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RESEARCH ARTICLE

Association of Religiosity With Sexual Minority Suicide Ideation and Attempt

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Introduction: The purpose of this study is to explore how the associations between importance of religion and recent suicide ideation, recent suicide attempt, and lifetime suicide attempt vary by sexual orientation.

Methods: Survey data were collected from the 2011 University of Texas at Austin's Research Consortium data from 21,247 college-enrolled young adults aged 18-30 years. Respondents reported sexual identity as heterosexual, gay/lesbian, bisexual, or questioning. Two sets of multivariable models were conducted to explore the relations of religious importance and sexual orientation with the prevalence of suicidal behavior. The first model was stratified by sexual orientation and the second model was stratified by importance of religion. To explore potential gender differences in self-directed violence, the models were also stratified by gender identity. The main outcome measures were recent suicidal ideation, recent suicide attempt, and lifetime suicide attempt.

Results: Overall, increased importance of religion was associated with higher odds of recent suicide ideation for both gay/lesbian and questioning students. The association between sexual orientation and self-directed violence were mixed and varied by strata. Lesbian/gay students who viewed religion as very important had greater odds for recent suicidal ideation and lifetime suicide attempt compared with heterosexual individuals. Bisexual and questioning sexual orientations were significantly associated with recent suicide ideation, recent attempt, and lifetime attempt across all strata of religious importance, but the strongest effects were among those who reported that religion was very important.

Conclusions: Religion-based services for mental health and suicide prevention may not benefit gay/lesbian, bisexual, or questioning individuals. Religion-based service providers should actively assure their services are open and supportive of gay/lesbian, bisexual, or questioning individuals. Am J Prev Med 2018;∎(■):■■■-■■. Published by Elsevier Inc. on behalf of American Journal of Preventive Medicine

INTRODUCTION

■ he crude suicide rate for individuals aged 18–30 years has increased, and in 2015 the rate was 14.87 suicides per 100,000 people. Although the suicide rate among sexual minority young adults is unknown, suicide ideation and attempt occur more frequently among lesbian, gay, bisexual, and questioning (LGBQ or sexual minority) individuals than heterosexual people.²⁻⁷ Specifically, gay men, bisexual men, and lesbian women have a greater risk for suicide attempts than heterosexual adults.8 In general, religiosity is regarded as protective against suicidal thoughts and behaviors; yet, religion can be either a source of support or stress for LGBQ individuals. 4,9-12 Consequently, it is

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unclear whether religiosity is protective against suicide ideation and attempt among LGBQ individuals.

The mechanisms through which religiosity diminishes suicide risk are unclear. 13-16 Particularly, moral objections (e.g., that suicide is an unforgiveable sin) may protect against suicidal behaviors, 15 and religion may serve as a proxy for connections to community or social support.¹⁷ Thus, scholars have started differentiating among religious importance, seeking spiritual guidance, and religious attendance to determine whether these factors may serve as mechanisms of suicide prevention. Among the few longitudinal studies examining religion and suicidal behaviors, adults who attended religious worship at least once a month had lower odds of attempting suicide over the next 10 years compared with those who did not attend, and individuals who sought spiritual comfort had lower odds of suicide ideation for 10 years compared with people who were not spiritual.¹⁸ Similarly, there are inverse relationships between suicide ideation and religious attendance, religious well-being, and spiritual well-being among college students. 16

Religious groups' perceptions vary about LGBQ individuals. High levels of individual religiousness are often associated with negative attitudes towards LGBQ people, ¹⁹ and the link between internalized homonegativity and religiously based stigma is well documented, especially among non-affirming religious environments. ^{9,10,12} Despite the fraught relations between religion and sexual orientation, many LGBQ individuals are religious, view religion as important, or have sought religious support after attempting suicide. ^{9–11,20–22} Thus, the association between religion and suicidal behavior among LGBQ individuals have been mixed.

