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Original Research

Violence and the **Academic Lives of** College Students at the Intersection of Race/ **Ethnicity and Sexual** Orientation/Gender Identity

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Abstract

To ascertain whether sexual and/or gender minority (SGM) students at a Hispanic-serving institution who experience violence are more likely to experience interference with their academic lives when compared to heterosexual, cisgender students, and how this relationship differs by race/ ethnicity. Data came from 736 undergraduate students at a university in the Southwestern United States responding to a 2017 Campus Climate Survey. Multivariable logistic regression was conducted on self-identified SGM students and reported interference with their academic lives. The model was also tested for effect modification by race/ethnicity. Two-thirds (67.65%) of SGM students reported four or more incidences of violence. Nearly one-fifth (18.83%) of SGM students reported being harassed,

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insulted, threatened, or intimidated, and 2.63% reported being physically hurt (including forced sex), because the perpetrator thought the individual might have been gay, lesbian, bisexual, or transgender. SGM students had 2.44 (95% Cl: 1.29, 4.61) increased odds of interference with academic life as a result of violence victimization compared with non-SGM students. When the model was evaluated for effect modification by race/ethnicity, large effect sizes were observed, although the results were not significant. SGM undergraduate students are at significantly increased risk of violence and interference with their academic lives. This research emphasizes the need for institutions of higher education to ensure that their policies and practices support equal access to education by SGM students. Additionally, this study contributes insights into a potential protective effect of Hispanic ethnicity that warrants further research.

Keywords

gender identity/sexual orientation, academic performance, violence, race/ethnicity, intersectionality

Introduction

Sexual and gender minority (SGM) students collectively experience a multitude of violent experiences during their college careers. SGM encompasses individuals identifying as lesbian, gay, bisexual, transgender, questioning, gender non-conforming, as well as other non-heterosexual, non-cisgender identities. They experience bullying and harassment from strangers and peers based on their sexual orientation and gender expression (Berrill, 1990; D'Augelli, 1992; Kosciw et al., 2012), and are also subjected to high rates of sexual violence (Edwards, Sylaska, Barry, et al., 2015; Johnson et al., 2016; Porter & Williams, 2011; Reuter et al., 2017). Unfortunately, research thus far has largely ignored the impact of violence on SGM college students' academic lives, despite previous research that psychological stress has a greater impact on SGM students' academic lives than non-SGM students (Oswalt & Wyatt, 2011). At the same time, no research exploring the impact of violence on racial/ethnic minority (REM) and SGM students was identified by the authors.

Violence Experienced by SGM Students on University Campuses

Violence experienced as a result of sexual orientation or gender expression is common on college campuses. Targeted harassment focused on the victim's

SGM identity can include verbal insults, threats, physical abuse or assault (Berrill, 1990; D'Augelli, 1992; Kosciw et al., 2012). An online survey of SGM youths aged 13 to 21 years reported that 70% experienced verbal harassment (called names or threatened), 29% were physically harassed (pushed or shoved), and 12% were physically assaulted (punched, kicked, injured with a weapon) based on sexual orientation in the past year. High rates were also reported based on gender expression (59%, 24%, and 11%; Kosciw et al., 2012). Other studies found that SGM students were twice as likely to experience cyberstalking and/or email harassment from a stranger compared to heterosexual students and that 95% of transgender college students did not feel that school was a safe space to express their gender (Fetner et al., 2012; Finn, 2004).

At the same time that SGM students are at risk for targeted harassment, they are at high risk for sexual violence victimization (Edwards, Sylaska, Barry, et al., 2015; Johnson et al., 2016; Porter & Williams, 2011; Reuter et al., 2017). Sexual violence includes sexual harassment (unwanted sexual attention and sexual imposition) (Benson & Thomson, 1982; Shepela & Levesque, 1998), sexual assault (rape, sexual coercion, and unwanted sexual contact) (Fedina et al., 2018), intimate partner violence (IPV) (sexual assault and physical violence perpetrated by a dating partner, friend, or family member; Edwards, Sylaska, Barry, et al., 2015), and stalking (unwanted pursuit; Edwards, Sylaska, Barry, et al., 2015). Sexual minority students were found to be more than four times as likely to experience rape, five times as likely to experience sexual abuse by a partner, and almost three times as likely to experience physical abuse by a partner as non-sexual minority students (Porter & Williams, 2011). Further studies found that sexual minority students were 1.85 times more likely to report unwanted pursuit when compared with non-sexual minority students (Edwards, Sylaska, Barry, et al., 2015).

