Published in final edited form as:

Suicide Life Threat Behav. 2016 October ; 46(5): 535–544. doi:10.1111/sltb.12234.

The Association of Multiple Identities with Self-directed Violence and Depression among Transgender Individuals

Megan C. Lytle, Ph.D.,

Center for the Study and Prevention of Suicide, Department of Psychiatry, University of Rochester Medical Center, Rochester, New York

John R. Blosnich, Ph.D., MPH, and

Center for Health Equity Research and Promotion, VA Pittsburgh Healthcare System, Pittsburgh, PA

Charles Kamen, Ph.D.

University of Rochester Medical Center, Rochester, New York

Abstract

Transgender individuals have a high prevalence of self-directed violence; however, there is scant literature focusing on their unique experiences. This study examined the differences in self-harm, suicidal ideation, suicide attempt, and depression based on racial/ethnic identity and sexual orientation among transgender individuals. Data were gathered from the Fall 2008 and Spring 2009 National College Health Assessment. Across racial/ethnic identities, greater proportions of transgender students endorse self-directed violence than their cisgender peers. Among transgender individuals, sexual minorities were more likely to report suicidal ideation than their heterosexual peers, and racial/ethnic minorities had higher odds of attempting suicide than non-Hispanic white individuals.

In 2013, suicide was among the top five leading causes of death among the age groups of 18-24 and 25-44 (Centers for Disease Control and Prevention, 2013a, 2013b). Evidence shows that among individuals 18-44 years in age there are pronounced disparities in suicidal risk based on sexual orientation, racial/ethnic identity, and gender identity (Haas, Rodgers, & Herman, 2014). Additionally, approximately 45% of the general population and 37% of transgender individuals (i.e, individuals whose gender identity or expression does not match the sex they were assigned at birth) between 18-24 years in age in the United States were enrolled in post-secondary institutions while 7% of the general population and 22% of transgender individuals between 25-44 years in age were enrolled in school (Grant, Mottet, Tanis, Harrison, Herman, & Keisling, 2011). Therefore, college campuses have become a focal point of suicide prevention efforts (Drum & Denmark, 2012) and LGBT individuals specifically (Johnson, Oxendine, Taub, & Robertson, 2013). However, researchers frequently group lesbian, gay, bisexual, transgender, queer, and questioning (LGBTQQ) individuals together and datasets rarely include items to gauge transgender status (Institute of Medicine, 2011). As a result, there are significant gaps in the literature regarding self-directed violence and help-seeking among transgender individuals, especially as this public health concern relates to transgender individuals in higher education.

Recently, scholars have started to examine how the experiences of transgender individuals differ from their cisgender (i.e., sex at birth aligns with gender) LGB counterparts (Mustanski, Garofalo, & Emerson, 2010; Mustanski & Liu, 2013), and data suggests that transgender persons report that they had previously attempted suicide in greater proportions even than LGB persons (45-52.5% vs 25-36%). Clements-Nolle and colleagues were among the first to examine the issue of suicidal thoughts and behaviors, focusing solely on the transgender community, and they found that 32% of transgender participants in their sample had attempted suicide (Clements-Nolle, Marx, Guzman, & Katz, 2001; Clements-Nolle, Marx, & Katz, 2006). Similar findings have since been reported (Goldblum, Testa, Pflum, Hendricks, Bradford, & Bongar, 2012; Haas et al., 2014; Kenagy, 2005; Kenagy & Bostwick, 2005).

Although gender identity development typically begins during childhood (Brill & Pepper, 2008), Beemyn, Curtis, Davis, and Tubbs (2005) suggest that college may provide transgender individuals with unique opportunities to explore and negotiate their multiple identities for the first time. For instance, one qualitative study about racial/ethnic minority (REM) transgender youth found that participants were often encouraged to hold off on making decisions about their gender identity until they were older and for some, college was their first opportunity to connect with the LGBTQ community (Singh, 2013). Moreover, college may present transgender youth with a number of unique challenges, including legal concerns (e.g., name changes), accessing healthcare, discrimination, negotiating intersecting identities, and the coming out process, among others (Beemyn et al., 2005). Similar to their cisgender LGB peers, the aforementioned stressors may put transgender college students at risk for self-directed violence (Grossman & D'Augelli, 2007). However, additional literature is needed to better understand self-directed violence between gender identities as well as potential difference within the transgender population.