Religiosity among LGBQ individuals and their parents have direct relationships to suicide attempts. 12 For example, a study of LGB individuals in Austria with a religious affiliation had lower odds of attempting suicide than LGB adults who were not affiliated, and those who felt a greater sense of belongingness to their religious organization were less likely to endorse suicide ideation. Within a religiously diverse sample, the prevalence of passive (e.g., wish life would end) and active (e.g., considered suicide attempt) suicide ideation was greater among atheist/agnostic, Christian, non-religious, and other religiously affiliated LGB students than heterosexual students.⁴ Relatedly, LGB individuals who left their religion to resolve the conflict between their sexual orientation and religious affiliation had greater odds of attempting suicide than those with unresolved conflict.¹¹

LGBQ individuals may experience alienation and distress from religion or attempt to negotiate their intersecting religious and sexual identities.^{23,24} Consequently, the association between religiosity and suicidal

behaviors is complicated for LGBQ individuals. Religion may not confer protection against suicidal behaviors or may be positively associated with suicidal thoughts and behaviors. Because few data sets contain information about sexual orientation, religiosity, and suicide ideation and attempt, there is a paucity of studies examining the association between religiosity and suicidal behavior among LGBQ individuals. The present hypothesis is that religiosity is negatively associated with suicide ideation and attempt among heterosexual individuals, but positively associated with suicide ideation and attempt among LGBQ individuals. Further, LGBQ status is associated with greater odds of suicide ideation and attempt among individuals endorsing greater religiosity.

METHODS

Study Sample

Data are from the National Research Consortium of Counseling Center in Higher Education at the University of Texas at Austin. The Consortium conducts national studies on mental health among college students. In 2011, the Survey of Distress, Suicidality, Student Coping was conducted among probability-based samples from 74 higher education institutions and aggregated into a national data set made available to researchers. This survey was self-administered through a web-based questionnaire, the combined response rate between the undergraduate and graduate students was 26.3% and 26,292 students completed the survey. Because this study focused on young adulthood, the sample was restricted to individuals aged 18-30 years (n=21,247). Approximately 2.1% (n=550) were excluded for missing data about age, along with 4,495 individuals (17.1%) who were aged >30 years. Additional information about the methodology have been published.²⁵ This study was approved by the University of Texas at Austin's IRB.

Measures

The main outcome measures were suicide ideation in the past year, suicide attempt in the past year, and lifetime suicide attempt. Respondents were asked: *Have you ever seriously considered attempting suicide at some point in your life?* Individuals who answered *yes* were presented questions about suicidal behaviors. Those who answered *no* did not receive follow-up inquiries and were recoded as no on further suicide ideation and attempt questions. People who indicated lifetime suicide ideation were asked: *During the past 12 months, have you seriously considered attempting suicide?* Affirmative responses were defined as recent suicide ideation.

People who indicated lifetime suicide ideation were asked: *How many times in your life have you attempted suicide?* Response options ranged from zero to five or more. All non-zero responses were defined as lifetime suicide attempt. Those who indicated a non-zero response were asked: *How many of those attempts occurred in the past 12 months?* Response options ranged from zero to five or more. All non-zero responses were defined as recent suicide attempt.

Religiosity was operationalized as: *How important are your religious or spiritual beliefs to your personal identity?* Individuals responded on a Likert-type scale ranging from 1 (not at all important) to 5 (very important). Although the survey included a

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question about religious affiliation (e.g., Buddhist, Jewish), this variable was not included because: (1) it was not mutually exclusive, making it impossible to discern a dominant religion among those who endorsed multiple affiliations; and (2) despite overarching doctrine, many individuals seek alternative or affirming places of worship within an otherwise unwelcoming doctrine (e.g., a Baptist church that officiates same-sex marriages). The survey did not include measures of religious activities (e.g., frequency of worship).

