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The Influence of Intersecting Identities on Self-Harm, Suicidal Behaviors, and Depression among Lesbian, Gay, and Bisexual Individuals

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Abstract

Individuals with lesbian, gay, and bisexual (LGB) identities have higher prevalence of self-directed violence, but very little is known about racial/ethnic differences among LGB populations. This study aimed to examine racial/ethnic differences in self-harm, suicidal ideation, suicide attempt, and depression among LGB and heterosexual emerging adults. Data are compiled from the Fall 2008 and Spring 2009 National College Health Assessment and limited to respondents within emerging adulthood (ages 18-24) who indicated their sexual orientation and racial/ethnic identities ($n=89,199$). Within each racial/ethnic group, LGB individuals were significantly more likely to report self-harm, suicidal ideation, suicide attempt, and depression than non-LGB individuals.

Evidence suggests there are racial/ethnic differences in suicide attempts among emerging adults. In 2010, the CDC's crude rate of suicide for Asian, Black, Latino, non-Hispanic White (NHW), and Other racial/ethnic identity for 18-24 year old individuals were 8.35, 8.51, 8.37, and 14.99, and 12.95, respectively; suggesting that among emerging adults, NHWs have among the highest rates of suicide. There are also suicide risk disparities based on sexual orientation, with lesbian, gay, and bisexual (LGB) individuals being more likely than non-LGB individuals to report lifetime attempt suicide, suicidal ideation, self-harm, and depression (King, Semlyen, Tai, et al., 2008; Silenzio, Pena, Duberstein, Cerel, & Knox, 2007). Scholars have started to investigate the impact of intersecting identities on self-directed violence (Crosby, Ortega, & Melanson, 2011). For instance, although Black and Latino LGB individuals across all age groups tend to report lower prevalence of major depressive disorder than NHW LGB individuals, Black and Latino LGB individuals were more likely to report attempting suicide than NHWs (Meyer, Dietrich, & Schwartz, 2008; O'Donnell, Meyer, & Schwartz, 2011). However, there remains a paucity of research about self-directed violence and the heterogeneity within LGB populations.

In addition to race/ethnicity and sexual orientation, suicide attempts occur more often in emerging adulthood (Crosby, Han, Ortega, Parks, & Gfoerer, 2011). The term *emerging adult* refers to individuals in late adolescence through mid-twenties; a critical period for identity development and individualization (Arnett, 2007). Emerging adulthood is often a time when youth leave home to attend college, choose a vocation, and/or develop their own beliefs and values. For some LGB individuals who are also racial/ethnic minority persons, emerging adulthood may be the first opportunity to negotiate their intersecting identities, which may contribute to increased distress.

Predictors of self-harm and suicidal ideation among lesbian, gay, bisexual, and transgender (LGBT) youth include lack of family acceptance, insufficient social support, and victimization (Liu & Mustanski, 2011; Ryan et al., 2010). Further, racially/ethnically diverse LGB persons tend to negotiate between accessing support from their community and coming out, which may reduce available social support due to community-level discrimination (Smith, Foley, & Chaney, 2008). Therefore, some LGBT individuals may find themselves both at risk of losing the social support of their racial/ethnic community due to homonegativity and without support in the LGBT community due to racism (Smith et al., 2008).

Given the variability in suicide risk among several demographic characteristics, researchers should consider the intersection of multiple identities, and emerging adulthood may be an especially critical time to examine this due to the identity development during this period. Moreover, very little is known about racial/ethnic differences in suicide risk among LGB emerging adults. The aim of this study was to examine the influence of racial/ethnic identity and sexual orientation on self-directed violence among a large national sample of emerging adults enrolled in higher education. We hypothesized: (1) in comparison to non-LGB individuals, LGB persons would have higher prevalence of self-harm, suicidal thoughts, suicide attempts, and depression and (2) in comparison to NHW LGB students, racial/ethnic minority LGB students would have higher prevalence of self-harm, suicidal thoughts, suicide attempts, and depression.