According to Singh (2013), the simultaneous development of intersecting identities may promote resiliency among REM transgender youth; however, Jefferson and colleagues (2013) suggested that REM transgender women who report high levels of racial and gender-based discrimination were more likely to experience symptoms of depression. Further, there are discrepancies between the few studies that explored the association between racial/ethnic identity and suicidal behavior. Specifically, some researchers found that non-Hispanic white (NHW) transgender persons tend to have a lower prevalence of suicide attempts compared to REM transgender individuals (Goldblum et al., 2012; Haas et al., 2014) while Clements-Noelle and colleagues (2006) reported that NHW transgender persons had a higher prevalence of attempting suicide compared to their REM transgender peers. Brown et al. (2014), by contrast, found no difference in suicide risk between REM and NHW transgender veterans. Moreover, while data on sexual orientation is often collected from transgender samples, this variable is frequently excluded from the analyses. One study that considered sexual orientation, found that transgender sexual minorities were more likely to attempt suicide than their transgender heterosexual peers (Haas et al., 2014).

Thus, the aim of this study was to examine the association of multiple identities and gender diversity with self-directed violence among a large national sample of adults enrolled in higher education. We hypothesized: (1) in comparison to cisgender individuals, transgender

persons would have higher prevalence of self-harm, suicidal thoughts, suicide attempts, and depression; (2) in comparison to NHW transgender students, REM transgender students would have higher prevalence of self-harm, suicidal thoughts, suicide attempts, and depression; and (3) in comparison to non-LGBQ transgender students, LGBQ transgender students would have higher prevalence of self-harm, suicidal thoughts, suicide attempts, and depression. Lastly, we explored the relationship between multiple identities and seeking suicide prevention information.

Methods

Sample and Procedures

Data were drawn from the Fall 2008 and Spring 2009 surveys of the American College Health Association (ACHA) National College Health Assessment-II (NCHA) (ACHA, 2009a, 2009b). The NCHA is a national research survey of college students who were randomly sampled from institutions of higher education that self-selected to purchase and administer the ACHA-NCHA II survey. Paper and pencil as well as web-based surveys were administered. The overall response rate for the Fall 2008 data set was 27.4% (ACHA, 2009a) and 26,685 students participated during this period. The Spring 2009 had an overall response rate of 30% (ACHA, 2009b) and there were 87,105 respondents during this semester. The data from the Fall 2008 and Spring 2009 were merged to create one academic year of data. In total, across both semesters, 172 unique institutions that elected to participate in the NCHA. More information about development, design, methods, and survey items is available from ACHA (2009a, 2009b).

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* (ACHA, 2008). 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 transgender individuals in the sample, the *Black; Hispanic or Latino; Asian or Pacific Islander; American Indian, Alaska Native, and Native Hawaiian; Biracial or Multiracial*, and *Other* racial/ethnic groups were combined to create the REM group. The final categorization of racial/ethnic identities was NHW and REM. Participants were asked, "What is your sexual orientation?" and had the following responses: *bisexual, gay/lesbian, heterosexual, and unsure* (ACHA, 2008). Due to the small proportion of transgender individuals, sexual orientation was recoded into two categories (LGBQ vs. non-LGBQ). Age (years) was also included.

Four out of the five outcomes variables are from the Mental Health section of the survey (ACHA, 2008). Three separate questions were used to ask respondents if they had 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 (ACHA, 2008). Response options for each of these three items included: *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. Consistent with previous research (Lytle, De Luca, & Blosnich, 2014) the responses were dichotomized to capture those who reported that experiences had occurred within the past 12 months (i.e., *yes, in the last 12 months; yes, in the last 30 days; and yes, in the last 2 weeks*) and those who denied these experiences occurred within the past 12 months (i.e., *no, never* and *no, not in the last 12 months*). The outcome of depression was determined based on whether respondents endorsed a diagnosis or treatment for depression within the past 12 months. The response options 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.* The final outcome of being interested in receiving information on suicide prevention was based on one item in a series of questions about receiving information on a variety of different topics from the participant's educational institution. The response options for requesting information were *yes* and *no*.