For sexual identity, respondents were asked: *How would you describe your sexual orientation?* Response options included: *bisexual, gay or lesbian, heterosexual, questioning*, and *other*. Among the 286 (1.3%) who indicated *other*, 268 supplied open responses. Although some of the other respondents could be included in the main sexual orientation groups (e.g., 59 respondents indicated straight), the majority of the responses (e.g., asexual, pansexual, queer) did not align with the existing categories. Thus, one respondent was recoded as lesbian/gay, 124 were recoded as heterosexual, and 143 were excluded from analyses. Because young people who are unsure of their sexual identity often report self-directed violence, the questioning category was maintained.²⁷

Multivariable models were adjusted for sociodemographic characteristics. Gender identity was coded as female, male, or transgender and age was included as a continuous variable. Race and ethnicity was recoded into mutually exclusive groups of white, black, Asian, Hispanic, and other; for multivariable models, race/ethnicity was dichotomized into white and racial/ethnic minority. International student status (yes/no) and partnership status were included. Respondents were asked: What is your current relationship status? (Select all that apply). The response options were: single and not currently dating, casually dating, in a steady dating relationship, partnered or married, separated or divorced, and widowed. Because respondents could indicate multiple categories, the variable was dichotomized into individuals who only endorsed single and not currently dating versus all other responses as a conservative definition of partnership status.

Statistical Analysis

Chi-square tests of independence were used to examine differences by sexual orientation in sociodemographic characteristics, religious importance, and prevalence of suicide ideation and attempt. Two sets of multivariable models were conducted to explore the relations of religious importance and sexual orientation with suicidal behavior. In the first set, recent suicide ideation was regressed on religious importance (as a continuous variable), stratified by sexual identity and adjusted for sociodemographic variables; this modeling was repeated for recent and lifetime suicide attempt. In the second set, recent suicide ideation was then regressed on sexual orientation, stratified by religious importance and adjusted for sociodemographic variables, and this analysis was repeated for recent and lifetime suicide attempt. Because of small cell sizes across the five Likert categories of importance of religion, this variable was recoded into a 3-category variable, 1-2 were merged (not important), 3 (moderately important), and 4-5 were combined (very important). Because of differences in self-directed violence among men and women, models were also stratified by gender identity. 1,28 All estimates are reported as AORs with corresponding 95% CIs. Listwise deletion of all included dependent and independent variables was used for all analyses. All analyses were conducted using Stata/SE, version 12.

RESULTS

Among the analytic sample, 2.3% (n=485) individuals identified as lesbian/gay, 3.3% (n=696) identified as bisexual, and 1.1% (n=233) identified as questioning. All sociodemographics differed between sexual orientation groups (Table 1). Compared with heterosexuals, significantly greater proportions of sexual minorities reported that religion was not important. Notably, questioning individuals had the highest prevalence of recent suicide ideation (16.4%) and bisexual students had the highest prevalence of lifetime attempts (20.3%).

In multivariable analyses stratified by sexual orientation, religious importance was not significantly associated with suicide ideation and attempt among bisexual individuals, but was significantly protective among heterosexual individuals (Table 2). Among lesbian/gay and questioning individuals, religious importance was associated with increased odds of recent suicide ideation, which seemed driven primarily by women. For example, among lesbian/gay individuals, increasing religious importance was associated with 38% increased odds of recent suicide ideation and for lesbian/gay women, specifically, was associated with 52% increased odds of recent suicide ideation. Additionally, for questioning individuals, increasing religious importance was also associated with increased odds of recent suicide attempt (AOR=2.78, 95% CI=1.14, 6.78). For lifetime suicide attempt, there was a negative association of religious importance among heterosexual women (AOR=0.90, 95% CI=0.85, 0.95), but weak positive associations for lesbian women (AOR=1.34, 95% CI=0.97, 1.85) and questioning men (AOR=1.53, 95% CI=0.98, 2.37).

In multivariable analyses stratified by religious importance, there were mixed findings (Table 3). For example, lesbian/gay sexual orientation was not associated with greater odds of recent suicide ideation among individuals who reported religion was unimportant and moderately important; however, it was significantly associated with recent suicide ideation among individuals who reported religion as very important (Table 3). Conversely, bisexual and questioning sexual orientations were significantly associated with recent suicide ideation across all strata of religious importance; however, the patterns seemed to indicate the strongest effects were among the group for whom religion was very important.