Methods

Sample and Procedures

Data are from the American College Health Association (ACHA) National College Health Assessment-II (NCHA) Fall 2008 and Spring 2009 surveys (ACHA, 2009a, 2009b). The NCHA is a nationwide dataset of randomly sampled students from postsecondary educational institutions that elect to purchase and administer the NCHA survey. Web-based or paper and pencil surveys were administered. The Fall 2008 data set response rate was 27.4% (NCHA, 2009a) and the Spring 2009 response rate was 30% (NCHA, 2009b). Information about the methodology and survey items is available from ACHA (2009a, 2009b). The data from the Fall 2008 ($n = 26,685$) and Spring 2009 ($n = 87,105$) were merged to create one academic year of data. Our focus was on sexual orientation and emerging adulthood, we restricted the sample to individuals aged 18-24 who identified their sexual orientation ($n = 89,199$).

Variables

For race/ethnicity, participants were asked, “How do you usually describe yourself?” The item responses included: *White, non-Hispanic (includes Middle Eastern)*; *Black, non-Hispanic*; *Hispanic or Latino*; *Asian or Pacific Islander*; *American Indian, Alaska Native, and Native Hawaiian*; *Biracial or Multiracial*; and *Other*. Respondents could choose multiple racial/ethnic categories, categories were recoded to be mutually exclusive, and those who indicated more than one category were recoded as Multiracial. Due to the low percentage of Native Americans in the sample, this racial/ethnic group was combined with the Other racial/ethnic group. The final categorization of racial/ethnic identities was: NHW, Black, Asian, Latino, Multiracial, and Other. Participants were asked, “What is your sexual orientation?” and had the following responses: *bisexual, gay/lesbian, heterosexual, and unsure*. For the purpose of this study, sexual orientation was recoded into two categories (LGB vs. non-LGB); individuals who were unsure were not included. Additional demographic information included gender (male/female) and age (years).

Four outcomes of interest were taken from the Mental Health section of the survey (ACHA, 2008). Participants were asked in three separate questions if they ever engaged in self-harm (i.e., “intentionally cut, burned, bruised, or otherwise injured yourself”), suicidal ideation (i.e., “seriously considered suicide”), and suicide attempt. The response options for each of these separate items were: *no, never*; *no, not in the last 12 months*; *yes, in the last 12 months*; *yes, in the last 30 days*; and *yes, in the last 2 weeks*. Responses were dichotomized into past 12 months (i.e., responses of *yes, in the last 12 months*; *yes, in the last 30 days*; and *yes, in the last 2 weeks*) versus not in the past 12 months (i.e., responses of *no, never* and *no, not in the last 12 months*). The fourth outcome was whether respondents had been diagnosed or treated for depression with the last 12 months. The item responses included: *no*; *yes, diagnosed but not treated*; *yes, treated with medication*; *yes, treated with psychotherapy*; *yes, treated with medication and psychotherapy*; or *yes, other treatment*. Responses were dichotomized into no=0 versus yes=1.

Statistical Analyses

Chi-square tests were used to examine group differences in self-harm, suicidal ideation, suicide attempt, and depression by sexual orientation and race/ethnicity. Multiple logistic regression models, adjusted for demographics, were used to examine the associations of racial/ethnic identities among LGB individuals with the key outcomes, using NHW LGB individuals as the reference group. We report odds ratios with 95% confidence intervals. Hosmer-Lemeshow tests were used to assess the goodness-of-fit for each logistic regression. We used STATA version 12.1 for all analyses. This study was approved by the institutional review board at the University of Rochester Medical Center.

