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Original Contributions: Sexual Identity and Suicidal Behaviors among LGBT Young Adults

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Importance: Sexual and transgender (LGBT) youth are at elevated risk for suicide attempts and other mental health problems, but population-level data are lacking on the prevalence of sexual and gender minority identities and on whether sexual and gender minority youth have higher rates of mental disorders than their heterosexual and cisgender peers. Moreover, it is unknown whether young adults who report higher rates of mental disorders (Kessler et al, 2005; Lewinsohn et al, 2000; Merikangas et al, 2010; Nock et al, 2005; Costello et al, 2003; Kessler et al, 2007; Nock et al, 2008; Costello et al, 2009; Costello et al, 2011) and suicide attempts (Nock et al, 2013; Nock et al, 2008; Nock et al, 2009; Nock et al, 2010; Nock et al, 2011) also have higher rates of sexual and gender minority identities. Although research with adolescents in Massachusetts has suggested that LGBT young adults are 3 times more likely to report suicide attempts than their heterosexual peers (Kessler et al, 2005; Lewinsohn et al, 2000; Merikangas et al, 2010; Nock et al, 2013), nationwide and young adult data have not been examined to date.

Objective: To understanding mechanisms that contribute to mental health disparities among LGBT young adults, we examine the prevalence of sexual and gender minority identities and whether young adults who report these identities have higher rates of mental disorders and suicide attempts than their heterosexual and cisgender peers.

Design, Setting, and Participants: Data from the Youth Risk Behavior Survey (YRBS) (Kann et al, 2016) and the Behavioral Risk Factor Surveillance System (BRFSS) (Centers for Disease Control and Prevention, 2013) were used to examine the prevalence of sexual and gender minority identities and whether young adults who report these identities have higher rates of mental disorders and suicide attempts than their heterosexual and cisgender peers. Data from the YRBS were collected from a nationwide sample of 15 000 students in grades 9 through 12 in the 48 states and the District of Columbia in 2015. Data from the BRFSS were collected from a nationwide sample of 1 000 000 adults aged 18 years and older in 2013 and 2014. Data were analyzed from 2017 to 2019.

Main Outcomes and Measures: Sexual and gender minority identities, mental disorders, and suicide attempts.

Results: Nationwide estimates from the YRBS and BRFSS indicate that approximately 2.0% of young adults aged 18 to 24 years identify as lesbian, gay, or bisexual (LGB) and approximately 0.3% of young adults aged 18 to 24 years identify as transgender. Young adults who identify as LGB have higher rates of mental disorders and suicide attempts than their heterosexual peers. Young adults who identify as transgender have higher rates of mental disorders and suicide attempts than their cisgender peers. Young adults who identify as LGB report higher rates of sexual and gender minority identities than do adolescents who identify as LGB (Kessler et al, 2005; Lewinsohn et al, 2000; Merikangas et al, 2010; Nock et al, 2013; Nock et al, 2008; Nock et al, 2009; Nock et al, 2010; Nock et al, 2011; Costello et al, 2003; Kessler et al, 2007; Costello et al, 2009; Costello et al, 2011).

(2) to investigate if international homophobia mediates this relationship; and 3) to determine if a religious upbringing is associated with sociability. In our study, data indicated that identity conflict that comes from discrimination felt between religious beliefs and LGBT identity was associated with higher risk of suicide.

All three indicators were associated with suicidal thoughts in the last month, parental anti-homosexual religious beliefs was associated with chronic suicidal thoughts in the last month and two indicators (i.e., having ever religion and parents religious beliefs) were associated with suicide attempts in the last year. Compared to the last year, in the case of suicide attempts, the two indicators were associated with a more than two times odds of having attempted suicide in the past year. It is important to note that the sample size included in the sample were not adolescents living at home, but college-aged young adults primarily living out of their parents' home. These two findings are especially unsettling, and add evidence not only to the literature on general family support and LGBT young adult outcomes, which find that family support is negatively associated with negative outcomes (Ryan, Huebner, Diaz, & Sanchez, 2009; Ryan, Russell, & Huebner, 2010), but to the more specific relationship that their religious beliefs may have on this critical behavioral health concern. While changing parental beliefs on homosexuality (particularly as it beliefs in this study were founded in religious doctrine) may not always be feasible, these findings indicate that there is a critical need to intervene with, not only, LGBT young adults but potentially their parents, families, and their belief systems. Further, while having one's religion could be considered a functional way of dealing with the conflict (Schick & Liddle, 2001), having one's religion due to the conflict was not associated with better mental health outcomes but instead a higher odds of both suicide attempt and suicidal thoughts.

Given the established relationship between internalized homophobia and suicide, it was included as a mediator to determine if religious conflict independently explained variance in sociability beyond the mediation of internalized homophobia. Although the sociability variable's impact on suicidal thoughts in the last month was completely diminished when internalized homophobia was considered. However, our study found that internalized homophobia only partially mediated the relationship between religious conflict and suicide, suggesting that other factors are influencing an individual's risk. We hypothesize that along with religious conflict, regardless of the source, other protective factors may be lost including social support networks. In the cases of parental beliefs and having one's religion, internalized homophobia was not a mediator, which suggests that these indicators of conflict act independently associated with suicidal thoughts. Further it appears that religious conflict, as indicated through parental beliefs, has a limited direct impact on chronic suicidal thoughts, as internalized homophobia fully mediated this relationship. This finding suggests that although parental religious beliefs are independently associated with suicidal thoughts when taking into account internalized homophobia, the relationship between parental beliefs and chronic suicidal thoughts are best accounted for by the level of internalized homophobia.

