predicted a significant positive relationship between IH and depression, and for those high in EWB, we predicted that the positive relationship between IH and depression would be significantly diminished.

Chapter 2: Methods

Participants

Participants were recruited using an announcement to email listservs, and online LGB young adult communities and organizations throughout the United States. We also advertised the study using the social media outlet Facebook. The Facebook advertisements targeted (1) women who were at least 18 years old, in the United States, in college, and who indicated being “interested in women;” (2) men who were at least 18 years old, in the United States, in college, and who indicated being “interested in men;” and (3) individuals of any gender who were at least 18 years old, and who indicated “LGBT interests” in their individual profiles.

When potential participants clicked the link provided in either the email or Facebook advertisement, they were taken to an online version of the informed consent form, which explained that participants should be at least 18 years of age, and self-identify as lesbian, gay, or bisexual. Individuals who did not identify as lesbian, gay, or bisexual on a demographic questionnaire following the consent form but preceding the actual survey were thanked for their time, and directed out of the survey.

Between the two recruitment strategies (i.e., emails to LGB listservs and organizations, and the advertisement posted on the social media website, Facebook), we had 699 individuals begin our survey. Of these 699, 423 were excluded from the analyses for having more than 10% missing data, leaving 246 participants. Forty-three of these participants missed at least one survey item, but were missing less than 10% of total possible survey items, for a total of 74 missing data points at the item-level (not including demographic items). Thus, only .5% of the total possible data points at the item-level were missing. Following procedures outlined by Schlomer, Bauman, and Card (2010), we used multiple imputations to deal with these 74 missing

data points. Specifically, we ran five imputations, conducted our analyses, and report the results of our analyses from the pooled data set.

Because we were specifically interested in spirituality, operationalized as the construct of existential well-being (i.e., one's assessment of her or his life satisfaction and ability to find meaning and purpose in life, regardless of a relationship with a God; Taliaferro et al., 2009), we included in our analyses only those who identified as spiritual on a demographic questionnaire preceding the survey. This left a total of 139 participants. However, in the current study, we were specifically interested in self-identified LGB young adults. LGB young adults were deemed an appropriate population for this study as this age group consistently reports a high level of psychache and suicidality (Eisenberg & Resnick, 2006; Haas et al., 2011; McAndrew & Warne, 2010). Of our 139 spiritual, LGB-identified participants, 19 were over the age of 24. These participants were also excluded from the analyses, leaving a final sample size of 120.

Participants in the final sample of 120 ranged in age from 18 to 24 years ($M = 19.60$, $SD = 1.41$). In terms of gender, 55% of the sample identified as female ($n = 66$), 42% identified as male ($n = 50$), and 3% identified as transgender ($n = 4$). Thirty one percent of the participants ($n = 37$) reported being freshman in college, 28% ($n = 34$) reported being sophomores, 22% ($n = 26$) reported being juniors, and 19% ($n = 23$) reported being seniors. In terms of race, 3% of the participants ($n = 4$) reported being Asian, 16% ($n = 19$) reported being Black or African American, less than 1% ($n = 1$) reported being Native Hawaiian or Pacific Islander, 75% ($n = 90$) reported being White or European American, 8% ($n = 10$) reported being multiracial, and 7% ($n = 8$) reported being an other racial category. (Participants were allowed to select more than one racial category, thus the percentages add to more than 100). One person preferred not to answer

the question regarding race. In terms of ethnicity, 16% reported identifying as Hispanic or Latino.

All participants in the sample identified as spiritual, and 40% ($n = 48$) identified as religious. Religious identifications included Agnostic ($n = 19$), Atheist ($n = 5$), Buddhist ($n = 12$), Christian ($n = 56$), Hindu ($n = 3$), Jewish ($n = 4$), Secular ($n = 6$), Unitarian ($n = 7$), Wiccan ($n = 11$), and “Not Applicable” ($n = 27$). (Again, participants were able to choose more than one religious identification, so the numbers add to more than 120. For example, some participants identified as Agnostic and Secular, or Secular and Unitarian).

Finally, in terms of sexual orientation, 29% of the participants ($n = 35$) identified as lesbian women, 27% ($n = 32$) identified as bisexual women, 38% ($n = 46$) identified as gay men, and 6% ($n = 7$) identified as bisexual men.

Measures

The Psychache Scale. The Psychache Scale (Holden et al., 2001) quantitatively measures psychache, conceptualized as unbearable psychological pain. The Psychache Scale is a thirteen-item measure, rated on a five-point scale; items one through nine are rated from one (*never*) to five (*always*), while items ten through thirteen are rated from one (*strongly disagree*) to five (*strongly agree*) (Holden et al., 2001). Sample items include, “Psychologically, I feel terrible,” (item #7) and “I can’t take my pain anymore” (item #10).