Results

The mean age of the sample was 20.19 years old ($SD = 1.61$), 66% of the participants identified as female, and approximately 73% of respondents identified as NHW (see Table 1). The prevalence of LGB identity across racial/ethnic groups ranged from a low of 4.2% among Asian respondents to a high of 8.3% among Multiracial respondents. There were

differences in gender by sexual orientation among Asian, NHW, and Hispanic groups, with all three having significantly higher proportions of LGB-identified males than heterosexual males. Across all racial/ethnic groups, LGB individuals were significantly more likely to report past 12-month self-harm, suicidal ideation, suicide attempt, and depression than non-LGB individuals (See Table 2). For instance, the prevalence of suicide attempts among Multiracial LGB individuals in comparison to their non-LGB peers was (7.3% vs. 1.3%, respectively). When comparing racial/ethnic differences within the LGB group, a lower proportion of Asian LGB individuals reported depression than NHW LGB individuals; a greater proportion of Black LGB individuals reported suicide attempt than their NHW LGB peers but a lower proportion of them reported depression; a lower proportion of Latino LGB individuals reported suicidal ideation and depression than NHW LGB respondents; and greater proportions of Multiracial LGB individuals reported self-harm and suicide attempts than NHW LGB persons.

In multiple logistic regression models adjusting for age, gender, and past 12-month diagnosis of depression among the LGB sample, Asian LGB individuals had higher odds of suicidal ideation (OR = 1.50; 95% CI = 1.12 – 2.01) and attempts (OR = 1.98; 95% CI = 1.13– 3.49) than their NHW LGB peers (See Table 3). Compared to their NHW LGB counterparts, both Black LGB (OR = 2.34; 95% CI = 1.30 – 4.20) and Multiracial LGB individuals (OR = 2.07, 95% CI = 1.29 – 3.15) had higher odds of suicide attempts.

Discussion

This study examined the differences between racial/ethnic identity and self-directed violence, suicidal ideation, and depression among LGB persons. Across all racial/ethnic groups, LGB individuals were more likely to report self-directed violence and depression than their non-LGB peers. Within the LGB sample, lower proportions of Asian, Black, and Latino persons reported depression, Black and Multiracial students reported more suicide attempts and Latinos reported lower levels of suicidal ideation than their NHW peers.

Although most racial/ethnic minorities in the general population tend to have lower suicide rates than NHW emerging adults (CDC, n.d.); individuals with intersecting identities may have elevated prevalence of self-directed violence and depression. Our findings expand upon previous research on racial/ethnic differences in suicide attempts among LGB individuals. Latino LGB adults have been found to report attempted suicide more so than their NHW LGB peers (Meyer et al., 2008), yet we found that Asian, Black, and Multiracial LGB emerging adults had greater odds of attempted suicide compared to NHWs. This discrepancy in findings may be due to the age differences in the study samples. Further research should examine how cohort effects may influence racial/ethnic differences in suicide attempts among LGB individuals.

Similar to O'Donnell and colleagues (2011), we found lower prevalence of depression in Black and Latino LGB persons in comparison to NHW LGB individuals. Our findings also corroborate Cochran and colleagues (2007) suggestion that Asian and Latino LGB persons may have lower prevalence of mental health disorders than the general LGB population. According to Davidson and Wingate (2011), some racial/ethnic groups have more protective

factors (e.g., hope and religiosity) associated with suicidal behaviors even though they are also exposed to more risk factors. Indeed, both internalized racism and heterosexism have inverse relationships with self-esteem whereas only internalized racism has a direct association with psychological distress among Black LGB individuals (Szymanski & Gupta, 2009). Thus, future research should focus on health disparities among individuals with multiple minority statuses, including access to and quality of mental health services.

We also found that LGB persons who identified as Multiracial or Other had the highest proportions of self-directed violence, and the etiology for this high prevalence is unclear. LGB individuals who do not identify with a specific racial/ethnic minority may experience conflict with identity, which could contribute to feelings of thwarted belongingness (Van Orden et al., 2010). Due to the current data, this could not be examined. Given the demographic specificity of LGB persons who identify as Multiracial or Other, qualitative research may facilitate an in-depth investigation of how persons in this group experience identity and belongingness.