Consequences of Violence

The accumulation of violence experienced by SGM students, regardless of its source, can have psychological and physical consequences (Almeida et al., 2009; Centers for Disease Control and Prevention [CDC], 2017; D'Augelli et al., 2002; Garnets et al., 1990; Hershberger & D'Augelli, 1995; Huebner et al., 2015; Huerta et al., 2006; Reed et al., 2010). Further, the negative health outcomes resulting from violence are more common and can persist for longer in SGMs, largely because of reduced opportunities for quality treatment (Dank et al., 2014; Edwards, Sylaska, & Neal, 2015; Fetner et al., 2012;

Oswalt & Wyatt, 2011; Woodford & Kulick, 2015). For example, gender norms can persuade SGMs to avoid reporting and receiving treatment for sexual assault (Todahl et al., 2009). Additionally, institutional and social discrimination, and uninformed providers can inhibit transgender individuals from accessing treatment (Beemyn et al., 2005). There is also evidence that experiences of violence can interfere with a student's engagement with academics. In turn, mediocre academic performance is associated with longer term consequences including socioeconomic status, and future job, financial, and health satisfaction (Ilies et al., 2019).

There is little data on the impact of targeted harassment on academic performance in university settings; however, studies evaluating this experience in high schools found an influence on academic life. Sexual minority adolescents experiencing targeted harassment reported less "school belonging," significantly lower grade point averages (GPA), and being more likely to skip school to avoid victimization, compared with non-sexual minority students (Kosciw et al., 2012; Rostosky et al., 2003). Oswalt and Wyatt (2011) found that a heterosexist university climate impacted sexual minority college students' mental health which subsequently had a greater impact on their academic performance compared with heterosexual students. Additionally, heterosexist harassment has been positively associated with academic disengagement and negatively associated with GPA (Woodford & Kulick, 2015; Woodford et al., 2014).

Similarly, there is limited data on sexual violence's impact on SGM students' academic life. However, some understanding may be gained from research conducted with women who experience violence on college campuses. Female college students experiencing sexual harassment are less likely to return to their universities and are more likely to doubt their academic capability, skip class, drop a course, and/or avoid particular buildings or places on campus (Cortina et al., 1998; Hill & Silva, 2005). Moreover, in one study, 14.3% of female students who experienced a rape during their first semester had a GPA below 2.5 at the end of the second semester compared with 5.9% of those who were not raped (Jordan et al., 2014).

The Socio-Ecological Model with an Intersectionality Lens

The socio-ecological model (SEM) describes the multiple levels of influence that affect violence: individual, interpersonal, community, and societal (CDC Injury Center, 2015). The societal level refers to policies and social norms that impact violence including structural racism and discrimination. Intersectional theory asserts that individuals are more marginalized in society

when they experience multiple forms of oppression and discrimination based on their characteristics (e.g., race, ethnicity, gender, sexual orientation, gender identity; Bowleg, 2012). Intersectionality acknowledges that societal-level systems of power affect multiple aspects of identity that are interrelated and the effects can be compounded.

Data on the prevalence of violence among SGM students of minority race/ethnicity are sparse, though rates can be predicted to be high given high rates of violence experienced by both SGM and REM populations separately (de Heer & Jones, 2017; Edwards, Sylaska, Barry, et al., 2015; Pilkington & D'Augelli, 1995; Porter & Williams, 2011; Reuter et al., 2017). One study examining the college minority experience with violence found that REM students had nearly three times the risk of victimization, with sexual assault by a partner being twice as likely for REM students compared with White students (Porter & Williams, 2011). Research on violence by Hispanic ethnicity produces mixed findings with some studies showing lower or similar rates among Hispanics compared with non-Hispanic individuals, while others found higher rates (Arellano et al., 1997; Bonomi et al., 2009; Caetano et al., 2016; Merrill & Hanson, 2016; Sorenson & Siegel, 1992; Tjaden & Thoennes, 2000). Based on intersectionality research in other areas, it is expected that the negative consequences of violence, particularly interference with academic life, would be amplified among this population.