This measure has been used in research supporting the link between suicidality and psychache amongst diverse populations, including LGB individuals and undergraduate students (Crain-Gully, 2011; Pereira, Kroner, Holden, & Flamenbaum, 2010; Troister & Holden, 2010). In the measurement development study, Holden et al. (2001) found an alpha coefficient of .92, and the scale was shown to possess concurrent validity with other measures of suicide attempt.

Holden et al. (2001) concluded that the Psychache Scale possesses both reliability and validity, making it useful for measuring psychache within an undergraduate student sample.

The Spiritual Well-Being Scale. The Spiritual Well-Being Scale (SWBS; Paloutzian & Ellison, 1982) is a 20-item self-report scale, with two subscales: RWB and EWB. As RWB assesses one's relationship with God, all items on the RWB subscale refer to God in some way; none of the items on the EWB subscale make this reference, as EWB assesses life satisfaction, fulfillment, and meaning and purpose in life. Responses to each item range from one (*strongly agree*) to six (*strongly disagree*). Sample RWB items include: "I believe that God loves me and cares about me," and "I have a personally meaningful relationship with God." (Paloutzian & Ellison, 1982, p. 232). Sample EWB items include: "I feel that life is a positive experience," and "I feel good about my future." (Paloutzian & Ellison, 1982, p. 232). Given difficulties in recruiting self-identified LGB young adults who identify as religious (only 65 of our initial sample of 246 identified as religious) we chose to only examine responses to the EWB subscale.

Factor analysis on data obtained from 206 subjects revealed that items clustered as expected, and the existential items loaded into two subfactors, involving life direction and life satisfaction (Paloutzian & Ellison, 1982). The SWBS yields three scores: (1) a total SWB score, (2) an RWB score, and (3) an EWB score. The SWBS has shown convergent validity with the Purpose in Life Test (Paloutzian & Ellison, 1982). Paloutzian and Ellison also found test-retest reliability coefficients of .93, .96, and .86 (for SWB, RWB, and EWB, respectively), and internal consistency coefficients of .89, .87, and .78 (for SWB, RWB, and EWB, respectively). A high score in any area or areas is conceptualized as being inherently positive due to the protective nature it holds against suicidality, whereas a low score in any area or areas (SWB, RWB, or EWB) is not deemed inherently negative, or a risk factor for suicidality, but instead

representative of a neutral quality in which the protective factor is not present (Taliaferro et al., 2009).

Martin and Dean's Internalized Homophobia Scale. Martin and Dean's (1987) Internalized Homophobia Scale is a nine-item measure for gay males, utilizing the criteria for ego-dystonic homosexuality in the third edition of the Diagnostic and Statistical Manual of Mental Disorders (Szymanski et al., 2008). Sample items from the measure include, "I often feel it best to avoid personal or social involvement with other gay men," and "I wish I weren't gay." Each item is measured using a five-point Likert-type scale, with responses ranging from one (*strongly disagree*) to five (*strongly agree*).

Herek and Glunt's (1995) research demonstrated the internal consistency of Martin and Dean's Internalized Homophobia Scale, with an alpha score of .85 for a gay male sample. Herek and Glunt (1995) found that high scores on the measure were correlated with less sexual orientation disclosure to heterosexual friends, lower collective self-esteem, higher dissatisfaction with the local LGB community, a greater tendency to attribute personal setbacks to antigay prejudice, lower community consciousness, and less importance attached to community involvements. Herek, Cogan, Gillis, and Glunt (1998) modified the scale for use with sexual minority female and male samples. Herek et al. (1998) reported an alpha score of .71 with a lesbian and bisexual female sample, and an alpha score of .83 with a gay and bisexual male sample. For the current study, participants who identified as gay men were given the original version of Martin and Dean's Internalized Homophobia Scale. Participants who identified as lesbian or bisexual were given a minimally reworded version of the Internalized Homophobia Scale (i.e., "I wish I weren't gay" was reworded as, "I wish I weren't lesbian" or "I wish I weren't bisexual," respectively) to ensure a match between participant identity and scale items.