Although our findings corroborate research that Asian youth with same-sex attraction have greater odds of attempting suicide than their non-LGB peers, our results differed from Pinhey and Millman's (2004) study in that we found Asian LGB persons had greater prevalence for suicidal ideation compared to their non-LGB peers. We also found that Asian LGB individuals had greater prevalence of suicidal ideation and attempting suicide when compared to their NHW LGB peers. The discrepancy in the findings for suicidal ideation between Asian LGB youth and emerging adults highlights the need for additional research on how identity development is associated with suicidal behavior among LGB individuals across cultures and development life periods.

This research has clinical implications and highlights the need for additional research. Specifically, although racial/ethnic minorities tend to have lower suicide rates than NHW emerging adults (CDC, n.d.), the findings from our study suggest that persons negotiating multiple minority statuses may have a higher prevalence of self-directed violence. Hence, mental health professionals, especially those who work in college counseling centers, should consider the impact minority stress could have on emerging adults. Minority stress may include socially-based stressors such as bias and victimization, which has been shown to be associated with self-directed violence among LGB emerging adults (Blosnich & Bossarte, 2012).

Despite the strengths of this research, there are several limitations. The NCHA data are cross-sectional, which preclude statements of causality. As with any self-report survey, these results may reflect underestimates in self-directed violence. The cultural influence on self-identification may limit the generalizability of these results, especially since we focused on emerging adulthood. Thus, our findings may better represent individuals who have started to negotiate their racial/ethnic identity with their sexual orientation. Both the sampling design and the fact that this was a sample of college students limit generalizability. Lastly, to have statistical power, we combined LGB persons, preventing examination of differences between these distinct identities (Matthews, Blosnich, Farmer, & Adams, 2013).

In conclusion, this study expands knowledge of racial/ethnic difference in self-directed violence and suicidal behaviors among LGB individuals by analyzing a culturally diverse sample of emerging adults. However, additional research is needed both to explore the sociocultural factors associated with suicidal behaviors experienced by LGB individuals and to investigate risk and protective factors of integrating multiple identities. Although there are some suicide prevention programs geared towards LGBT youth such as the Trevor Project (Haas et al, 2011), our findings highlight the need to focus suicide prevention efforts on individuals with intersecting identities. Suicide prevention should include assessments for minority stressors (e.g., bias and victimization) that may be related to suicide risk.

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Table 1
Demographics, by race/ethnicity and sexual orientation¹

	<u>Sexual Orientation</u>		<u>Sex</u>		<u>Age</u>
	<u>LGB</u>	<u>Heterosexual</u>	<u>Female</u>	<u>Male</u>	
	n (%)	n (%)	n (%)	n (%)	M(SD)
<u>Black</u>					
LGB	243 (6.1)	--	165 (68.7)	75 (31.3)	19.8 (0.11)
Heterosexual	--	3,776 (93.9)	2,677 (71.5)	1,068 (28.5)	19.9 (0.03)
<u>Asian</u>					
LGB	337 (4.2)	--	166 (49.7)	168 (50.3) *	19.8 (0.11)
Heterosexual	--	7,756 (95.8)	4,795 (62.0)	2,936 (38.0)	19.9 (0.03)
<u>Latino</u>					
LGB	328 (6.1)	--	172 (52.6)	155 (47.4) *	20.0 (0.09)
Heterosexual	--	5,069 (93.9)	3,435 (68.6)	1,582 (31.4)	20.0 (0.02)
<u>Multiracial</u>					
LGB	430 (8.3)	--	296 (69.8)	128 (30.2)	20.0 (0.08)
Heterosexual	--	4,724 (91.7)	3,217 (68.4)	1,488 (31.6)	20.0 (0.02)
<u>Other</u>					
LGB	88 (7.1)	--	50 (60.2)	33 (39.8)	20.5 (0.18)
Heterosexual	--	1,153 (92.9)	750 (65.3)	398 (34.7)	20.2 (0.05)
<u>non-Hispanic White</u>					
LGB	2,895 (4.4)	--	1,725 (60.6)	1,122 (39.4) *	20.3 (0.03) *
Heterosexual	--	62,400 (95.6)	41,490 (66.7)	20,706 (33.3)	20.2 (0.01)