After consideration of internalized homophobia, the relationship between having one's religion and suicidal thoughts was significant. In our analysis, having one's religion is associated with a decrease in suicidal thoughts (OR=0.5). This finding was unexpected, but intuitively, on after found that having one's religion was associated with a higher risk of suicidal thoughts. Thus, a dual relationship was found where having the religion was related to lower internalized homophobia, leading to a lower odds of suicidal thoughts, but also an increase in the odds of suicidal thoughts directly. Further, the strength of the direct effect and indirect effect suggests that having one's religion of origin has a net impact of increasing the odds of suicidal thoughts, a potentially important clinical implication for those working with LGBT young adults. Although this study was not concerned with both religious and LGBT identities, its our measure was an indicator of conflict, it is possible it was also measuring an addition construct (e.g. those who have their religion may experience a disruption in their support system). This indicator, as well as parental anti-homosexual religious beliefs, may be increasing both conflict and problems in primary support. Concerns with our current measurement of minority stress constructs have been noted in other literature (Goldbach et al., 2015).

Internalized homophobia was not associated with suicide attempt in the last year. Conversely, parental beliefs and having the religion of origin were associated with a suicide attempt in the last year. This has important implications on clinical practice, as direct interventions that are focused on reducing suicide by diminishing feelings of internalized homophobia alone may be ineffective with this population. Rather, it is critical that parental relationships (parents and religious community) may be more impacting on deterring a suicide attempt than one's own guilt or self-concept, and adds evidence for family-centered approaches such as those being developed by researchers in the area (e.g., Family Acceptance Project, Ryan, Russell, Huebner, Diaz, Sanchez, 2010).

The last aim of this study was to investigate how religious upbringing impacts suicide and internalized homophobia. In our study, those who experienced a religious upbringing and are currently experiencing religious conflict were more at risk of considering suicide. Further, a religious upbringing in itself does not provide protection from suicidal ideation when compared to a non-religious upbringing. Thus, it appears that a religious upbringing that includes anti-sexual religious and LGBT identity conflict puts an individual more at risk of suicidal thoughts.

There were two important clinical implications found in the current study. First, it may seem counterintuitive that when individuals experience a religious upbringing, it is recommended that they accentuate that they unfortunately experience more risk for suicide. Clinicians should be aware that having one's religion of origin may not additional stressors that attempt to place a client at additional risk for suicide. Further, the negative impact felt from having one's religion due to conflict has a stronger impact than the positive indirect impact through a reduction in internalized homophobia. As many LGBT young adults often experience multiple levels of bias, clinical interventions should ideally entail a plan for enhancing supportive resources without risk of further isolation from communities of historical significance to the client (i.e., loss of community, potential rejection from family of origin). Second, it is important for clinical clients to be involved in conversations that recognize their religious tradition and their LGBT identity, which has been found qualitatively to be supportive (Gaspard & Cummella, 2010; Dunning, 2012). Second, it is apparent that LGBT young adults who experience religious identity conflict are at significant risk for suicide. When individuals experience conflict with an accepted belief structure this can cause great deal of distress, which may lead to a desire to escape. For this reason, suicide risk assessments could be enhanced by further understanding the role of the internalized homophobia and subsequent challenges adjusting to this.

The future of this research area will require further operationalization of religious identity conflict. The dearth of validated minority stress measures has been noted in the literature (Goldbach et al., 2015; Goldbach, et al., 2015). In our current study, indicators were utilized to measure conflict. The development of future measurement instruments, that measure this religious LGBT identity conflict, will help to pave out the relationships discussed in this study. These relationships also require further study through replication with an internalized homophobia variable that is scalar.

The current study had several limitations. First, the data was collected in 2008 by internet-based purposive sampling, and some of these constructs may have changed in the last decade. To date, however, this dataset remains the largest known to collect on variables of minority stress. As with all cross-sectional data, causation cannot be determined and the exact temporal relationship between variables is unknown. Second, the sample was primarily White and Caucasian with a small sample size, and therefore it is not clear if the individual experienced their most recent suicide attempt, which using this data could not be determined because so item was included in the survey to ask about the age the individual left their religion. Further, the study was largely male (77%), largely Caucasian (67%), and had very few transgender participants (2%). Thus, the study is limited in its ability to generalize to both women and the experiences of gender identity differences. Additionally, racial/ethnic minority individuals who identify as LGBT may experience unique identity conflict that is not accounted for in our research sample (Harakas, Dunn, Montoya, & Zanjani, 2015; Meyer, Dietrich, & Schwartz, 2008). Future research should include more racial/ethnic minorities and further highlight the need for study samples that are racially diverse and represent a diversity of genders and gender expressions. Finally, the study was limited by using an international homophobia variable that was not based on a scale but rather three binary questions. Although this created variables similar to the scale, it may have underestimated internalized homophobia, which is a complex construct with many components. Despite these concerns, the study offers novel evidence to clarify the complicated relationship between LGBT identity, internalized homophobia, religiosity, and suicide risk.

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