Center for Epidemiologic Studies Depression Scale – Revised. The Center for Epidemiologic Studies Depression Scale – Revised (CESD-R) is a screening tool for depression and depressive disorders (Eaton, Muntaner, Smith, Tien, & Ybarra, 2004). The tool measures symptoms for a major depressive episode, as outlined by the Diagnostic and Statistical Manual of Mental Disorder, Fourth Edition, Text Revision, (DSM-IV-TR). The CESD-R is one of the most widely used measures in the psychiatric epidemiological field (Snaith, 1993). The assessment is a 20-item self-report measure, with responses ranging from zero (*rarely or none of the time [less than one day]*) to three (*most or all of the time [five to seven days]*). Samples items include, “During the past week, I was bothered by things that usually don’t bother me,” and “During the past week, my sleep was restless.” (Van Dam & Earleywine, 2011).

Overall, Van Dam and Earleywine’s (2011) research confirmed the psychometric soundness of the CESD-R, specifically citing the scales’ high internal consistency, strong divergent and convergent validity with positive and negative affect, anxiety, and schizotypy, and strong factor loadings. As such, the CESD-R is deemed an accurate and valid measure of depression. Additionally, the CESD-R possesses an algorithmic classification method, a more accurate and pragmatic approach to identifying probable depression, while still holding the sensitivity of the original measure (Van Dam & Earleywine, 2011).

Procedure

An announcement of the research was sent to LGB listservs and online communities with a description of the study and an invitation to participate. The announcement included a URL that took interested participants to an online version of the informed consent statement that explained the requirements of the study as well as the participants’ right to exit the survey at any time without penalty. Participants were taken to the survey only if they indicated consent to

participate. Participants recruited through Facebook saw an advertisement for the research study on the side panel of their personal profile. Interested participants clicked on the ad and were taken to the online version of the informed consent statement, followed by the survey, should they indicate consent to participate. The survey was conducted online via the www.surveymonkey.com.

Upon completion of the study measures, participants were then thanked for their participation in the study, and asked to respond to a brief demographic questionnaire, including the following items: age, race/ethnicity, sexual orientation, educational level, and gender. After submitting this information, participants opened a debriefing page that shared the purpose of the study, expected results, and importance of the study. Participants were also given the option to enter into a drawing for one of four small prizes (electronic gift cards to a well-known online retailer).

Chapter 3: Results

In this study, we were primarily interested in examining the relationships between IH, religion and spirituality, and negative mental health outcomes (i.e., psychache and depression). However, given difficulties in recruiting enough participants who identified as both religious and LGB, we were unable to examine relationships involving religiosity (as assessed by the RWB). Therefore, all analyses were conducted only with participants who identified as spiritual (including those who identified as both religious and spiritual, $n = 120$), and we examined only the EWB subscale of the SWBS.

Internalized Heterosexism, Spirituality, and Psychache

Consistent with our first hypothesis, IH was significantly, negatively correlated with EWB ($r = -.38, p < .01$) and significantly, positively correlated with psychache ($r = .38, p < .01$) (see Table 1). In order to examine whether EWB served as a moderator of the relationship between IH and psychache (i.e., our second hypothesis), we conducted a multiple regression with psychache as the dependent variable, following the procedures outlined by Frazier et al. (2004). Specifically, z -scores were calculated for the predictor and moderator variables (i.e., IH and EWB, respectively) and an interaction term was created by multiplying the z -scores for IH and psychache. The z -scores for the predictor and moderator variables were entered into the regression at Step 1, followed by the interaction term corresponding to IH and EWB at Step 2.

The results of the regression were significant, mean R^2 of the five imputations = .44 (range = .44 – .45), mean $F(2, 117)$ of five imputations = 30.79 (range = 30.21 – 31.25), all $p < .001$. Consistent with our first hypothesis, we found significant main effects for both IH and EWB at Step 1, pooled $B = .14, p = .03$, and pooled $B = -.51, p < .001$, respectively (see Table 2).

IH and EWB accounted for 44% of the variance in psychache at Step 1. The interaction of IH and EWB, however, was not significant.

Internalized Heterosexism, Spirituality, and Depression

We also examined the relationships between IH, spirituality, and depression (as measured by the CESD-R). We were interested in also examining depression, given that psychache is currently an understudied variable among the LGB population. In addition, there is a substantial body of previous research (e.g., D'Augelli et al., 2001; Meyer, 2003; Szymanski et al., 2008) demonstrating a positive relationship between IH and depression, but a lack of research on mediators and moderators of these relationships. We also hoped to compare these findings with the findings regarding the relationships between IH, spirituality, and psychache. Consistent with our first hypothesis, IH was significantly, positively correlated with depression ($r = .48, p < .01$) (see Table 1).

