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Questions of faith: Religious affiliations and suicidal ideation among sexual minority young adults

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Abstract

Objective: To examine how the associations of specific religious affiliations with recent suicidal ideation vary by sexual orientation among young adults.

Method: This project was a cross-sectional secondary analysis of data from the 2006 and 2011 surveys of the National Research Consortium of Counseling Centers in Higher Education. The analytic sample was restricted to persons between the ages of 18–29 ($n = 40,150$). Multiple logistic regression analyses were used to examine associations of religious affiliations with recent suicidal ideation between heterosexual and sexual minority (e.g., gay, lesbian, bisexual, questioning) young adults.

Results: Approximately 6.7% of the sample self-identified as sexual minority. Compared to heterosexuals, sexual minorities were more likely to report recent suicidal ideation (aOR = 4.52, 95% CI = 3.97–5.16). Among heterosexuals, Unspecified Christian and Catholic denominations were associated with 24% and 37% reduced odds of recent suicidal ideation compared to agnostic/atheist heterosexuals. However, among sexual minorities, Unspecified Christian and Catholic denominations were associated with 68% and 77% increased odds of recent suicidal ideation compared to agnostic/atheist sexual minorities. Unspecified Christian and Catholic sexual minorities had 184% and 198% increased odds of recent suicidal ideation compared to Unitarian/Universalist sexual minorities.

Conclusions: Although protective for heterosexuals, religious affiliation may not be globally protective against suicidal ideation among sexual minorities.

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CONFLICT OF INTEREST

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Keywords

suicidal ideation; sexual orientation; religion

1 | INTRODUCTION

Suicide continues to be the 10th leading cause of death in the United States (US) (Hedegaard, Curtin, & Warner, 2018), and the current suicide death rate among adolescents and young adults is the highest in nearly 20 years (Miron, Yu, Wilf-Miron, & Kohane, 2019). Young adulthood (ages 18–29) is a crucial time of stress from forging independence, increased health risk behaviors, and potential emergence of mental illness (Arnett, Žukauskien , & Sugimura, 2014). For example, among the more than 10 million adults in the United States who reported suicidal ideation in the last year, the prevalence of suicidal ideation among young adults is four times higher than adults aged 50 or older (Substance Abuse & Mental Health Services Administration, 2018). Suicidal ideation is specifically high among young adults who identify as lesbian, gay, bisexual, queer, or who are questioning their sexual orientation (i.e., sexual minority) (Blosnich & Bossarte, 2012; Tsypes, Lane, Paul, & Whitlock, 2016). Although many studies elucidated risk and protective factors related to suicidal ideation among sexual minorities (Haas et al., 2010), few examined how one specific factor, religiosity, which is generally held as protective against suicidal ideation (Bonelli & Koenig, 2013) may actually be associated with suicidal ideation for sexual minorities.

Although difficult to define, Bergan and McConatha (2001) conceptualized religiosity as “various dimensions associated with religious beliefs and involvement (p. 24).” Despite the different ways religiosity has been measured in research—from attendance of religious services, to rating importance of religion, to simply having a religious affiliation—literature concordantly shows that religiosity is generally protective against poor mental health and suicidal phenomena (Bonelli & Koenig, 2013). Religiosity is theorized to be health promoting in terms of increasing avenues of social support, feelings of belongingness that come with shared values and practices, and preventing self-harm behaviors through doctrines that forbid suicide or suicidal thinking (Pescosolido & Georgianna, 1989; Stack, 1992). However, recent research casts doubt whether these protective factors hold for sexual minorities because some religions may purposefully or inadvertently stigmatize sexual minority people, for instance by maintaining same-sex attraction is sinful or refusing to acknowledge same-sex marriages (Clarke, Brown, & Hochstein, 1989). Qualitative studies of sexual minorities have documented consistent narratives of stress and lack of connectedness related to nonaffirming experiences with religion (Jacobsen & Wright, 2014; Jeffries et al., 2014; Levy & Reeves, 2011; Schuck & Liddle, 2001).