¹ =racial groups are non-Hispanic

* p<.05 in comparisons of LGB vs. Heterosexual within racial/ethnic category (e.g., LGB Asian vs. Heterosexual Asian)

Table 2
Self-directed violence and depression between sexual orientation, by race/ethnicity

	Depression ^I	Self-Harm ^I	Suicidal Ideation ^I	Suicide Attempt ^I
	n (%)	n (%)	n (%)	n (%)
<u>Black</u>				
LGB	36 (15.2) ^{a,b}	33 (13.9) ^a	42 (17.6) ^a	16 (6.7) ^{a,b}
Heterosexual	161 (4.3)	133 (3.5)	202 (5.4)	66 (1.8)
<u>Asian</u>				
LGB	42 (12.5) ^{a,b}	44 (13.2) ^a	70 (20.8) ^a	17 (5.0) ^a
Heterosexual	305 (4.0)	372 (4.8)	462 (6.0)	106 (1.4)
<u>Latino</u>				
LGB	50 (15.4) ^{a,b}	43 (13.2) ^a	42 (12.9) ^{a,b}	9 (2.8) ^a
Heterosexual	329 (6.6)	233 (4.6)	286 (5.3)	48 (1.0)
<u>Multiracial</u>				
LGB	104 (24.4) ^a	97 (22.7) ^{a,b}	94 (22.1) ^a	31 (7.3) ^{a,b}
Heterosexual	461 (9.8)	306 (6.5)	346 (7.3)	59 (1.3)
<u>Other</u>				
LGB	20 (23.0) ^a	20 (23.3) ^a	18 (20.9) ^a	6 (7.0) ^a
Heterosexual	74 (6.5)	72 (6.3)	90 (7.8)	19 (1.7)
<u>non-Hispanic White</u>				
LGB	634 (22.1) ^a	500 (17.3) ^a	529 (18.3) ^a	94 (3.3) ^a
Heterosexual	5,717 (9.2)	3,039 (4.9)	3,257 (5.2)	518 (0.8)

^I =within the past 12 months

^a =p<.05 in comparisons of LGB vs. Heterosexual within racial/ethnic category (e.g., LGB Asian vs. Heterosexual Asian)

^b =p<.05 in comparisons of race/ethnicity with LGB (e.g., LGB Asian vs. LGB non-Hispanic White)

Table 3
Adjusted odds of self-directed violence among LGB racial/ethnic minority persons¹

	Self-Harm		Suicidal Ideation		Suicide Attempt	
	AOR	(95%CI)	AOR	(95%CI)	AOR	(95%CI)
Age	0.85	(0.80-0.89)*	0.85	(0.80-0.89)*	0.78	(0.70-0.86)*
Sex (male)	0.41	(0.34-0.50)*	0.77	(0.65-0.92)*	1.20	(0.85-1.69)
Depression	3.32	(2.77-3.98)*	4.46	(3.75-5.32)*	6.35	(4.56-8.83)*
Black	0.70	(0.47-1.05)	0.96	(0.66-1.39)	2.34	(1.30-4.20)*
Asian	0.93	(0.66-1.32)	1.50	(1.12-2.01)*	1.98	(1.13-3.49)*
Latino	0.81	(0.57-1.15)	0.71	(0.50-1.00)	0.89	(0.44-1.81)
Multiracial	1.23	(0.95-1.60)	1.13	(0.86-1.47)	2.07	(1.29-3.15)*
Other	1.34	(0.76-2.37)	1.06	(0.59-1.93)	2.07	(0.79-5.44)

Note: AOR=adjusted odds ratio

¹ = non-Hispanic White is reference category for racial/ethnic groups

* p<.05