In order to examine whether EWB served as a moderator of the relationship between IH and depression (i.e., our third hypothesis), we conducted another multiple regression with depression as the dependent variable, following the procedures outlined by Frazier et al. (2004). Specifically, z -scores were calculated for the predictor and moderator variables (i.e., IH and EWB, respectively) and an interaction term was created by multiplying the z -scores for IH and psychache. The z -scores for the predictor and moderator variables were entered into the regression at Step 1, followed by the interaction term corresponding to IH and EWB at Step 2.

The results of the regression were significant, mean R^2 of the five imputations = .51 (range = .50 – .53), mean $F(2, 117) = 40.16$ (range = 39.04 – 41.04), all $p < .001$. As shown in Table 3, significant main effects were found for both IH and EWB at Step 1, pooled $B = 3.16, p < .001$, and pooled $B = -7.16, p < .001$, respectively. IH and EWB accounted for 51% of the

variance in psychache at Step 1. Again, the interaction of IH and EWB was not significant.

Post-Hoc Analyses

As EWB did not serve as a moderator in the relationship between IH and psychache, nor in the relationship between IH and depression, we decided to run post-hoc analyses to examine the research question of whether EWB *mediates* the relationship between IH and each outcome variable (i.e., psychache and depression). In order to examine whether EWB might serve as a mediator in the relationships between either, we ran two sets of mediation analyses, one for each of our dependent variables, psychache and depression. Consistent with procedures described by Frazier et al. (2004), in each set, we conducted three regression analyses to determine (1) whether IH predicted the outcome variable (i.e., psychache or depression), (2) IH predicted the mediator (i.e., EWB), and (3) whether IH predicted the outcome, while controlling for the mediator.

First, in order to examine whether EWB mediates the relationship between IH and psychache, we first regressed psychache on the IH to determine that there is an effect to mediate. The unstandardized regression coefficient associated with the effect of IH on psychache was significant, $B = .44, p < .001$ (see Table 4). Therefore, the first requirement for mediation was met. We then regressed EWB on IH. The unstandardized regression coefficient was also significant, $B = -4.77, p < .001$, and thus the second condition for mediation was met. Finally, we regressed psychache simultaneously on both EWB and IH. The coefficient associated with the relationship between EWB and psychache was significant, when controlling for IH, $B = -.05, p < .001$. Thus, this condition for mediation was met. Additionally, the relationship between IH and psychache, controlling for EWB, was significant, pooled $B = .18, p = .03$. However, the beta coefficient was smaller than when we analyzed IH as the sole predictor of psychache (pooled $B =$

.44, $p < .001$), indicating partial mediation. Using the equation provided by Shrout and Bolger (2002, as cited in Frazier, Tix, & Barron, 2004) we examined the proportion of the total effect that was mediated by EWB. Specifically, we divided the product of the pooled unstandardized regression coefficients for the relationships between IH and EWB (-4.77), and EWB and psychache (-.05) by the pooled unstandardized regression coefficient for the relationship between IH and psychache (.44), and found that 54.20% of the total effect of the relationship between IH and depression is mediated by EWB.

Similarly, to analyze whether EWB mediates the relationship between IH and depression, we regressed depression on IH to determine if there was an effect to mediate. The unstandardized regression coefficient associated with the relationship between IH and depression was significant $B = 7.82, p < .001$, thus meeting the first requirement for mediation (see Table 5). We then regressed EWB on IH. The pooled unstandardized regression coefficient was again significant, ($B = -4.77, p < .001$, satisfying the next condition for mediation. Finally, we regressed depression simultaneously on both EWB and IH. The coefficient associated with the relationship between EWB and depression was significant, when controlling for IH, $B = -.76, p < .001$, thus, this condition for mediation was met. Additionally, the relation between IH and depression controlling for EWB was still significant, pooled $B = 4.21, p < .001$, but the unstandardized coefficient was smaller than when IH was analyzed as the sole predictor of depression, pooled $B = 7.82, p < .001$, which indicates partial mediation. Again, using the equation provided by Shrout and Bolger (2002, as cited in Frazier, Tix, & Barron, 2004) we examined the proportion of the total effect that was mediated by EWB. Specifically, we divided the product of the pooled unstandardized regression coefficients for the relationships between IH and EWB (-4.77), and EWB and depression (-.76) by the pooled unstandardized regression coefficient for the

relationship between IH and depression (7.82), and found that 46.36% of the total effect of the relationship between IH and depression is mediated by EWB.