In addition to the outcome variables, the issue of discrimination (e.g., racism, sexism, and homophobia) was considered. Specifically, respondents were asked, "Within the last 12 months, students reported the following factors affecting their individual academic performance" and they were asked to select the most serious outcome (ACHA, 2008). The response options were: *this did not happen to me/not applicable, I have experienced this issue but my academics have not been affected, received a lower grade on an exam or an important project, received a lower grade in the course, received an incomplete or dropped the course, or experienced a significant disruption in thesis, dissertation, research, or practicum work,* and these were dichotomized.

Statistical Analyses

Chi-square tests were used to examine group differences in self-harm, suicidal ideation, suicide attempt, depression, and seeking information about suicide prevention between gender identities by sexual orientation and race/ethnicity; where cell sizes were < 5 , Fisher's exact tests were used. Sequential multiple logistic regression models, adjusting for age and discrimination, were used to examine the associations of racial/ethnic identities and sexual orientation among transgender individuals with the key outcomes. 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 SPSS version 22 for all analyses. The institutional review board at the University of Rochester Medical Center approved this study.

Results

The mean age of the sample was 22.15 years old ($SD = 5.75$). The cisgender students had an average age of 22.14 ($SD = 0.17$) and transgender students had an average age of 28.24 ($SD = 1.30$). In terms of gender identity, 65.7% of the participants identified as female ($n = 73,219$), 34.1 % identified as male (38,022), and 0.2% identified as transgender ($n = 174$). Approximately 28% of respondents identified as REM, and 6.8% identified as LGBTQ. There were differences in racial/ethnic identity and sexual orientation among the gender identity groups. Specifically, a significantly greater proportion of transgender individuals identified

as a REM (44.8% vs 28.2%) and as LGBQ (73.2% vs 6.7%) than cisgender non-LGBQ individuals.

Self-Directed Violence between Transgender and Cisgender Students, by Demographics

Among REM and NHW college students, transgender individuals were significantly more likely to report self-harm, suicidal ideation, suicide attempt, and depression in the past 12-months than their cisgender peers (See Table 1). For instance, REM transgender individuals were more likely to endorse being diagnosed with depression (38.5% vs 7.3%) and report that they had engaged in self-harm (38.0% vs 5.3%), suicidal ideation (35.2% vs 6.6%), and suicide attempt (29.6% vs 1.5%) than REM cisgender individuals. Similar results were found when comparing NHW transgender persons with NHW cisgender individuals. Specifically, NHW transgender individuals were more likely to endorse being diagnosed with depression (38.6% vs 10.8%) and reported that they had engaged in self-harm (27.8% vs 5.0%), suicidal ideation (31.1% vs 5.8%), and suicide attempt (10.0% vs 0.9%) than NHW cisgender individuals. In addition, transgender individuals who identified as NHW were also more likely to request suicide prevention information (43.8% vs 28.0%) than their cisgender peers.

When sexual orientation was considered, transgender sexual minority and heterosexual students reported self-directed violence in greater proportions than non-LGBQ cisgender individuals. Specifically, transgender individuals who identified as LGBQ endorsed that they had been diagnosed with depression (43.6% vs 20.7%) and that they had engaged in self-harm (41.3% vs 14.4%), suicidal ideation (43.8% vs 16.8%), and suicide attempt (25.6% vs 3.4%) in greater proportions than non-LGBQ cisgender individuals. Among the non-LGBQ students, those who identified as transgender were more likely to endorse depression (18.2% vs 9.1%) and self-harm (13.3% vs 4.5%) than their cisgender counterparts.

Self-Directed Violence among Transgender Students

Prior to adjusting for age and discrimination, transgender individuals who identified as LGBQ had greater odds of seeking suicide prevention information, were more likely to have been diagnosed with depression and had higher odds of self-harm, suicidal ideation, as well as attempting suicide in the past year in comparison to their non-LGBQ transgender peers (see Table 2). The differences between LGBQ and non-LGBQ transgender individuals who sought information about suicide prevention, endorsed a diagnosis of depression, and attempted suicide were no longer significant after adjusting for discrimination. In the final models, which adjusted for both age and discrimination, transgender LGBQ individuals had greater odds of requesting information on suicide prevention (OR = 2.49; 95% CI = 1.05-5.93), endorsing self-harm (OR = 4.21; 95% CI = 1.43- 12.42), and reporting suicidal ideation (OR = 8.67; 95% CI = 2.39-31.44) than their non-LGBQ peers. Throughout each sequence of the logistic regression, compared to their NHW transgender counterparts, transgender individuals who identified as a REM (OR = 3.33, 95% CI = 1.10-10.05) had higher odds of attempting suicide.