Though scant, quantitative studies corroborate personal narratives in qualitative studies. For example, Meyer, Teylan, & Schwartz (2015) found that, among a sample of sexual minorities, religious counseling for mental health was positively associated with suicide attempt, whereas medical treatment for mental health was negatively associated with suicide attempt. In two different studies among college students, Lytle, De Luca, Blosnich, and

Brownson (2015) noted that Jewish and Christian sexual minorities had significantly higher prevalence of suicidal ideation than their peers in the same religious affiliation, and that greater importance of religion was protective against suicidal ideation for heterosexuals but was positively associated with suicidal ideation among sexual minorities (Lytle, Blosnich, De Luca, & Brownson, 2018). Although providing evidence of disparities, these past studies were not equipped to examine more nuanced measures of religion, such as specific denomination.

Some religious affiliations have core tenets that stigmatize sexual minorities (e.g., same-sex sexual behavior as sinful) and ban sexual minority individuals from religious leadership (Besen & Zicklin, 2007; Garneau & Schwadel, 2013; Olson, Cadge, & Harrison, 2006). However, some religious affiliations, such as Unitarian Universalist faith, openly support and welcome sexual minority congregants (Green, 2003). Thus, religion may function protectively for sexual minorities as it does for heterosexuals if sexual minorities can find affirming religions, such as affiliations that do not condemn same-sex attractions as a sin, support, and perform same-sex marriages, and allow sexual minorities to hold leadership roles in the religious organization (Rosenkrantz, Rostosky, Riggle, & Cook, 2016; Rostosky, Riggle, Brodnicki, & Olson, 2008). Consequently, understanding the nuances among different denominations can help to disentangle the complexity of how religion is related to suicidal ideation among sexual minorities in the United States.

To fill gaps in the literature about how specific religious denominations and affiliations may be associated with suicidal ideation among sexual minority young adults, we capitalized on existing data that contain a rare inclusion of three key items: religious affiliation, sexual orientation, and suicidal ideation. We hypothesize that (1) sexual minority young adults will be more likely than their heterosexual peers to report either an affiliation as Unitarian/Universalist or atheist/agnostic/secular; (2) among all religious affiliations except Unitarian/Universalist and atheist/agnostic/secular, sexual minorities will have greater odds of suicidal ideation in the past 12 months compared to their heterosexual peers; and (3) among sexual minorities, Unitarian/Universalist affiliation will be negatively associated with suicidal ideation in the past 12 months compared to all other religious affiliations.

2 | METHODS

2.1 | Sample

This project was a cross-sectional secondary analysis of data from the 2006 and 2011 surveys of the National Research Consortium of Counseling Centers in Higher Education (i.e., the Consortium), which both focused on mental health among college students. Both survey years incorporated stratified random samples of students from 4-year universities and colleges from across the United States who completed Web-based survey instruments. In the 2006 survey year, 26,451 students participated and in 2011, 26,292 students participated, representing response rates of 24.3% and 26.3%, respectively. These response rates are similar to those achieved in other Web-based surveys of college-based samples (Krebs et al., 2011; Sutfin et al., 2011; Vahratian, Patel, Wolff, & Xu, 2008), including the American College Health Association's National College Health Assessment (American College Health Association, 2007). Additional details about the Consortium data and methodology

have been previously published (Drum, Brownson, Denmark, & Smith, 2009). Questionnaire items germane to the present research questions were identical or very similar across the two survey years (see measures for further description), enabling us to combine 2006 and 2011 study data. Because the scope of the project involved the period of young adulthood (ages 18–29), we excluded respondents missing age ($n = 1275$; 2.4%) or who were 30 years of age or older ($n = 9692$; 18.4%).

2.2 | Religious affiliation

In both survey years, respondents were asked to indicate their religious affiliation. In 2006, the response options were as follows: agnostic, atheist, Buddhist, Christian, Hindu, Islamic, Jewish, Native American religion, nonreligious/secular, Unitarian/Universalist, or other. In 2011, the response options were as follows: none, agnostic, atheist, Buddhist, Christian, Hindu, Jewish, Muslim, Native American religion, Unitarian or Universality, or other. A key difference between survey years was that in 2011, if a student indicated Christian, they could specifically indicate if they were Catholic, LDS (Latter Day Saint), or Protestant. We first combined categories that were identical: Buddhist, Christian, Hindu, Jewish, Native American Religion, and Unitarian/Universalist. We then combined similar categories: Islam and Muslim were recoded into one category; none, agnostic, atheist, and nonreligious/secular were combined into one category.