Chapter 4: Discussion

Because suicidality among LGB young adults presents a significant public health concern, our main goal in this research was to examine whether spirituality might serve as a protective factor against negative mental health outcomes related to suicidality (i.e., psychache and depression). Specifically, given that research has found psychache to be one of the most proximal predictors of suicidality (Perreira et al., 2010; Troister & Holden, 2010), our hope was that this research would help counseling psychologists develop interventions aimed at preventing suicidality among LGB young adults. Because psychache is an understudied variable in the LGB population (e.g., we could locate no previous quantitative research examining the relationships between IH and psychache), we also examined the relationships between IH, spirituality, and depression.

A significant body of research has examined suicide risk factors among LGB young adults (e.g., Bolton & Sareen, 2011; Haas et al., 2011), but far less is known about protective factors against suicidality for this population. Research within the general population of young adults, however, has found spirituality to serve as a protective factor against suicide (e.g., Taliaferro et al., 2009), and research within the LGB population suggests that faith-based group experiences may also serve a protective function (Lease, Horne, & Noffsinger-Frazier, 2005). Therefore, in conducting the current study, we specifically hypothesized the following: (1) IH would be positively correlated with depression and psychache, (2) EWB would moderate the relationship between IH and psychache, such that EWB would serve as a buffer against IH in relation to psychache, and (3) EWB would moderate the relationship between IH and depression, such that EWB would serve as a buffer against IH in relation to depression.

We found significant correlations between each of the dependent variables (psychache

and depression), the independent variable (IH), and our moderator variable (EWB) in the predicted directions. Among these significant correlations, IH was positively correlated with both psychache and depression, consistent with previous research supporting a positive link between IH and negative mental health outcomes (D'Augelli et al., 2001; Meyer, 2003; Szymanski et al., 2008). At the same time, consistent with previous research, (e.g., Lease et al., 2005; Taliaferro et al., 2009), IH was negatively correlated with EWB, and EWB was negatively correlated with both depression and psychache.

The results also indicate that IH independently predicted both psychache and depression in our sample of LGB young adults, with higher levels of IH predicting higher levels of both psychache and depression; these results are in line with Meyer (2003) who concluded that heightened levels of IH likely results in mental and physical health consequences. We did not, however, find evidence that EWB serves as a buffer against IH in relation to either psychache or depression. Post-hoc mediation analyses revealed, however, that EWB serves as a partial mediator in the relationships between IH, and psychache and depression. Specifically, IH was negatively related to EWB among LGB young adults, which in turn was negatively related to both psychache and depression. Simply put, we found that, in our sample of LGB young adults, higher IH related to lower EWB, which in turn related to higher levels of psychache and depression. These results make sense, because while growing up in a heterosexist, repressive society, LGB people internalize negative messages about LGB people (Eisenberg & Resnick, 2006; Haas et al., 2011; Szymanski et al., 2008), which may make them, in turn, question whether their lives have meaning (as reflected in lower EWB). Lack of meaning, then relates to feelings of depression and psychological pain (as reflected in psychache and depression).

While previous research (Haas et al., 2011; Eisenberg & Resnick, 2006) is still unclear

with regard to factors that protect LGB young adults from suicidality, EWB does not seem to moderate the link between IH and psychache. Previous research (i.e., Eisenberg & Resnick, 2006; Haas et al., 2011) suggests that connection to an LGB community, family connectedness, adult caring, and school safety may all be protective factors against suicide in LGB populations, yet a good amount of variance in suicide risk remains unaccounted for (Eisenberg & Resnick, 2006, p. 666). While spiritual connectedness (i.e., EWB) has been found to be an empirically-supported suicide protective factor for other populations, such as older adults (e.g., June et al., 2009), this did not extend to our sample of LGB young adults. Though our hypothesis was not supported in this area, it is important to stress the conclusion that IH independently predicts psychache and EWB in the directions predicted, allowing us to more fully understand the relationships between these variables.

In the current sample, it may be that spirituality is a less salient identity for LGB young adults, even those that identify as spiritual. Given that we each possess multiple identities, whether based on role or occupation (e.g., student), relationships (e.g., son/daughter, parent, friend), and interests (e.g., artist, researcher), our identities often compete for salience. Thus, although participants report possessing a spiritual identity, this identity may not be particularly salient, making it unable to serve as a protective factor against suicidality. Additionally, spirituality is often an internally-oriented identity; a lack of social support in one's spiritual identity may be a key factor in preventing spirituality, in and of itself, to serve as an LGB protective factor, given the importance of interpersonal protective factors (Haas et al., 2011; Eisenberg & Resnick, 2006).