Purpose

This study examines whether SGM students at a Hispanic-serving institution who experience violence are more likely to experience interference with their academic life than non-SGM students, and if this relationship differs by REM identity.

Materials and Methods

This study analyzed secondary data from the University of Kentucky's Multi-College Bystander Efficacy Evaluation (McBEE) survey conducted at a university in the Southwestern United States. The McBEE survey was based on the 2015 Association of American Universities Campus Climate Survey conducted by Westat (Cantor et al., 2017; Clear et al., 2019). Study data were entered into Research Electronic Data Capture (REDCap), a secure, web-based application designed to support data capture for research studies (Harris et al., 2009). The confidential survey was disseminated

electronically to undergraduate students in spring 2017. Students who exclusively took classes online and/or remotely were excluded. The survey solicited responses from 7,234 students and collected responses from 736, a 10.2% response rate. Data analyses were conducted using STATAIC 14 software (StataCorp, 2015).

Construction of Measures

Sexual and Gender Minority

The category SGM was created to include individuals who identified as a gender other than male or female, a sexual orientation other than heterosexual, or both. While students who identified as genderqueer, gender non-conforming, and gender questioning did respond to the survey, none identified specifically as transgender male or transgender female.

Violence Victimization

The survey asked participants to record experiences of violence within four domains during the 2016–2017 school year. These domains were sexual harassment (including targeted harassment based on sexual/gender identity), sexual assault, IPV, and stalking. There were 4–5 questions within each domain. For example, participants were asked, "Since Fall 2016 ... how many times has a student or someone employed by or otherwise associated with [the university] made sexual remarks or told jokes or stories that were insulting or offensive?" The violence variable was generated by calculating the scaled responses into a continuous summary score. This summary score was divided into two binary variables—"any violence," and "more violence"—for analysis. "Any violence" was dichotomized by reports of one or more violence experiences versus no violence experiences. "More violence" separated reports of fewer than four violence experiences (<75% of responses) categorized as "less violence" and four or more violence experiences (≥75% of responses) categorized as "more violence."

Interference with Academic Life.

Previous studies documenting interference with academic life have used measures including changes in GPA (Aragon et al., 2014; Jordan et al., 2014; Mengo & Black, 2016); reduced attachment to school (Pearson et al., 2007); increased absenteeism, or dropping out (Aragon et al., 2014; Cortina et al., 1998; Hill & Silva, 2005); and interference with learning and/or academic

achievement (Paul Poteat et al., 2014), and have often utilized self-reporting of these measures (Brewer & Thomas, 2019; Brewer et al., 2018; Messman & Leslie, 2019; Pearson et al., 2007). In this study, interference with academic life was measured by responses to questions about specific violence experiences. Respondents were asked if "X" violent experience: "interfered with [their] academic or professional performance," "limited [their] ability to participate in activities or programs at the university," or "created an intimidating or uncomfortable environment." Further, as a result of "X" violent experience, had they "felt detached from others, activities, or [their] surroundings," "missed classes or work," "turned in assignments or taken exams late, or were unable to complete assignments or take exams," "had gotten worse grades," or "thought about leaving the university." Interference with academic life was assigned if they responded in the affirmative to any of these questions.

Race/Ethnicity Variable

Participants reported their ethnicity (Hispanic/non-Hispanic) and race (Asian, Black/African American, American Indian/Alaskan Native, Native Hawaiian/Pacific Islander, Multiracial, Other, and White). Race/ethnicity was collapsed from the surveyed categories to ensure large enough sample sizes. The race/ethnicity variable included Hispanic White, Hispanic Other, non-Hispanic White, and non-Hispanic Other. A second variable identified students who were SGM/non-REM (a student identifying as SGM and non-Hispanic White) or SGM/REM (a student identifying as SGM and any other race or ethnicity).