Finally, we examined respondents who indicated “other” and wrote brief descriptions of their religious affiliation in an open-ended field of the survey. In 2006, 1297 respondents ages 18–29 wrote in answers, and 946 respondents ages 18–29 in 2011 wrote in answers. Authors reviewed the answers to reach consensus about recoding a respondent from the “other” category into a mainstream religious affiliation category. For example, in 2006, 180 respondents who indicated “other” wrote in “Catholic,” and these individuals were recoded into the Catholic category. Other examples include persons who wrote in “Baptist,” “Adventist,” or “Episcopalian” being recoded into the Protestant category, and persons writing in “Mormon” or “Church of Jesus Christ of Latter Day Saints” were recoded into the LDS category. Since not all Christians specified a denomination, the Christian group was relabeled, “Unspecified Christian.” We excluded individuals who were missing religious affiliation ($n = 712$; 1.7%), and we excluded Native American religious affiliation due to small sample size ($n = 70$). From the total of 2243 write-in answers across both survey years, 51.0% ($n = 1143$) were recoded into mainstream religious affiliations; the remaining ambiguous write-in answers (e.g., “nondenominational” or “spiritual”) were left as “other” and excluded from analyses.

2.3 | Sexual orientation

During both survey years, participants were asked to self-identify their sexual orientation. Response options were similar across survey years: gay/lesbian, bisexual, heterosexual, questioning. We dichotomized this sexual orientation into heterosexual and sexual minority (i.e., gay/lesbian, bisexual, questioning). In 2011, respondents could indicate “other” and write in their sexual identity. Again, the authors reviewed answers from 259 respondents and recoded answers that mapped into the sexual minority category (e.g., queer, homosexual, pansexual, fluid) and answers that mapped into the heterosexual category (e.g., straight). A

total of 174 (67.2%) of the write in responses were recoded, and we excluded individuals missing data on sexual orientation ($n = 459$; 1.1%).

2.4 | Suicidal ideation in the past 12 months

In 2006, participants were asked, “Have you ever seriously considered attempting suicide?” and in 2011, participants were asked, “Have you ever seriously considered attempting suicide at some point in your life?” Participants who answered affirmatively were then asked, “During the past 12 months, have you seriously considered attempting suicide?” (item was worded identically in 2006 and 2011). Persons who answered yes to the second question were considered to have suicidal ideation in the past 12 months. Persons missing data on the suicidal ideation questions were excluded from analyses ($n = 405$; 1.0%).

2.5 | Socio-demographics

Sample characteristics included gender (men or women), international student status (yes or no), and partnership status (single/not currently dating or partnered/dating). Answer options to the question about racial/ethnic identity varied between survey years (e.g., the 2006 survey used “Asian-American,” whereas the 2011 survey used “Asian or Asian-American [e.g., Chinese, Japanese, Korean]”). Because of the lack on congruence and risk of misclassification, we recoded race/ethnicity as white or minority racial identity. Additionally, because the main outcome was suicidal ideation in the past 12 months, history of mental illness is a major correlate (Klonsky, May, & Saffer, 2016). Unfortunately, the surveys did not include questions about mental illness diagnoses; however, we included one item that was identically worded in both survey years to account for a history of mental illness. The item read, “Have you ever taken medication for mental health concerns?” with response options of yes or no. This item was chosen over an item about past counseling and mental health treatment because the responses about past mental health treatment included options that are more reflective of everyday stressors (e.g., massage therapy) instead of a mental health diagnosis. Conversely, we believed the question about medication for mental health concerns to more accurately identify students who are most likely have mental health diagnoses such as depression and anxiety. Because socio-demographics were not key variables of interest for the present analyses, missing data were handled with listwise deletion.

2.6 | Analyses

We examined differences between heterosexual and sexual minority respondents on all study variables using chi-square tests and reporting frequencies and percentages. To test how religious affiliation was associated with suicidal ideation in the past 12 months, we used multiple logistic regression models stratified by sexual minority status and adjusted for socio-demographic characteristics. We also adjusted for survey year, but because the analytic sample was restricted to the period of young adulthood, we did not adjust for age. We used the atheist/agnostic/secular category as the reference because this group would lack the religious-based factors that protect people from suicidal ideation (e.g., social connectedness, moral objection to self-harm). To test the hypothesis that, among sexual minorities, having a Unitarian/Universalist affiliation would be protective against suicidal ideation compared to other religious affiliations and compared to atheist/agnostic/secular, we coded Unitarian/

Universalist as the reference category against which all other affiliations were compared in the multiple logistic regression model. We report adjusted odds ratios (aOR) and 95% confidence intervals, and statistical significance was assessed using $p < .05$. The institutional review board of [institution name masked for peer review] approved this study.