As a result of this study, our understanding of the relationship between EWB, psychache, and IH is significantly improved. Our study thus adds to the knowledge base concerning IH and

its correlates, as described in Szymanski et al. (2008), as well as psychache and its correlates. Additionally, the results of this study are valuable in that they illuminate EWB as a partial mediator of both the relationship between IH and psychache, and IH and depression.

Limitations

Our study contains certain limitations that deserve attention and clarification. Specifically, our sample of college-aged LGB young adults is appropriate, in that this age group consistently reports high levels of suicidality and psychache, related to possessing an LGB identity in a heterosexism society (Eisenberg & Resnick, 2006; Haas et al., 2011; McAndrew & Warne, 2010). However, the generalizability of findings to the entire LGB community, regardless of age and educational level, is questionable.

In addition, the majority of our sample identified as White, with a majority of religious respondents identifying as a member of a Christian-based religion. The lack of racial and religious diversity may have skewed the results as well, with White respondents not having to contend with additional minority stress (Meyer, 2008) as a result of being of a minority racial group, causing less of an endorsement of the importance for developing EWB as a protective factors against suicidality, resulting from multiply minority stressors.

Future Research

Research concerning LGB young adult suicide protective factors is just beginning, and there remains considerable opportunity and need to identify more potential protective factors. Researchers should continue exploring novel potential protective factors. Some possible examples are social support, positive LGB role models, high self-esteem, personality factors, academic achievement, healthy behaviors, and so forth.

Additionally, future research should continue to examine the extent to which protective

factors against suicidality already identified for other diverse populations may also serve as suicide protective factors for LGB young adults. For instance, June et al. (2009) identified RWB as a suicide protective factor among African-American and European-American older adults. With a sample of more LGB young adults who identify as religious, it is possible that religious identification may serve as an LGB young adult suicide protective factor. A more comprehensive literature review of suicide protective factors for various diverse populations could reveal many additional possibilities for LGB young adult suicide protective factors. At the same time, researchers should explore the potential for spirituality to serve as a suicide protective factor in other populations, beyond those identified in previous research (June et al., 2009; Taliaferro, 2009).

We envision a large-scale research study examining the possibility of several LGB young adult suicide protective factors at the same time, utilizing a national sample, with diverse LGB young adults. Yet another useful approach is a phenomenological exploration of the lived experience of being an LGB person who also identifies as having considered suicide. Such a project would vividly illuminate suicide protective factors for this population, based on thematic analysis. Pursuing research in these directions will continue to have positive practical implications. The results of these studies will continue to inform best practices for those involved in the lives of LGB young adults, such as counselors, teachers, social workers, and parents, especially those who work with LGB young adults contemplating suicide.

References

- Bolton, S., & Sareen, J. (2011). Sexual orientation and its relation to mental disorders and suicide attempts: Findings from a nationally representative sample. *The Canadian Journal of Psychiatry*, 56(1), 35-43.
- Centers for Disease Control and Prevention. (2010). *Leading causes of death reports, 1999-2007*. Retrieved from <http://webappa.cdc.gov/sasweb/ncipc/leadcaus10.html>
- Crain-Gully, D.I. (2011). Psychache and coming out lesbian, gay, bisexual, transgender, and questioning (LGBTQ) adults at risk of suicidal ideation and suicide attempts: A mixed-methods design. *Dissertations Abstracts International: Section B: The Sciences and Engineering*, 71(8-B), 5104.
- D'Augelli, A.R., Grossman, A.H., Hershberger, S.L., & O'Connell, T.S. (2001). Aspects of mental health among older lesbian, gay, and bisexual adults. *Aging & Mental Health*, 5(2), 149-158.
- Eaton, W.W., Muntaner, C., Smith, C., Tien, A., & Ybarra, M. (2004). Center for epidemiologic studies depression scale: Review and revision (CESD and CESD-R). In M.E. Maruish (Ed.), *The use of psychological testing for treatment planning and outcomes assessment* (363-377). Mahwah, NJ: Lawrence Erlbaum.
- Eisenberg, M.E., & Resnick, M.D. (2006). Suicidality among gay, lesbian, and bisexual youth: The role of protective factors. *Journal of Adolescent Health*, 39(5), 662-668.
- Frazier, P.A., Tix, A.P., and Barron, K.E. (2004). Testing moderator and mediator effects in counseling psychology research. *Journal of Counseling Psychology*, 51(1), 115-134.
- Haas, A.P., Eliason, M., Mays, V.M., Mathy, R.M., Cochran, S.D., D'augelli, ... Clayton, P.J. (2011). Suicide and suicide risk in lesbian, gay, bisexual, and transgender populations: Review and recommendations. *Journal of Homosexuality*, 58, 10-51.