Discussion

This study addresses gaps in knowledge about self-directed violence among transgender individuals by examining the differences based on their racial/ethnic identity and sexual orientation. It is also among the first studies to examine suicidal thoughts and behaviors amid transgender students in higher education. Similar to previous research, we found that transgender individuals were more likely to report self-harm, suicidal ideation, suicide attempt, and depression in the past 12-months than their cisgender peers.

Moreover, this study is among the first to discover important differences between and among transgender individuals regarding their desire for information about suicide prevention information. Our results showed that LGBTQ-identified transgender students have greater burdens of self-directed violence when compared with transgender students who are not LGBTQ. That more LGBTQ-identified transgender students report being interested in receiving information about suicide prevention is encouraging, however it also raises important questions about the type of information they find and *if* they find information. While it is clear that suicide prevention is a major public health issue for transgender communities (Grant et al., 2011; Haas et al., 2010), it is unclear whether campus communities provide accessible, culturally relevant information for transgender students experiencing suicidal risk. Further research is needed to explore how, if, and where transgender students access suicide prevention services and information. Similar research from the campus side (i.e., with counselors, administrators, mental health professionals) is equally needed in order to assess structural (e.g., accessibility, privacy) and workforce development (e.g., cultural awareness, clinical education) needs from a systems-level perspective. Such studies should account for a range of factors, including veteran status, which may be associated differentially with suicide risk among transgender students.

Although gender identity development typically begins during childhood, research shows that many persons do not identify as transgender until adolescence (Testa et al., 2014). Testa and colleagues (2014) reported that individuals who were either aware of transgender persons or had met another transgender individual prior to self-identifying as transgender were less likely to endorse suicidal ideation during this stage of identity development compared to those who were unaware and disconnected from other transgender persons. Therefore, high school and college may be the first opportunities youth have to explore their gender identity, especially if they constantly received the message to wait until they were older to express their gender identity.

Effrig, Bieschke, and Locke (2011) conducted one of the few studies that compared the prevalence of self-directed violence among transgender college students with the experience of their cisgender peers, and found that transgender students were more likely to endorse self-harm, suicidal ideation, and suicide attempts than their cisgender peers. Although Effrig and colleagues inquired about racial/ethnic identity and sexual orientation, these variables were not included in their analyses. Therefore, the present study extends the existing literature about self-directed violence among transgender individuals by focusing on multiple identities. Specifically, we found that REM, NHW, and LGBTQ transgender individuals were more likely to report self-harm, suicidal ideation, suicide attempts, and

depression than their cisgender peers, with the fewest differences found among the heterosexual students. Although non-LGBQ transgender persons were more likely to report depression and self-harm than their non-LGBQ cisgender peers, there were no significant differences in terms of suicidal ideation and attempt.

Much of the previous research conducted on sexual and gender minorities has ignored the important differences between these two groups, treating LGBTQ persons as a monolithic whole. Furthermore, few studies have looked at the impact of racial/ethnic and sexual/gender minority statuses on health outcomes of transgender persons. The findings of this study are in line with previous research showing suicide disparities affecting REM, LGBQ, and transgender persons, and shows that multiple minority identities do increase risk of self-directed violence (Goldblum et al., 2012; Haas et al., 2014), even among a population of at-risk transgender college students.