Construction of the Conceptual Model

Given the multiple levels of influence on violence, the SEM was used to frame the research question. As represented in Figure 1, the framework illustrates the complex interplay between individual, relationship, community, and societal factors (including norms and inequities associated with demographic characteristics; Cummings et al., 2013). According to the Centers for Disease Control and Prevention (CDC), "the model allows for a better understanding of the diversity of factors that place people at risk for violence or protect them from experiencing or perpetrating violence" (CDC Injury Center, 2015). Within the societal level, we incorporated intersectionality arising from SGM and REM status.

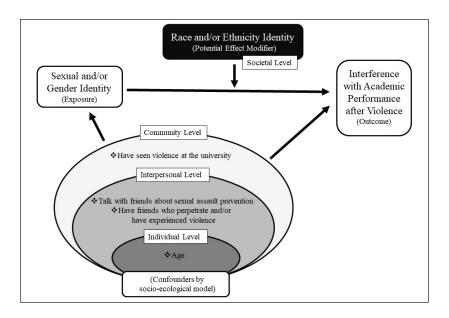


Figure 1. Concept map with available variables determined to be confounders and a potential effect modifier, by level of the socio-ecologic model.

Influential risk and protective factors were identified first from the literature. Consistent with the SEM, potential risk factors that increase the impact of violence at the interpersonal level included social acceptability of violence (Jones & Raghavan, 2012), and a lack of role models who display healthy relationships (Jacobson et al., 2015). At the community level, they included perception of safety on campus (Johnson et al., 2016) and ambient harassment leading to psychological distress (Woodford et al., 2014). Potential protective factors included community and interpersonal discussion and support (Edwards et al., 2016; Murchison et al., 2017). Potentially confounding variables were identified in the dataset, if available, and tested for confounding. Key variables of interest, including race/ethnicity and age, were included in the model, despite not meeting statistical confounding criteria. The final variables included in the model were classified at the following levels: individual—age, race/ethnicity; interpersonal—have talked with friends about sexual assault prevention, have friend(s) who perpetrate sexual assault/experienced sexual assault; and community—have seen/heard about sexual harassment at the university (Figure 1). Logistic regression analyses were performed in succession, adding confounding variables at each socio-ecologic level to the crude model. The final model was tested for effect modification by race/ethnicity, which could operate as a societal-level proxy for discrimination.

Results

Demographics

The respondents reflected the demographics of students enrolled at the university in spring 2017 (Table 1; Office of Institutional Analytics, 2018). Two-fifths identified as Hispanic, two-fifths identified as non-Hispanic White, and one-fifth identified as non-Hispanic Other. One in five students identified as SGM. Over half of SGM students also identified as REMs.

Table 1. Demographic Characteristics of Participating Undergraduate Students (*n* = 736).

Characteristics	Mean (Range)		
Age (years) n=736	Mean (Range)		
• • ,	20.5 (18–24)		
Race/ethnicity* $n = 705$			
Hispanic White	160 (22.7)		
Hispanic Other	121 (17.2)		
Non-Hispanic White	286 (40.6)		
Non-Hispanic Other	138 (19.6)		
Gender* $n = 735$			
Woman	440 (59.9)		
Man	277 (37.7)		
Gender minority	18 (2.5)		
Sexual orientation* $n = 731$			
Heterosexual or straight	583 (79.8)		
Sexual minority	148 (20.3)		
Sexual and/or gender minority $n = 736$			
Yes	154 (20.9)		
No	582 (79.1)		
Sexual and/or gender minority and racial/ethnic minority	ority* n= 146		
SGM and non-racial/ethnic minority	66 (45.2)		
SGM and racial/ethnic minority	80 (54.8)		
Talked with friends/acquaintances about reducing/pr sex/dating violence* $n=735$	eventing/keeping safe from		
Yes	427 (58.1)		
No	308 (41.9)		

(continued)

Table 1. continued

Characteristics	Mean (Range)			
Have friends they know or suspect have used physical force against a partner/forced sex, or have partners who use physical force, or have been forced into $sex^* n = 735$				
Yes	228 (31.0)			
No	507 (69.0)			
Since Fall 2016 while you have been a student at the university, have you seen or heard someone sexually harass (verbally, over social media, or in person) someone else?* $n = 735$				
Yes	132 (18.0)			
No	603 (82.0)			

Note. *Sample size does not always equal 736 due to missing data.