- Herek, G.M. (1990). The context of anti-gay violence: Notes on cultural and psychological heterosexism. *Journal of Interpersonal Violence, 5*(3), 316-333.
- Herek, G. M. (2007). Confronting sexual stigma and prejudice: Theory and practice. *Journal of Social Issues, 63*(4), 905-925.
- Herek, G. M., Cogan, J. C., Gillis, J. R., & Glunt, E. K. (1998). Correlates of internalized homophobia in a community sample of lesbians and gay men. *Journal of the Gay and Lesbian Medical Association, 2*, 17-25.
- Herek, G.M., & Glunt, E.K. (1995). Identity and community among gay and bisexual men in the AIDS era: Preliminary findings from the Sacramento men's health study. In G.M. Herek & B. Greene (Eds.), *AIDS, identity, and community: The HIV epidemic and lesbians and gay men* (pp. 55-77). Thousand Oaks, CA: Sage.
- Holden, R.R., Mehta, K., Cunningham, E.J., & McLeod, L.D. (2001). Development and preliminary validation of a scale of psychache. *Canadian Journal of Behavioral Science, 33*(4), 224-232.
- June, A., Segal, D., Coolidge, F.L., & Klebe, K. (2009). Religiousness, social support and reasons for living in African American and European American older adults: An exploratory study. *Aging and Mental Health, 13*(5), 753-760.
- King, C.A., & Merchant, C.R. (2008). Social and interpersonal factors relating to adolescent suicidality: A review of the literature. *Arch Suicide Res, 12*(3), 181-196.
- Lease, S.H., Horne, S.G., & Noffsinger-Frazier, N. (2005). Affirming faith experiences and psychological health for Caucasian lesbian, gay, and bisexual individuals. *Journal of Counseling Psychology, 52*(3), 378-388.

- McAndrew, S., & Warne, T. (2010). Coming out to talk about suicide: Gay men and suicidality. *International Journal of Mental Health Nursing, 19*(2), 92-101.
- Meyer, I.H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin, 129*, 674-697.
- Paloutzian, R.F., & Ellison, C.W. (1982). Loneliness, spiritual well-being and the quality of life. In L. Peplau and D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research and therapy* (pp. 224-237). New York, NY: John Wiley and Sons, Inc.
- Pavot, W., & Diener, E. (1993). Review of the satisfaction with life scale. *Psychological Assessment, 5*(2), 164-172.
- Pereira, E.J., Kroner, D.G., Holden, R.R., & Flamenbaum, R. (2010). Testing Shneidman's model of suicidality in incarcerated offenders and in undergraduates. *Personality and Individual Differences, 49*(8), 912-917.
- Schlomer, G.L., Bauman, S., & Card N.A. (2010). Best practices for missing data management in counseling psychology. *Journal of Counseling Psychology, 57*(1), 1-10.
- Shrout, P.E. & Bolger, N. (2002). Mediation in experimental and non-experimental studies: New procedures and recommendations. *Psychological Methods, 7*, 422-445.
- Silenzio, V.M.B., Pena, J.B., Duberstein, P.R., Cerel, J., & Knox, K.L. (2007). Sexual orientation and risk factors for suicidal ideation and suicide attempts among adolescents and young adults. *American Journal of Public Health, 97*(11), 2017-2019.
- Smith, L. C., Shin, R. Q., & Officer, L. M. (2012). Moving counseling forward on LGB and t transgender issues: Speaking queerly on discourses and microaggressions. *The Counseling Psychologist, 40*, 385-408. doi:10.1177/0011000011403165

- Snaith, P. (1993). What do depression rating scales measure? *British Journal of Psychiatry*, *163*, 293-298.
- Szymanski, D.M., Kashubeck-West, S., and Meyer, J. (2008). Internalized heterosexism: Measurement, psychosocial correlates, and research directions. *The Counseling Psychologist*, *36*(4), 525-574.
- Taliaferro, L.A., Rienzo, B.A., Pigg, R.M., Miller, M.D., & Dodd, V.J. (2009). Spiritual well-being and suicidal ideation among college students. *Journal of American College Health*, *58*(1), 83-90.
- Troister, T., & Holden, R.R. (2010). Comparing psychache, depression, and hopelessness in their associations with suicidality: A test of Shneidman's theory of suicide. *Personality and Individual Differences*, *49*(7), 689-693.
- Van Dam, N.T., & Earleywine, M. (2011). Validation of the center for epidemiologic studies depression scale – revised (CESD-R): Pragmatic depression assessment in the general population. *Psychiatry Research*, *186*, 128-132.