3 | RESULTS

The final analytic sample included 40,150 respondents, and 6.7% ($n = 2679$) of the sample self-identified as sexual minority. Compared to heterosexual respondents, a greater proportion of sexual minority respondents were men, identified as racial/ethnic minority, and were international students (Table 1). Sexual minority and heterosexual respondents differed in religious affiliation. For example, sexual minorities were more likely to identify as atheist/agnostic/secular compared to their heterosexual peers (44.0% vs. 24.4%, $p < .001$). Sexual minority respondents had more than twice the prevalence of heterosexual respondents of taking medication for mental health concerns in their lifetime (31.6% vs. 15.0%, $p < .001$).

Overall, after adjusting for socio-demographic characteristics and ever receiving medication for mental health concerns, sexual minority young adults had 4.5 times greater odds of suicidal ideation in the past 12 months compared to their heterosexual peers (aOR = 4.52, 95% CI = 3.97–5.16; Table 2). In multivariable models stratified by religious affiliation, sexual minority respondents were significantly more likely than their heterosexual peers to report suicidal ideation in the past 12 months (except for Unitarian/Universalist and Islam). For example, compared to heterosexual Catholics, sexual minority Catholics had over five times the odds of suicidal ideation in the past 12 months (aOR = 5.25, 95% CI = 3.23–8.52).

Different patterns emerged among heterosexual and sexual minority groups when comparing the associations of different religious affiliations with suicidal ideation in the past 12 months. For heterosexuals, Unspecified Christian, Catholic, Protestant, Latter Day Saint, and Jewish affiliations were all associated with significantly lower odds of suicidal ideation in the past 12 months compared to heterosexuals who identified as atheist/agnostic/secular (Table 3). However, an opposite association emerged for sexual minorities: Compared to sexual minorities who identified as atheist/agnostic/secular, Unspecified Christian and Catholic sexual minorities had *greater* odds of suicidal ideation in the past 12 months (aOR = 1.68, 95% CI = 1.24–2.28 and aOR = 1.77, 95% CI = 1.07–2.91, respectively).

Additionally, among sexual minorities, after adjusting for covariates, Unspecified Christian and Catholic sexual minorities had nearly three times the odds of suicidal ideation in the past 12 months (aOR = 2.84, 95% CI = 1.04–7.72 and aOR = 2.98, 95% CI = 1.01–8.80, respectively) compared to sexual minorities who were Universalist/Unitarian (Table 4).

4 | DISCUSSION

This study took a unique approach of examining whether religious affiliation was associated with lower odds of suicidal ideation among sexual minority young adults. The data supported the first hypothesis that sexual minority young adults would be overrepresented among Universalists/Unitarians and individuals identifying as atheist/agnostic/secular. There was partial support for the second hypothesis in that sexual minorities across most religious

affiliation strata had significantly greater odds of suicidal ideation in the past 12 months compared to their heterosexual peers. However, the data did not support that sexual minority Universalist/Unitarian affiliation or sexual minority atheist/agnostic/secular individuals had significantly lower odds of suicidal ideation in the past 12 months compared to their respective heterosexual peers. Lastly, there was partial support for the third hypothesis, as sexual minority Universalist/Unitarians had significantly lower odds of suicide ideation in the past 12 months compared to their sexual minority Unspecified Christian and Catholic counterparts. The findings corroborate previous research that operationalized religion in other ways (e.g., frequency of religious activities, seeking mental health counseling from religious sources [Baams, De Luca, & Brownson, 2018; Barnes & Meyer, 2012], importance of religious beliefs [Lytle et al., 2018]), suggesting that religiosity may not be protective against suicidal ideation for sexual minority populations in the way it is for heterosexual populations.