Because of the rarity of recent suicide attempt, some estimates in Table 3 could not be generated for all sexual orientations across all religious importance strata; those that were estimable were unstable and should be

Table 1. Sociodemographics, Importance of Religion, and Self-directed in Early Adulthood, by Sexual Orientation

Characteristic	Heterosexual (<i>n</i> = 19 ,576)	Lesbian/Gay (n=485)	Bisexual (n=696)	Questioning (n=233)	p-value
Gender identity					
Men	7,193 (36.8)	301 (63.3)	173 (25.0)	73 (31.3)	< 0.001
Women	12,355 (63.2)	175 (36.2)	518 (75.0)	157 (67.4)	
Transgender	11 (0.06)	7 (1.4)	4 (0.6)	3 (1.3)	
Race					
White	13,825 (70.7)	315 (65.1)	461 (66.2)	144 (61.8)	< 0.001
Black	726 (3.7)	17 (3.5)	20 (2.9)	12 (5.1)	
Asian	2,047 (10.5)	42 (8.7)	109 (15.7)	38 (16.3)	
Hispanic	1,062 (5.4)	51 (10.6)	33 (4.7)	13 (5.6)	
Other	1,884 (9.6)	58 (12.0)	73 (10.5)	26 (11.2)	
Age, years, M (SD)	22.5 (3.3)	23.0 (3.4)	22.6 (3.3)	21.5 (3.1)	< 0.001
International student	1,795 (9.2)	32 (6.6)	109 (15.7)	32 (13.7)	< 0.001
Current relationship status					
Single/not currently dating	7,434 (38.0)	213 (43.9)	252 (36.2)	153 (65.7)	< 0.001
Partnered/dating	12,078 (62.1)	272 (56.1)	444 (63.8)	80 (34.3)	
Importance of religion					
1 Not at all important	3,513 (18.0)	146 (30.2)	188 (27.1)	61 (26.3)	< 0.001
2	2,937 (15.1)	99 (20.5)	115 (16.5)	44 (19.0)	
3 Moderately important	5,381 (27.5)	136 (28.2)	197 (28.3)	65 (28.0)	
4	2,735 (14.0)	60 (12.4)	91 (13.1)	26 (11.2)	
5 Very important	4,971 (25.4)	42 (8.7)	104 (15.0)	36 (15.5)	
Social connectedness, M (SD)	10.7 (2.54)	10.0 (2.70)	9.7 (2.57)	8.92 (2.4)	0.011
Recent suicidal ideation	721 (3.7)	31 (6.5)	79 (11.4)	38 (16.4)	< 0.001
Recent suicide attempt	82 (0.4)	20 (3.3)	4 (0.9)	6 (2.9)	< 0.001
Lifetime suicide attempt	969 (5.0)	67 (14.0)	140 (20.3)	40 (17.2)	< 0.001

Note: Values are n (%) unless otherwise noted.

interpreted with caution. Among individuals who reported religion was unimportant, lesbian/gay sexual orientation was not associated with recent suicide

attempt, but it was significant among the group for whom religion was very important. Bisexual sexual orientation was significantly associated with recent

Table 2. Importance of Religious Beliefs Associated With Self-directed Violence Among Early Adults, Stratified by Sexual Orientation

Importance of religion ^a	Heterosexual	Lesbian/Gay	Bisexual	Questioning
importance or religion			Discaudi	- Questioning
Recent suicide ideation, n	19,349	465	691	197
Overall ^b	0.91* (0.86, 0.96)	1.38 * (1.04 , 1.83)	1.04 (0.88, 1.24)	1.38 * (1.05 , 1.80)
Women ^c	0.92* (0.86, 0.98)	1.52 ^{**} (0.96, 2.40)	1.04 (0.86, 1.27)	1.39 ** (0.98, 1.98)
Men ^c	0.90* (0.82, 0.98)	1.23 (0.86, 1.76)	0.95 (0.62, 1.45)	1.32 (0.86, 2.03)
Recent suicide attempt, n	18,790	406	611	177
Overall ^b	0.83* (0.71, 0.97)	1.42 (0.68, 2.97)	1.15 (0.82, 1.63)	2.78 [*] (1.14, 6.78)
Women ^c	0.89 (0.74, 1.06)	2.30 (0.82, 6.45)	1.18 (0.78, 1.80)	4.09 (0.53, 31.34)
Men ^c	0.68* (0.48, 0.94)	_	1.32 (0.68, 2.57)	2.34 (0.66, 8.27)
Lifetime suicide attempt, n	19,386	474	688	229
Overall ^b	0.91* (0.87, 0.96)	1.04 (0.85, 1.28)	1.09 (0.96, 1.26)	1.25 (0.97, 1.60)
Women ^c	0.90* (0.85, 0.95)	1 .34 ^{**} (0.97, 1 .85)	1.08 (0.93, 1.27)	1.13 (0.83, 1.56)
Men ^c	0.94 (0.87, 1.03)	0.85 (0.64, 1.13)	1.16 (0.83, 1.60)	1.53 ^{**} (0.98, 2.37)