†The sexual and gender minority category includes individuals who identified as a gender minority, a sexual minority, or both.

Experiences of Violence

More SGM students reported any violence (67.7%) when compared with non-SGM students [45.7%; X^2 (1, 15.4, p<.001)]. A breakdown of violence type experienced can be seen in Figure 2. A greater number of SGM students also reported "more violence" (44.1%) when compared with non-SGM students [22.3%; X^2 (1, 19.3, p<.001)]. Additionally, one-fifth (18.8%) of SGM respondents reported having been harassed, insulted, threatened, or intimidated and 2.6% reported being physically hurt (including forced sex) in the past year because the perpetrator thought they might be gay, lesbian, bisexual, or transgender. More students that identified as SGM/non-REM reported any violence (71.4%) and "more violence" (52.4%) compared with students identifying as SGM/REM (65.5% and 36.4%, respectively), although these differences were not statistically significant X^2 (1, 0.4, p=.532) and X^2 (1, 2.9, p=.115).

Interference with Academic Life

More SGM students (82.8%) reported interference with their academic life when compared with non-SGM students [63.3%; $X^2(1, 11.7, p=.001)$]. Though the differences were not significant, more students identifying as SGM/non-REM (86.8%) reported interference with academics compared with SGM/REM students (78.4%; p=.406). This did shift if the student had experienced "more violence," with 95.5% of SGM/REM students reporting interference compared with 86.4% of SGM/non-REM students (p=.608). A breakdown of the specific type of interference experienced can be seen in Figure 3.

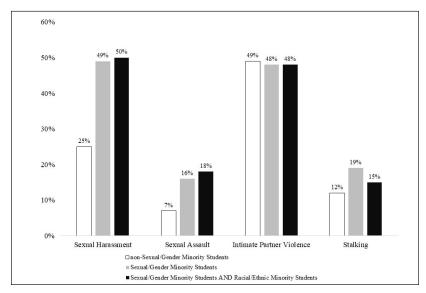


Figure 2. Comparison of Sexual/Gender Minority and Racial/Ethnic Minority Status Students, who experienced at least one instance of violence, by type of violence.

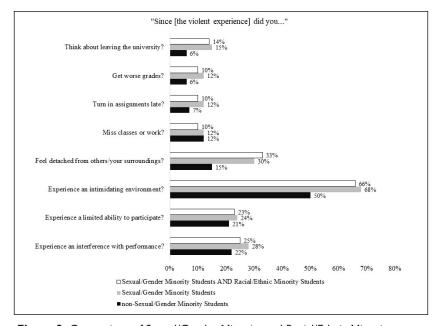


Figure 3. Comparison of Sexual/Gender Minority and Racial/Ethnic Minority Status Students, who experienced academic interference after violence, by type of interference.