In a unique contribution, the results suggest that an affirming religion (i.e., Universalism/Unitarianism) displayed protective associations against recent suicidal ideation among sexual minorities. Universalist/Unitarian faith is well known as a religious affiliation that openly affirms sexual and gender minority individuals (Oppenheimer, 1996), and qualitative evidence supports sexual minority people changing their faith to and finding solidarity in Universalist/Unitarian faith communities (Schuck & Liddle, 2001), suggesting that for some sexual minorities, finding a community of faith through religion is an important element for their well-being. It is possible that the affirming experiences in Universalist/Unitarian faith communities of allowing sexual minorities to live openly, be leaders in the organization, support same-sex marriage, and advocate for equal rights create the religious environments in which sexual minorities can have acceptance, social connection, and community integration in ways not afforded to them in religious affiliations that are not affirming.

Faith-based organizations' participation is crucial in suicide prevention, yet negative messaging around sexual minorities may weaken such efforts to seek help while experiencing distress. The National Strategy for Suicide Prevention promotes collaboration of faith-based partners in suicide prevention (U.S. Department of Health & Human Services, 2012), but their most recent publication never mentions the complicated relationship between some religions and sexual minorities (National Action Alliance for Suicide Prevention & Faith Communities Task Force, 2019). The knowledge generated from our previous work, and this current study further strengthens the need to develop empirically driven, culturally sensitive prevention campaigns and policy recommendations for an increasingly diverse population of adolescents and young adults. Help-seeking among distressed adolescents and emerging adults is not fully understood (Wyman, 2014), especially among historically under-represented groups (Knox, Conwell, & Caine, 2004). Underserved minority populations often report insufficient culturally informed services and resources (De Luca, Blosnich, Hentschel, King, & Amen, 2016; De Luca, SchmeelkCone, & Wyman, 2015; De Luca, Yan, Lytle, & Brownson, 2014). Although sexual minority adults engage in mental health services at greater rates than their heterosexual peers (Blosnich, Nasuti, Mays, & Cochran, 2016), there is limited information regarding sexual minority adolescents.

Moreover, there are few faith-based prevention efforts developed for sexual minority individuals. The Family Acceptance Project (FAP) has developed trainings, consultations, and interventions to help families, practitioners, educators, and religious leaders better support sexual and gender minorities within the context of their faith, family, and culture (Ryan, 2010). Specifically, the FAP created a LDS booklet incorporating quotes from religious leaders and personal stories to help families balance their religious beliefs with providing more accepting environments (Ryan, 2013). Although their research and trainings tend to focus on promoting health and well-being among adolescent sexual minorities, this work could be adapted and used more broadly among faith-based organizations and college counseling centers. In addition, The Trevor Project's LGBTQ on Campus for Students is a brief online training to make colleges and universities safer and more supportive (Marshall, 2016; The Trevor Project, 2019). Though this program is currently being assessed, this type of resource that promotes prosocial and intergroup contact may have the potential to reduce bias, especially within religiously affiliated higher education institutions. Moreover, because of the diversity of religions in the United States, further research is necessary to understand faith-based suicide prevention efforts across an array of religious affiliations (e.g., Judaism, Islam, Buddhism).

These results have several limitations. As a cross-sectional analysis, it is not possible to evaluate causal links between the study variables and suicidal ideation in the past 12 months. Although the wording of items between the two survey years was nearly identical in most instances, there remains a possibility that differential item wording—however slight—could introduce response bias. The field struggles with the best operationalization of religious identity (e.g., affiliation, personal importance of beliefs, attendance of religious services) (Hall, Meader, & Koenig, 2008), and due to limited items across survey years, this analysis only used affiliation, which could invite measurement and omitted variable biases. Not to mention, participants most likely endorsed their current religious affiliation rather than the religion they were raised, which could help explain why hypothesis two was only partially supported. The sample sizes of some of the sexual minority groups were small (e.g., 14 sexual minorities indicated Latter Day Saint affiliation), which likely hampered statistical power. Additionally, although there is heterogeneity among sexual minority groups, sexual minorities were combined because of small sample sizes. Despite being a large nationwide sample, the respondents were college-attending young adults with arguably more resources than similar-aged young adults who are not enrolled in college, so results may not generalize to different populations. Although we accounted for racial/ethnic identity in these analyses through covariate adjustment, there may be unmapped implications of sexual minority, racial/ethnic identity, and religious affiliation that could be explored in future analyses that can account for intersectionality (Lester & Walker, 2017). Unfortunately, the numbers of sexual minority respondents who were also racial/ethnic minority were too small to drive such analyses when stratified across 10 different religious affiliation categories in the present analyses. Lastly, our measure of ever taking medication for a mental health concern was broad and may not have fully captured history of mental illness.