Note: Values are AOR (95% CI) unless otherwise noted. Boldface indicates statistical significance (p < 0.05, p < 0.10).

^aImportance of religion entered into models as a continuous measure.

^bModels adjusted for age, gender identity, race/ethnicity, international status, and current relationship status.

[°]Models adjusted for age, race/ethnicity, international status, and current relationship status.

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Table 3. Association of Sexual Orientation with Self-directed Violence, Stratified by Religious Importance

	Religious importance					
Sexual orientation	Not important	Moderately important	Very important			
Recent suicide ideation						
Lesbian/Gay						
Overall	1.41 (0.81, 2.47)	0.90 (0.33, 2.48)	4.17 [*] (2.27, 7.64)			
Women	1.41 (0.56, 3.54)	0.56 (0.08, 4.11)	4.75 [*] (1.94, 11.60)			
Men	1.43 (0.71, 2.90)	1.21 (0.37, 3.98)	3.80 [*] (1.66, 8.69)			
Bisexual						
Overall	3.10 [*] (2.13, 4.50)	2.69 [*] (1.59, 4.53)	4.62 [*] (2.98, 7.14)			
Women	3.60 [*] (2.37, 5.47)	2.29 [*] (1.23, 4.25)	5.35 [*] (3.29, 8.69)			
Men	1.59 (0.62, 4.05)	4.59 [*] (1.71, 12.29)	2.00 (0.60, 6.64)			
Questioning						
Overall	2.43 [*] (1.31, 4.52)	4.06 [*] (1.96, 8.43)	10.26 * (5.73, 18.39)			
Women	2.14 (0.96, 4.78)	3.80 [*] (1.65, 8.72)	8.99 [*] (4.28, 18.90)			
Men	3.16 [*] (1.18, 8.44)	5.28 [*] (1.14, 24.58)	15.32* (5.86, 40.02)			
Recent suicide attempt	• , ,	, , ,	, , ,			
Lesbian/Gay						
Overall	1.61 (0.37, 6.91)	_	6.60 [*] (1.51, 28.84)			
Women	2.44 (0.32, 18.81)	_	11.67* (2.60, 52.33)			
Men	1.35 (0.17, 10.47)	_				
Bisexual						
Overall	4.88 [*] (2.17, 10.97)	5.94 [*] (2.00, 17.68)	11.21 * (4.75, 26.48)			
Women	4.61* (1.66, 12.80)	3.28 (0.74, 14.42)	9.06* (3.35, 24.54)			
Men	4.27 (0.91, 20.13)	30.01 [*] (4.37, 206.03)	26.87 [*] (4.44, 162.66)			
Questioning	(,	, , , , , , , , ,	,			
Overall	_	8.23 [*] (1.84, 36.88)	16.86 [*] (5.61, 50.62)			
Women	_	4.15 (0.53, 32.46)	4.63 (0.60, 35.51)			
Men	_	66.52 [*] (5.62, 787.12)	93.27* (18.38, 473.27)			
Lifetime suicide attempt		,	,			
Lesbian/Gay						
Overall	2.78 [*] (1.87, 4.15)	3.61 [*] (2.15, 6.05)	3.74 [*] (2.14, 6.54)			
Women	2.42* (1.32, 4.44)	1.85 (0.72, 4.76)	6.37* (3.11, 13.03)			
Men	3.21* (1.88, 5.47)	5.36* (2.77, 1 0.36)	2.11 (0.76, 5.46)			
Bisexual	, , , ,	, ,	(,,			
Overall	3.72 [*] (2.72, 5.08)	4.08* (2.76, 6.03)	6.59 [*] (4.64, 9.37)			
Women	3.79* (2.67, 5.36)	4.25* (2.79, 6.50)	6.76* (4.51, 10.14)			
Men	3.00 [*] (1.44, 6.26)	3.17* (1.09, 9.19)	5.59 [*] (2.67, 11 .67)			
Questioning	, (, ,)	(,	(,)			
Overall	2.27* (1.25, 4.12)	6.31 [*] (3.50, 11.37)	4.26 [*] (2.17, 8.35)			
Women	2.49* (1.25, 4.96)	5.54 [*] (2.80, 10.95)	3.19 [*] (1.32, 7.71)			
Men	1.91 (0.57, 6.43)	8.90 [*] (2.77, 28.59)	8.17 [*] (2.85, 23.44)			