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				Model 4
	Model I	Model 2	Model 3	Community-Level Model
Variables	Simple Model	Individual-Level Model	Interpersonal-Level Model	(Full Model)
Sexual and/or gender minority	2.79 (95% CI 1.53,5.09) *	2.80 (95% CI 1.52, 5.17) *	2.80 (95% CI 1.52, 5.17) 2.50 (95% CI 1.33, 4.69)*	2.37 (95% CI 1.25, 4.48)*
Age	I	1.06 (95% CI 0.91, 1.23)	1.06 (95% CI 0.91, 1.23) 1.04 (95% CI 0.89, 1.22)	1.03 (95% CI 0.88, 1.20)
Race/ethnicity				
Hispanic White	I	0.57 (95% CI 0.30, 1.06)	0.60 (95% CI 0.32, 1.12)	0.56 (95% CI 0.30, 1.08)
Hispanic Other	I	0.80 (95% CI 0.38, 1.06)	0.81 (95% CI 0.38, 1.73)	0.85 (95% CI 0.40, 1.82)
Non-Hispanic Other	I	0.75 (95% CI 0.38, 1.48)	0.79 (95% CI 0.40, 1.59)	0.87 (95% CI 0.43, 1.75)
Non-Hispanic White	I	1.0 (ref)	1.0 (ref)	I.0 (ref)
Talk with friends about sexual assault prevention	I	I	1.43 (95% CI 0.83, 2.47)	1.26 (95% CI 0.72, 2.19)
Have friends who perpetrate/ experience violence	I	ſ	1.23 (95% CI 0.74, 2.04)	I.07 (95% CI 0.63, I.80)
Have seen violence at the university	I	I	I	2.45 (95% CI 1.29, 4.67)

Table 3. Race/Ethnicity as an Effect Modifier on the Association Between Sexual and/or Gender Minority Identification and the Odds of Academic Interference as a Result of Violence.

Model Comparisons†	Odds Ratio	P-value	95% CI
SGM [‡] Non-Hispanic White vs. SGM Hispanic White	2.56	.201	0.61, 10.76
SGM Non-Hispanic White vs. SGM Hispanic Other	3.22	.138	0.69, 15.08
SGM Non-Hispanic Other vs. SGM Hispanic White	3.54	.172	0.58, 21.71
SGM Non-Hispanic Other vs. SGM Hispanic Other	4.45	.126	0.66, 30.21
SGM Non-Hispanic Other vs. SGM Non-Hispanic White	1.38	.717	0.24, 8.07
SGM Hispanic Other vs. SGM Hispanic White	0.79	.779	0.16, 3.97

Notes. †Models adjusted for age, talking with friends about sexual assault prevention, having friends who perpetrate/experience violence, and having seen violence at the university. ‡SGM = sexual and/or gender minority.

With the crude logistic regression model (i.e., Model 1 in Table 2), SGM students had 2.79 (p=.001, 95% CI: 1.53, 5.09) increased odds of interference compared to non-SGM students. In the fully adjusted model (i.e., Model 4 in Table 2), SGM students still experienced 2.37 (p=.008, 95% CI: 1.25, 4.48) increased odds of interference compared with non-SGM students (Table 2). When the full model was evaluated for effect modification by race/ethnicity, large effect sizes were observed, although none of the results were significant (Table 3).

Discussion

Results from this study indicate that SGM students continue to experience persistently high rates of violence (Berrill, 1990; Edwards, Sylaska, & Neal, 2015; Finn, 2004). In this study, two-thirds of SGM students reported experiencing four or more incidences of violence during the academic year. Likewise, one in five SGM students reported harassment or threats because of their sexual orientation and/or gender presentation.

Further, there was significant interference (more than two times greater odds) with academic life among SGM students who had experienced violence compared with non-SGM students. These findings differ from a recent

study that concluded the negative impact of IPV on GPA and perceived academic difficulties was similar among sexual minority and heterosexual college students (Brewer et al., 2018). This may be a result of divergent methods to measure academic difficulties or because the aforementioned study focused exclusively on IPV rather than overall victimization. However, the results of the present study with regard to SGM students align with minority stress theory—which posits that victimization and discrimination experiences related to one's SGM identity can lead to stress and increased negative health outcomes (Edwards, Sylaska, Barry, et al., 2015), including an increased risk for IPV (Edwards, Sylaska, & Neal, 2015). This increased stress could exacerbate the effects of violence experienced by an SGM student, resulting in a greater impact on their academic life than a non-SGM student. Additionally, because SGM students are more likely to experience more violence over their lifetime, they may be at higher risk for the cumulative effects of violence (Logie et al., 2014). This may be true for negative academic outcomes, especially when the violence occurs at their university.