Limitations notwithstanding, this analysis is among one of the first and largest to disentangle sexual orientation differences among specific religious identities, including some specific Christian denominations. The results uphold a sobering pattern that sexual minority young

adults have disproportionately high prevalence of suicidal ideation (Hottes, Bogaert, Rhodes, Brennan, & Gesink, 2016), to an extent that the long-held protective association of religious affiliation had no statistically significant protective association. In fact, in some instances, religious affiliation was positively associated with suicidal ideation for sexual minorities. The National Strategy for Suicide Prevention both identifies sexual minorities as a specific minority population of focus for prevention and encourages faith-based partnerships for suicide prevention (U.S. Department of Health & Human Services, 2012). Increasingly, research is revealing how complicated these two initiatives may be (Barnes & Meyer, 2012; Gibbs & Goldbach, 2015; Lytle et al., 2018), highlighting a vacuum of guidance on constructive plans for equity in suicide prevention.

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TABLE 1

Socio-demographics and mental health treatment among college students (ages 18–29) by sexual minority status, National Research Consortium of Counseling Centers in Higher Education 2006 and 2011

	Heterosexual	Sexual minority	
	<i>(n = 37,471)</i>	<i>(n = 2679)</i>	
	<i>N (%)</i>	<i>n (%)</i>	<i>p</i>
Gender			
Men	14,124 (37.7)	1060 (39.6)	0.024
Women	23,257 (62.1)	1591 (59.4)	
Race			
White	27,618 (73.7)	1539 (57.5)	<0.001
Minority	8765 (23.4)	918 (34.3)	
International student	2827 (7.5)	234 (8.7)	0.025
Current relationship status			
Single/not currently dating	15,628 (41.7)	1136 (42.4)	0.071
Partnered/dating	21,729 (58.0)	1467 (54.8)	
Religious affiliation			
Atheist/Agnostic/Secular	9161 (24.4)	1179 (44.0)	<0.001
Unspecified Christian	15,495 (41.3)	707 (26.4)	
Catholic	4396 (11.7)	167 (6.2)	
Protestant	3555 (9.5)	129 (4.8)	
Latter Day Saint	659 (1.8)	14 (0.5)	
Universalist Unitarian	266 (0.7)	59 (2.2)	
Jewish	1017 (2.7)	76 (2.8)	
Islam	481 (1.3)	30 (1.1)	
Buddhist	475 (1.3)	59 (2.2)	
Hindu	729 (1.9)	41 (1.5)	
Ever taken medication for mental health concerns	5634 (15.0)	846 (31.6)	<0.001

Note: Total may not sum to 100% due to missing data.

Suicidal ideation in past 12 months between sexual minority and heterosexual college students (ages 18–29), overall and by religious affiliation, National Research Consortium of Counseling Centers in Higher Education 2006 & 2011

TABLE 2

	Suicidal ideation in past 12 months		
	Unadjusted bivariate	Multivariable ^a	
Overall	<i>n</i> (%)	<i>p</i>	aOR (95% CI)
Heterosexual	1164 (3.1)	<0.001	Ref
Sexual Minority	602 (22.5)		4.52* (3.97–5.16)
Religious affiliation Atheist/Agnostic/Secular			
Atheist/Agnostic/Secular			
Heterosexual	387 (4.2)	<0.001	Ref
Sexual Minority	179 (15.2)		2.53* (2.04–3.13)
Unspecified Christian			
Heterosexual	406 (2.6)	<0.001	Ref
Sexual Minority	259 (36.6)		8.78* (6.96–11.07)
Catholic			
Heterosexual (<i>n</i> = 4393)	125 (2.8)	<0.001	Ref
Sexual Minority (<i>n</i> = 167)	29 (17.4)		5.25* (3.23–8.52)
Protestant			
Heterosexual (<i>n</i> = 3343)	111 (3.1)	<0.001	Ref
Sexual Minority (<i>n</i> = 119)	17 (13.2)		3.22* (1.74–5.95)
Latter day saint			
Heterosexual (<i>n</i> = 659)	13 (2.0)	<0.001	Ref
Sexual Minority (<i>n</i> = 14)	3 (21.4)		11.81* (1.40–99.32)
Unitarian/Universalist ^b			
Heterosexual (<i>n</i> = 266)	9 (3.4)	0.003	Ref
Sexual Minority (<i>n</i> = 59)	11 (18.6)		1.77 (0.50–6.29)
Jewish ^b			
	21 (2.1)	<0.001	Ref