Note: Values are AOR (95% Cl). Boldface indicates statistical significance (*p <0.05). All models adjusted for age, gender identity, race/ethnicity, international status, and current relationship status. "—" denotes results were suppressed due to perfect prediction. Heterosexual is the reference for each of the three strata of religious importance.

suicide attempt across all religious importance strata, but again the pattern of results suggested the strongest effects among the group for whom religion was very important.

Lastly, LGBQ groups overall had greater odds of lifetime suicide attempt than heterosexual individuals (Table 3). In gender-stratified analyses, compared with heterosexual people, all sexual minority groups

had greater odds of lifetime attempt, aside from gay men who viewed religion as very important, lesbian women who viewed religion as moderately important, and questioning men who viewed religion as unimportant.

Data from Table 3 were also summarized in post-hoc analyses that estimated the adjusted prevalence of recent

suicide ideation and lifetime suicide attempt in Appendix Figures 1 and 2 (available online). Results from recent suicide attempt could not be graphed because of suppression of some estimates across sexual orientation.

Post-hoc analyses were also conducted to include a 3item scale of social connectedness (i.e., how understood by others do you feel, how cared for by others do you feel, and how much do you feel that you can count on others). Each item had a 5-point Likert-type response that ranged from 1 (lower values) to 5 (greater values); reliability was acceptable (α =0.78). Overall, the adjustment of social connectedness did not change the pattern of findings for LGBQ respondents (Appendix Tables 1 and 2, available online); however, it did seem to account for many of the protective associations between religiosity and suicide ideation and attempt among heterosexuals (Appendix Table 1, available online).

DISCUSSION

The results partially supported the hypothesis that LGBQ groups do not experience the benefits of religiosity's protective association against suicide ideation and attempt. Conversely, greater religious importance was significantly protective against both suicide ideation and attempt among heterosexuals in this sample. Moreover, these findings corroborate that gender differences in the association between religiosity and suicidal behaviors are minimal,¹⁶ suggesting that other factors, such as connectedness, may play a stronger role. For example, the change in results after adjusting for social connectedness suggests how religiosity confers protection against suicide ideation and attempt among heterosexuals; the lack of change among LGBQ individuals suggests other religious factors (e.g., antigay messaging and internalized homophobia) may be involved. In fact, among individuals with the strongest religiosity, LGBQ people seemed to have the greatest odds of suicide ideation and attempt; however, there was considerable heterogeneity among them.

The positive associations among LGBQ groups are not surprising, given the relations between religion and LGBQ individuals, which are complicated at best and toxic at worst. For example, it is common knowledge that two of the world's most common religions, Christianity and Islam, largely condemn homosexuality as a sin. However, significant positive associations were not consistent among all sexual minority groups. One potential explanation for this may be that different individual approaches are used to negotiate the intersection of sexual and religious identities. For example, some sexual minority individuals may withdraw from religion or seek affirming communities, whereas others

may immerse themselves in religion.^{24,29} Thus, the heterogeneity in the results may speak to the potential nuanced ways that sexual minority communities navigate religious milieus.