Appendices

Table 1
Means, Standard Deviations, and Correlations Between Variables

Variables	Mean	SD	Variables			
			EWB	CESD	Psychache	IH
EWB	43.05	9.92	1	-.67**	-.65**	-.38**
CESD	20.47	13.08		1	.76**	.48**
Psychache	2.04	.90			1	.38**
IH	1.94	.79				1

** $p < .01$

Table 2
Testing EWB as a Moderator of the Relationship Between IH and Psychache

Step and variable	SE		95 % CI	R ²
	B	B		
Step 1				
IH	.14	.06	.01, .26	
EWB	-.51	.06	-.63, -.38	.44**
Step 2				
IH × EWB	-.03	.06	-.14, .08	.44

Note. CI = confidence interval.

** $p < .001$.

Table 3
Testing EWB as a Moderator of the Relationship Between IH and Depression

Step and variable	<i>B</i>	<i>SE B</i>	95 % <i>CI</i>	<i>R</i> ²
Step 1				
IH	3.16	.87	1.46, 4.85	
EWB	-7.16	.87	-8.87, -5.49	.51**
Step 2				
IH × EWB	-.07	.75	-1.54, 1.41	0.51

Note. CI = confidence interval.

** $p < .001$.

Table 4

Testing EWB as a Mediator of the Relationship Between IH and Psychache

Testing steps in mediation	<i>B</i>	<i>SE B</i>	95 % <i>CI</i>	β
Testing Step 1				
Outcome: Psychache				
Predictor: IH	.44	.10	.25, .63	.38**
Testing Step 2				
Outcome: EWB				
Predictor: IH	-4.77	1.07	-6.87, -2.68	.38**
Testing Step 3				
Outcome:				
Psychache				
Mediator: EWB	-.05	.01	-.07, -.04	-.59**
Predictor: IH	.18	.09	.01, .35	.16*

Note. CI = confidence interval.

* $p < .05$. ** $p < .001$.

Table 5

Testing EWB as a Mediator of the Relationship Between IH and Depression

Testing steps in mediation	<i>B</i>	<i>SE B</i>	95 % <i>CI</i>	β
Testing Step 1				
Outcome: Depression				
Predictor: IH	7.82	1.34	5.20, 10.44	.47**
Testing Step 2				
Outcome: EWB				
Predictor: IH	-4.77	1.07	-6.87, -2.68	.38**
Testing Step 3				
Outcome: Depression				
Mediator: EWB	-.76	.09	-.94, -.58	-.58**
Predictor: IH	4.21	1.16	1.95, 6.47	-.59**

Note. CI = confidence interval.

** $p < .001$.

Vita

Jon Raymond Bourn was born in Glens Falls, NY, to the parents of Shirley and Guy Bourn. He was raised in Granville, NY, and attended Granville Elementary School before graduating valedictorian of Granville Jr./Sr. High School. After graduation, he enrolled at Elmira College on a full tuition scholarship, where he discovered his passion for the social sciences and the helping professions. While at Elmira College, he became very active in several organizations promoting social justice, including an LGBTQ advocacy group and a religious tolerance organization. He also had the opportunity to serve as a research assistant under Benjamin Lovett, Ph.D., where he studied ADHD and extended time accommodations on exams. Jon earned a Bachelor of Arts degree from Elmira College in June 2011 in Psychology, Human Services, and Sociology and Anthropology, graduating summa cum laude.

Jon next enrolled in the Counseling Psychology doctoral program at the University of Tennessee, Knoxville, studying under Joseph Miles, Ph.D. While in the program, Jon initially served as a teaching assistant for one academic year, before accepting an offer to serve as a Graduate Teaching Assistant, and has subsequently taught classes in General Psychology and Abnormal Psychology. During his time at the University of Tennessee he has co-authored a book chapter on the use of Intergroup Dialogue to explore intersections of conservative Christianity and sexual orientation, in addition to leading an Intergroup Dialogue exploring social class identity. Clinically, he has completed three doctoral practicum courses at the University of Tennessee, Knoxville, Student Counseling Center, worked as a Substance Abuse Counselor at a residential drug abuse rehabilitation center, and co-facilitated interpersonal group therapy for a homeless veteran population. Jon's research interests focus on LGBT mental health, suicidality amongst the LGBT population, suicide protective factors, and multiculturalism, broadly defined.