One potential explanation for the compounding effect of intersectional identities on self-directed violence is that those who endorse multiple minority identities may experience higher levels of discrimination than those who endorse only a single minority identity. For example, REM transgender students might be exposed to discrimination both because of their race and/or their gender identity (Jefferson et al., 2013). When we accounted for exposure to discrimination in our models, some of the association between self-directed violence, race/ethnicity, and sexual identity among transgender students was reduced. Some forms of self-directed violence, however, remained elevated; REM transgender students continued to report a higher number of suicide attempts than NHW transgender students, even accounting for discrimination. This finding highlights both that factors beyond self-report of discrimination may influence mental health outcomes among REM transgender students, and that these students may need tailored suicide prevention interventions, resources, and support. For example, Trans Life line offers telephone-based social support provided by transgender-identified staff. The Trevor Project provides both telephone- and internet-based suicide prevention services by trained counselors for youth and young adults (ages 13-24) who identify as LGBT or are questioning their sexual and/or gender identity.

Several limitations are noted in light of these findings. First, the NCHA data are cross-sectional, and statements of causality cannot be made. Second, as a self-report survey, these results may be an underestimate of self-directed violence as experienced by transgender students. For instance, although transgender is an umbrella term, students who identify as genderqueer, bigender, agender, or gender diverse may or may not identify as transgender. Moreover, the transgender response choice did not have options for common distinctions among transgender individuals, namely male-to-female or female-to-male identities. Additionally, some universities have strict policies against expressing and/or identifying as LGBTQ (Lytle, Vaughan, Rodriguez, & Shmerler, 2014); therefore, some students may not be able to safely identify as transgender on a college survey. It is unclear whether these factors might have led to a systematic bias in identifying as transgender and/or REM on the NCHA survey. Third, institutions of higher education self-select to take part in the NCHA survey and then randomly select students to participate, thus limiting the generalizability of the results. Furthermore, these results may not be representative of transgender individuals not enrolled in higher education, as persons seeking and enrolled in higher education are

likely different from those who do not. Finally, the only survey item that addressed discrimination focused on academic concerns and does not specifically include transphobia; therefore, this item may only be a proxy for discrimination experienced by transgender students.

In conclusion, this study expands knowledge of self-directed violence associated with multiple identities among a diverse sample of college students. Although the advent of the Trans Lifeline is a step in the right direction, our findings highlight the need for additional research to better understand the health disparities experienced by transgender individuals with multiple minority statuses as well as the protective factors that promote resiliency among these persons. This information is a necessary step towards the development of a suicide prevention intervention geared towards transgender individuals.

References

- American College Health Association. Original ACHA-NCHA sample paper survey (fall 2008 to spring 2011). 2008. Retrieved from www.acha-ncha.org/sample_survey.html
- American College Health Association. American College Health Association- National College Health Assessment II: Reference group data report Fall 2008. 2009a. Retrieved from http://www.acha-ncha.org/docs/ACHA-NCHA_Reference_Group_Report_Fall2008.pdf
- American College Health Association. American College Health Association- National College Health Assessment II: Reference group data report Spring 2009. 2009b. Retrieved from http://www.acha-ncha.org/docs/ACHA-NCHA_Reference_Group_Report_Spring2009.pdf
- Beemyn B, Curtis B, Davis M, Tubbs NJ. Transgender issues on college campuses. *New directions for Student Services*. 2005; 2005(111):49–60.
- Brill, SA.; Pepper, R. *The transgender child: A handbook for families and professionals*. Berkeley, CA: Cleis Press; 2008.
- Brown GR, Jones KT. Racial health disparities in a cohort of 5135 transgender veterans. *Journal of Racial and Ethnic Health Disparities*. 2014; 1:257–266.
- Centers for Disease Control and Prevention. Fatal injury reports, national and regional, 1999 - 2013. Web-based injury statistics query and reporting system. 2013a. Retrieved from webappa.cdc.gov/cgi-bin/broker.exe
- Centers for Disease Control and Prevention. Leading causes of death 1999-2013, national or regional. 2013b. Retrieved from <http://webappa.cdc.gov/cgi-bin/broker.exe>
- Clements-Nolle K, Marx R, Guzman R, Katz M. HIV prevalence, risk behaviors, health care use, and mental health status of transgender persons: Implications for public health intervention. *American Journal of Public Health*. 2001; 91(6):915. [PubMed: 11392934]
- Clements-Nolle K, Marx R, Katz M. Attempted suicide among transgender persons: The influence of gender-based discrimination and victimization. *Journal of Homosexuality*. 2006; 51(3):53–69. [PubMed: 17135115]
- Drum DJ, Denmark AB. Campus suicide prevention: bridging paradigms and forging partnerships. *Harvard Review of Psychiatry*. 2012; 20(4):209–221. [PubMed: 22894730]
- Effrig JC, Bieschke KJ, Locke BD. Examining victimization and psychological distress in transgender college students. *Journal of College Counseling*. 2011; 14(2):143–157.
- Goldblum P, Testa RJ, Plum S, Hendricks ML, Bradford J, Bongar B. The relationship between gender-based victimization and suicide attempts in transgender people. *Professional Psychology: Research and Practice*. 2012; 43(5):468.
- Grant, JM.; Mottet, L.; Tanis, JE.; Harrison, J.; Herman, J.; Keisling, M. *Injustice at every turn: A report of the National Transgender Discrimination Survey*. 2011. Retrieved from endtransdiscrimination.org/PDFs/NTDS_Report.pdf
- Grossman AH, D'Augelli AR. Transgender youth and life-threatening behaviors. *Suicide and Life-Threatening Behavior*. 2007; 37(5):527–537. [PubMed: 17967119]