Moreover, religious-based conflict over sexual identity is often associated with conversion therapy (i.e., trying to change/suppress one's sexual orientation),³⁰ a practice that is denounced by the American Psychological Association,³¹ among other professional organizations. This historic persecution of non-heterosexuality as well as more modern interpretation of scripture may have driven some religious institutions toward broadening their dogmatic practice to actively affirm and welcome LGBQ individuals.³² Yet, further research is needed about whether religions that are LGBQ-affirming may confer protective effects against suicidal behaviors among LGBQ individuals.

More importantly, the present results have direct implications for mental health services, suicide prevention, and help-seeking efforts. Specifically, efforts that are built around faith-based organizations (FBOs) may not be appropriate for LGBQ individuals in distress, especially when religion may be a contributing element of distress for LGBQ individuals.^{33–37} This conundrum seems to have been overlooked in the suicide prevention literature, perhaps because of the paucity of quantitative studies, such as the present investigation. For example, the 2012 National Strategy for Suicide Prevention suggests FBOs be a major partner in suicide prevention and that, by promoting connectedness, FBOs may aid in suicide prevention.²⁸ But to whom does this connectedness extend when ample literature suggests LGBQ people experience ostracism from their faith communities?^{24,38,39} Further, it is unclear whether enhanced training in suicide prevention for clergy and FBOs would serve LGBQ individuals if they perceived religious institutions as unwelcoming, thus undercutting help-seeking behaviors. Consequently, these findings, paired with the endorsement of FBOs as partners in suicide prevention, warrants research in several areas. For example, do LGBQ individuals actively avoid FBOs for mental health-related services? To what extent do FBOs serve LGBQ individuals, and do outcomes of service provision differ between heterosexual and LGBQ clients?

Limitations

There are a number of advantages to this study. Specifically, this large and diverse sample allowed investigating the differences among LGBQ individuals as well as rigorous adjustment for covariates (e.g., social connectedness). Despite the strengths of this research, there are several limitations. The data did not include

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questions about religious practice (e.g., religious attendance) or whether the associated religion espoused stigmatizing beliefs about sexual minorities; therefore, it was not possible to explore more nuanced relationships between religiosity and self-directed violence among LGBQ individuals. Although there is a religious affiliation variable, it was not included because it cannot account for the significant variation between denominations (e.g., Catholics, Protestants). With a sample from higher education institutions, these findings may not generalize to the broader population of LGBQ individuals. Although religious beliefs typically are instilled early in life by parents, because this is a cross-sectional analysis, it is not possible to ascertain any causal inferences between religiosity and suicidal behavior or if this relationship evolved over time. Although the response rate is similar for other large studies of young adults, 40-42 the response rate was relatively low, which limits generalizability. The estimates for some outcomes, primarily recent suicide attempt, were unstable because of small sample size of the LGBQ groups. Finally, the measure of sexual identity did not allow for nuanced categorization (e.g., mostly heterosexual).

CONCLUSIONS

This study begins to address an important gap in the literature by exploring the association between religiosity, suicidal behaviors, and sexual orientation. Previous literature suggested that religiosity may protect against suicidal behaviors, yet those protective benefits were not observed among LGBQ individuals in this sample. In fact, the results suggested that, among people who regarded religion as very important, sexual minority status was more strongly associated with suicide ideation and attempt than the associations observed among people who regarded religion as unimportant. Suicide prevention efforts that partner with religious-based services should be aware of potential conflicts between religion and LGBQ individuals. Faith-based partners in public health suicide prevention and intervention services should be willing and equipped to assist all people who seek their services, regardless of sexual orientation. Moreover, this study opens a more general question about how and if faith-based public health partnerships benefit LGBQ populations.

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SUPPLEMENTAL MATERIAL

Supplemental materials associated with this article can be found in the online version at https://doi.org/10.1016/j.amepre.2018.01.019.

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