Suicidal ideation in past 12 months			
	Unadjusted bivariate	Multivariable ^a	
Overall	<i>n</i> (%)	<i>p</i>	aOR (95% CI)
Sexual Minority (<i>n</i> = 59)	16 (21.1)		4.94* (2.02–12.09)
Islam ^c			
Heterosexual (<i>n</i> = 481)	13 (2.7)	0.061	Ref
Sexual Minority (<i>n</i> = 30)	3 (10.0)		1.60 (0.19–13.33)
Buddhist			
Heterosexual (<i>n</i> = 475)	14 (2.9)	<0.001	Ref
Sexual Minority (<i>n</i> = 59)	11 (18.6)		5.12* (2.03–12.88)
Hindu ^c			
Heterosexual (<i>n</i> = 728)	20 (2.7)	<0.001	Ref
Sexual Minority (<i>n</i> = 41)	9 (21.9)		9.22* (3.32–25.64)

Abbreviations: aOR, adjusted odds ratio; CI, confidence interval.

^aAdjusted for gender, international student status, partnership status, race/ethnicity, survey year, and ever taken medication for mental health concerns.

^bInternational student status omitted from final model because of perfect prediction.

^cRace/ethnicity omitted from final model because of perfect prediction.

* $P < 0.05$

TABLE 3

Association of religious affiliations with suicidal ideation in the past 12 months among college students (ages 18–29) by sexual minority status, National Research Consortium of Counseling Centers in Higher Education 2006 & 2011

	Suicidal ideation in the past 12 months^a	
	Heterosexual	Sexual Minority
	(n = 34,892)	(n = 2193)
	aOR (95% CI)	aOR (95% CI)
Religious affiliation		
Atheist/Agnostic/Secular	Ref	Ref
Unspecified Christian	0.7 * (0.65–0.89)	1.68 * (1.24–2.28)
Catholic	0.6 * (0.51–0.76)	1.77 * (1.07–2.91)
Protestant	0.68 * (0.54–0.85)	1.28 (0.68–2.38)
Latter Day Saint	0.53 * (0.30–0.93)	1.35 (0.26–7.04)
Universalist Unitarian	0.73 (0.35–1.49)	0.59 (0.22–1.60)
Jewish	0.51 * (0.33–0.80)	0.95 (0.43–2.10)
Islam	0.59 (0.31–1.13)	0.39 (0.05–3.05)
Buddhist	0.77 (0.41–1.33)	1.63 (0.74–3.59)
Hindu	0.76 (0.44–1.30)	1.83 (0.62–5.40)

Abbreviations: aOR, adjusted odds ratio; CI, confidence interval.

^aAdjusted for gender, international student status, partnership status, race/ethnicity, survey year, and ever taken medication for mental health concerns.

* $p < 0.05$

TABLE 4

Association of religious affiliations with suicidal ideation in the past 12 months among sexual minority college students (ages 18–29), National Research Consortium of Counseling Centers in Higher Education 2006 & 2011

	<u>Sexual Minority</u>
	<u>(n = 2205)</u>
	<u>aOR (95% CI)</u>
Religious affiliation Universalist/Unitarian	Ref
Atheist/Agnostic/Secular	1.58 (0.60–4.20)
Unspecified Christian	2.84* (1.04–7.72)
Catholic	2.98* (1.01–8.80)
Protestant	2.15 (0.68–6.78)
Latter Day Saint	2.27 (0.34–15.36)
Jewish	1.60 (0.47–5.53)
Islam	0.66 (0.07–6.38)
Buddhist	2.74 (0.79–9.55)
Hindu	3.09 (0.72–13.17)

Abbreviations: aOR, adjusted odds ratio; CI, confidence interval.

^aAdjusted for gender, international student status, partnership status, race/ethnicity, survey year, and ever taken medication for mental health concerns

*
 $p < 0.05$

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