- Haas AP, Eliason M, Mays VM, Mathy RM, Cochran SD, D'Augelli AR, et al. Clayton PJ. Suicide and suicide risk in lesbian, gay, bisexual, and transgender populations: review and recommendations. *Journal of Homosexuality*. 2010; 58(1):10–51.
- Herman, JL.; Haas, AP.; Rodgers, PL. Suicide attempts among transgender and gender non-conforming adults. 2014. Retrieved from escholarship.org/uc/item/8xg8061f#page-4
- Institute of Medicine. The health of lesbian, gay, bisexual, and transgender people: Building a foundation for better understanding. Washington, DC: National Academies Press; 2011.
- Jefferson K, Neilands TB, Sevelius J. Transgender women of color: discrimination and depression symptoms. *Ethnicity and Inequalities in Health and Social Care*. 2013; 6(4):121–136. [PubMed: 25346778]
- Johnson RB, Oxendine S, Taub DJ, Robertson J. Suicide prevention for LGBT students. *New Directions for Student Services*. 2013; 2013(141):55–69.
- Kenagy GP. Transgender health: Findings from two needs assessment studies in Philadelphia. *Health & Social Work*. 2005; 30(1):19–26. [PubMed: 15847234]
- Kenagy GP, Bostwick WB. Health and social service needs of transgender people in Chicago. *International Journal of Transgenderism*. 2005; 8(2-3):57–66.
- Lytle MC, De Luca S, Blosnich J. The influence of intersecting identities on self-harm, suicidal behaviors, and depression among lesbian, gay, and bisexual individuals. *Suicide and Life-Threatening Behavior*. 2014; 44(4):384–391. [PubMed: 25250405]
- Lytle MC, Vaughan MD, Rodriguez EM, Shmerler DL. Working with LGBT individuals: Incorporating positive psychology into clinical training and practice. *Psychology of Sexual Orientation and Gender Diversity*. 2014; 1(4):335–347. [PubMed: 25544947]
- Mustanski BS, Garofalo R, Emerson EM. Mental health disorders, psychological distress, and suicidality in a diverse sample of lesbian, gay, bisexual, and transgender youths. *American Journal of Public Health*. 2010; 100(12):2426–2432. [PubMed: 20966378]
- Mustanski B, Liu RT. A longitudinal study of predictors of suicide attempts among lesbian, gay, bisexual, and transgender youth. *Archives of Sexual Behavior*. 2013; 42(3):437–448. [PubMed: 23054258]
- Singh AA. Transgender youth of color and resilience: Negotiating oppression and finding support. *Sex Roles*. 2013; 68(11-12):690–702.
- Testa RJ, Jimenez CL, Rankin S. Risk and resilience during transgender identity development: The effects of awareness and engagement with other transgender people on affect. *Journal of Gay & Lesbian Mental Health*. 2014; 18(1):31–46.