Race/Ethnicity as an Effect Modifier

Although not statistically significant, this study found that non-Hispanic White SGM students experienced more violence and more interference with their academic lives compared with Hispanic SGM students. This was contrary to the hypothesis that the intersection of ethnicity and SGM identity would lead to increased negative impact on academic outcomes. This finding may be a result of the "Hispanic Paradox", a phenomenon whereby Hispanics, especially immigrants or first generation individuals, experience lower health risks compared with non-Hispanic Whites (The Hispanic paradox, 2015; Peña et al., 2008). Researchers have proposed that there may be cultural resiliency factors, including social resources, familism, and religiousness, which contribute to these improved outcomes (Gallo et al., 2009). There is also evidence that as acculturation increases, this protective effect diminishes (Ramos et al., 2011). Further evidence shows that ethnic pride and cultural identity can protect against violence among the Hispanic population (Enriquez et al., 2012; Sanderson et al., 2004). This study took place at a designated Hispanic-serving institution where 40% of the student body is Hispanic. Students have access to ethnic studies programs, academic resources focused on cultural identity, and university cultural community centers that support Hispanic students. These resources may provide some protection and enhance resiliency among Hispanic students. Additional research specifically powered to detect the effects of targeted harassment and sexual violence on Hispanic undergraduate students' academic lives is warranted, as is research

into potential protective/resiliency factors which may reduce risk among Hispanic students.

While Hispanic ethnicity was protective against the impact of violence on academic life in this study, racial identity other than White was not. Results indicated a non-significant trend in the predicted direction among racial minorities. Primarily, non-Hispanic Other students experienced higher odds of interference when compared with Hispanic and non-Hispanic White SGM students. These results were consistent with literature describing minority experiences with violence (de Heer & Jones, 2017; Edwards, Sylaska, Barry, et al., 2015; Pilkington & D'Augelli, 1995; Porter & Williams, 2011; Reuter et al., 2017).

Implications

One of the unique contributions of this research is that violence disproportionately impacts the academic lives of SGM university students experiencing violence compared with non-SGM students experiencing violence. This study also found that SGM students continue to experience disproportionate levels of violence compared to non-SGM students, including targeted violence as a result of their sexual orientation and/or gender identity. Implications of these findings include that SGM students may not have the same opportunity to obtain an education as their non-SGM counterparts do. This research reinforces the need for institutions of higher education to ensure that their policies and practices support equal access to education by SGM students. Additionally, by analyzing climate survey data at a designated Hispanic-serving institution, this study contributes insights into a potential protective effect of Hispanic ethnicity that warrants further research.

Limitations

One limitation of this study is the low response rate, potentially resulting in selection bias. Significantly, there were no transgender respondents. This may be because transgender students chose to not report their gender identity, or chose to not respond to the survey. In either case, these results are not necessarily representative of the transgender experience at this university. However, response rates are only indirect indicators of data quality and a low response rate alone does not necessarily signify biased estimates (Cantor et al., 2017). Selection bias was likely minimized as the demographics of the respondents, including the proportion of SGM students, reflected the demographics of the institution (Office of Institutional Analytic, 2018). Furthermore, this response rate is within the range of similar surveys (Cantor et al., 2017).

Another limitation is in measuring race/ethnicity. Currently, race/ethnicity is self-identified; however, the many health implications of race/ethnicity can be conferred on a person based on their outward appearance or "socially assigned" race, which may not reflect how an individual identifies. Future studies examining race/ethnicity should consider a two-step identification question: first asking for a self-identified race, then asking how other people usually classify the person's race (Jones et al., 2013). Using this two-step approach may allow for analyses that capture the social construct of racial/ethnicity more appropriately.

Despite these limitations, this study adds evidence about the academic lives of SGM students who experience violence. Results from this study also provide new information about the unique SGM population studying at a majority—minority institution with a large population of Hispanic students.

Conclusion

This study indicates that SGM students are particularly vulnerable to high rates of violence while attending institutes of higher education and interference with their academic lives after experiencing violence. Future research should design studies specifically powered for SGM students of multiple races and ethnicities to further explore the relationship between violence and academic lives, and examine potential protective factors associated with Hispanic ethnicity.

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