Table 1
Self-directed violence and depression between gender identity, by race/ethnicity and sexual orientation

	Suicide Prevention % (SE)	Depression ¹ % (SE)	Self-Harm ¹ % (SE)	Suicidal Ideation ¹ % (SE)	Suicide Attempt ¹ % (SE)
<u>Racial/Ethnic Minority</u>					
Transgender (n = 73)	32.9 (5.5)	38.5 (5.7)	38.0 (5.7)	35.2 (5.6)	29.6 (5.3)
Cisgender (n = 30,501)	37.2 (0.3)	7.3 (0.1)	5.3 (0.1)	6.6 (0.1)	1.5 (0.0)
<u>non-Hispanic white</u>					
Transgender (n = 90)	43.8 (5.2)	38.6 (5.1)	27.8 (4.7)	31.1 (4.9)	10.0 (3.2)
Cisgender (n = 77,685)	28.0 (0.2)	10.8 (.01)	5.0 (0.0)	5.8 (0.0)	0.9 (0.0)
<u>LGBQ</u>					
Transgender (n = 123)	43.7 (4.5)	43.6 (4.5)	41.3 (4.4)	43.8 (4.5)	25.6 (3.9)
Cisgender (n = 7,388)	42.5 (0.6)	20.7 (0.5)	14.4 (0.4)	16.8 (0.4)	3.4 (0.2)
<u>Heterosexual</u>					
Transgender (n = 45)	29.5 (6.8)	18.2 (5.8)	13.3 (5.1)	6.7 (3.7)	4.4 (3.1)
Cisgender (n = 103,025)	29.9 (0.1)	9.1 (0.0)	4.5 (0.0)	5.3 (0.0)	0.9 (0.0)

Table 2
Adjusted odds of self-directed violence among transgender persons

Model 1						
	Suicide Prevention	Depression	Self-Harm	Suicide Ideation	Suicide Attempt	
	AOR (95%CI)	AOR (95%CI)	AOR (95%CI)	AOR (95%CI)	AOR (95%CI)	
LGBQ ¹	2.16 (1.00-4.66) *	3.62 (1.53-8.55) **	5.06 (1.85-13.88) **	9.87 (2.88-33.81) ***	6.31 (1.40-28.39) *	
REM ²	0.68 (0.35-1.33)	0.86 (0.43-1.75)	1.49 (0.74-3.05)	1.09 (0.53-2.24)	3.51 (1.43-8.60) **	
Model 2						
	Suicide Prevention	Depression	Self-Harm	Suicide Ideation	Suicide Attempt	
	AOR (95%CI)	AOR (95%CI)	AOR (95%CI)	AOR (95%CI)	AOR (95%CI)	
Discrim	0.94 (0.44-1.98)	3.61 (1.63-7.98) **	1.160 (0.53-2.55)	1.16 (0.53-2.53)	1.25 (0.45-3.52)	
LGBQ ¹	2.22 (0.96-5.17)	1.95 (0.76-5.03)	4.15 (1.42-12.16) **	8.55 (2.37-30.89) ***	4.24 (0.86-20.89)	
REM ²	0.73 (0.36-1.47)	0.76 (0.35-1.65)	1.42 (0.67-3.03)	1.09 (0.51-2.36)	3.53 (1.29-9.68) *	
Model 3						
	Suicide Prevention	Depression	Self-Harm	Suicide Ideation	Suicide Attempt	
	AOR (95%CI)	AOR (95%CI)	AOR (95%CI)	AOR (95%CI)	AOR (95%CI)	
Discrim	1.12 (0.51-2.45)	3.36 (1.51-7.52) *	1.00 (0.45-2.26)	1.00 (0.45-2.24)	0.86 (0.28-2.63)	
Age	0.95 (0.91-0.99) *	1.01 (0.98-1.04)	1.00 (0.97-1.03)	1.00 (0.97-1.04)	1.02 (0.98-1.05)	
LGBQ ¹	2.49 (1.05-5.93) *	1.97 (0.76-5.09)	4.21 (1.43-12.42) **	8.67 (2.39-31.44) ***	4.14 (0.83-20.62)	
REM ²	0.93 (0.45-1.96)	0.76 (0.34-1.70)	1.43 (0.64-3.16)	1.07 (0.48-2.42)	3.33 (1.10-10.05) *	

Note:

AOR=adjusted odds ratio

¹ = heterosexual is reference category for sexual orientation

² = non-Hispanic white is reference category for racial/ethnic groups

* p<.05

** p<.01

100>d

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript