Suicidality and Intersectionality Among Students Identifying as Nonheterosexual and With a Disability

Matthew T. King¹, Gabriel J. Merrin², Dorothy L. Espelage³, Nickolas J. Grant¹, and Kristen L. Bub¹

Abstract
Research about students with disabilities and students identifying as LGBQ (lesbian, gay, bisexual, or questioning) reveals that both populations report more suicidality and peer victimization and less school connectedness than do their peers. No study has previously examined the intersection of these identities with regard to peer victimization, school connectedness, and suicidality. Using a sample of 11,364 high school students, we examined the relationships among these identities, peer victimization, and school connectedness with suicidal ideation. Compared with their peers without either identity, students identifying with one of these identities reported higher levels of suicidal ideation. School connectedness and peer victimization each moderated the association between identity and suicidal ideation. In addition, students who were victimized more than their peers and who identified both with a disability and as LGBQ (n = 250) reported the highest levels of suicidal ideation. School-based victimization and suicide prevention programs should consider students’ multiple identities.

Peer victimization and suicide continue to be prevalent public health issues that affect adolescents across the United States (Espelage & Holt, 2013; Kaminski & Fang, 2009). Peer victimization has been defined as “the experience among children of being a target of the aggressive behaviour of other children, who are not siblings and not necessarily age mates” (Hawker & Boulton, 2000, p. 441). Although peer victimization does not cause suicide (American Foundation for Suicide Prevention, 2013), experiences with victimization are important predictors of adverse psychological outcomes for youth (see Holt et al., 2015). Among specific populations such as students with disabilities and students who identify as lesbian, gay, bisexual, or questioning (LGBQ), the effects of victimization are especially worrisome. These populations may be particularly vulnerable to the poor psychosocial and health-related outcomes that result from victimization, including low self-esteem, depression, and delinquency for students with disabilities (Rose, Forber-Pratt, Espelage, & Aragon, 2014) and higher rates of drug use, depression, and suicidality for youth identifying as LGBQ (Birkett, Espelage, & Koenig, 2009). The extant literature shows that stigma-related stressors (e.g., peer victimization), when combined with typical daily stressors, predict poor outcomes.

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(e.g., suicidality; Meyer, 2003; Meyer, Frost, & Nezhad, 2014). Although not all students with disabilities or students identifying as LGBQ are the targets of peer victimization, even limited experience with identity-based victimization can lead to outcomes such as low self-esteem, school avoidance, depression, and anxiety (Swearer, Espelage, Vaillancourt, & Hymel, 2010). Similarly, involvement in victimization may be associated with suicidal ideation and behaviors (Espelage & Holt, 2013).

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As a result, the majority of research in this area has focused on understanding ecological risk and protective factors, such as school-level interventions and peer-to-peer interactions, as a way to prevent victimization for all students. Far less research has been concerned with specific populations, such as students with disabilities and students who identify as LGBQ (Duke, 2011; Rose, Monda-Amaya, & Espelage, 2011). Using a minority stress framework (Meyer, 2003), we sought to understand how students’ intersecting identities may influence the relation between peer victimization and school connectedness on suicidal ideation.

**Minority Stress Framework**

Previous research based on the minority stress model has explained the poor psycho-social and health-related outcomes (e.g., suicidality) of youth identifying as LGBQ. Meyer et al. (2014) conceptualized minority stress as stress arising from the social position of sexual minorities as “a stigmatized and disadvantaged minority group in society” (p. 177). In his seminal article, Meyer (2003) proposed that sexual minority health disparities (e.g., anxiety, depression, risky behaviors) can be explained by stressors prompted by a homophobic and stigmatizing culture, leading to internalized discrimination and marginalization.

The minority stress model posits that the disadvantaged social position of people who identify as LGBQ exposes them to increased stress and fewer resources for coping, in comparison with people who are heterosexual (Meyer, Schwartz, & Frost, 2008). Individuals identifying with a marginalized social identity may experience more adverse health outcomes, in part due to repeated exposure to microaggressions. Although major discriminatory events play a role in adverse mental health outcomes, such as depression and anxiety, more recent research findings indicate that microaggressions may have an additive role in producing minority stress (Balsam, Molina, Beadnell, Simoni, & Walters, 2011). The minority stress model has been used to understand the health outcomes (Meyer, 1995, 2003) and prevalence of suicide (Meyer et al., 2014) among sexual minorities, but it has been infrequently extended to individuals with intersecting marginalized identities. Although all students can be at risk for victimization and suicidality, the minority stress model (if extended beyond sexual orientation) holds that students with disabilities and students who identify as LGBQ are at risk for increased levels of stress and fewer resources for coping as compared with their peers. The combination of these two identities may add an additional level of stress leading to greater risk of suicidal ideation due to repeated exposure to victimization.

**Victimization, Suicidality, and Students With Disabilities**

As of 2013, nearly 22% of middle and high school students participating in a nationwide survey reported that they were being bullied at school (National Center for Education Statistics, 2015). The rates of victimization among students with disabilities are significantly higher. In a longitudinal study examining
national prevalence rates of repeated victimization. Blake, Lund, Zhou, Kwok, and Benz (2012) found that students with disabilities are up to 1.5 times more likely to report being victimized as similarly aged students without a disability. In an international study examining victimization rates across 11 countries that included students with disabilities and chronic illnesses, students with disabilities were 1.3 to 2.1 times more likely to be victimized than their peers without disabilities (Sentenac et al., 2013).

Students with disabilities are at a heightened risk for not only victimization but also suicidality (Hardan & Sahl, 1999; Ludi et al., 2012; Wachter & Bouck, 2008). According to the 2013 Youth Risk Behavior Surveillance System, 17% of high school students nationwide seriously consider suicide, and 8% actually attempt it (Centers for Disease Control and Prevention, 2013). Yet, little information is available about suicidal ideation among students with disabilities even though there is a link between victimization and suicidality. Studies have compared the differences in the rates of internalizing symptoms for students with and without disabilities. For example, in a study of 130 Mexican students ages 6 to 17, Gallegos, Langley, and Villegas (2012) found that students with learning disabilities (as identified by school records) were significantly more likely to experience anxiety (12%–22%) and depression (18%–32%) than were students without a learning disability.

Rates of victimization and bullying among students with disabilities within the school context vary. The variability of reported rates may be a consequence of how disability is defined and measured within educational settings. Students receive special education services when they meet the criteria for a disability, as delineated in the Individuals with Disabilities Education Act (2006). Yet, some studies use self-report, but others use school records for determining disability status. A review by Schroeder, Cappadocia, Bebko, Pepler, and Weiss (2014) showed that rates of bullying vary by the method of analysis (observational vs. self-report) and the informants used to obtain information (e.g., parent, teacher, peer). Rates of bullying range from 7% to 94% with parent report, 30% with teacher report, 7% with peer report, and 17% to 40% with self-report. In all, rates of bullying and victimization may be influenced by the methods used to measure victimization, as well as how students with disabilities are identified.

Victimization, Suicidality, and Students Identifying as LGBQ

Much like students with disabilities, students identifying as LGBQ have reported higher levels of victimization as compared with their straight-identified peers (Espelage, Aragon, Birkett, & Koenig, 2008; Robinson & Espelage, 2011, 2012). According to the 2013 National School Climate Survey of 8,854 students in Grades 6 through 12 from over 3,200 school districts across the United States, a staggering 74% of youth who identify as LGBQ reported being verbally harassed in the past year (Kosciw, Greytak, Palmer, & Boesen, 2014). Further, among students identifying as LGBQ, 56% reported homophobic remarks; 49%, cyberbullying; 36%, physical harassment; and nearly 56%, feeling unsafe at school.

Students who identify as LGBQ are also at a higher risk for suicidal ideation than are their straight-identified peers (D’Augelli et al., 2005; Eisenberg & Resnick, 2006; Robinson & Espelage, 2011). This association is potentially mediated by victimization. In a representative sample of 1,988 high school students, Bontempo and D’Augelli (2002) found that students identifying as LGBQ who reported higher levels of victimization also reported higher levels of substance use, suicidality, and sexual risk behaviors versus their peers. However, at low levels of victimization, they reported levels of substance use, suicidality, and sexual risk behaviors at rates similar to those of their peers identifying as heterosexual. Fortunately, protective factors, especially factors related to school connectedness, have been shown to mitigate the risk of suicidality among youth identifying as LGBQ (Gay,

Intersecting Identities

Research in understanding the levels and effects of intersecting identities first appeared in the writing of Black feminists and queer women of color (i.e., Anzaldúa, 1987; Lorde, 1984) and was later termed intersectionality by Kimberlé Crenshaw (1989). Assuming that one cultural identity encompasses and explains the entirety of one’s lived experiences is less than ideal. In essence, overlooking intersectionality undermines the importance of one’s multiple salient identities within a system of socialization. The concept of intersecting identities posits that one’s lived experiences are not based on a single cultural identity. Intersectionality assumes that marginalization of identities within a system of socialization can be understood according to how multiple identities interact (Bowleg, 2008). Although Duke (2011) synthesized the literature about the intersection of disability and sexual orientation among youth, to our knowledge, no study has examined the intersection of sexual orientation and disability among students with regard to peer victimization.

School Connectedness

School connectedness is defined by the Centers for Disease Control and Prevention (2000) as a student’s belief that other students and staff care about his or her academic achievement and personal well-being. When students feel connected to their school, they report higher levels of engagement, emotional control, and motivation and are more likely to succeed academically (Furrer & Skinner, 2003). In a study of over 36,000 students in Grades 7 through 12, researchers found school connectedness to be one of the factors that protected against substance use, school absences, and suicidal ideation and attempts (Resnick et al., 1997).

Previous research also indicates that school connectedness may moderate the effects of victimization and suicidal ideation for certain populations of students. For instance, in a study of 10- to 14-year-olds (N = 490), Loukas and Pasch (2013) found that school connectedness buffered the negative effect of victimization on conduct problems over time for girls. In a study of 951 high school students who identify as LGBQ, Duong and Bradshaw (2014) found that feeling connected to an adult at one’s school moderated the relations among bullying, aggressive behaviors, and suicidal behaviors such that those who felt more connected were less likely to report suicidal behaviors. However, the effects of victimization may also negatively influence school connectedness. For example, Poteat and Espelage (2007) found that middle school-aged males who experienced homophobic name-calling were more likely to experience a lower sense of school belonging than were their peers. In addition, students with disabilities may be less likely to participate in many activities that help students feel connected to their school (Vinoski, Graybill, & Roach, 2016). This may be related to the general inclusion practices of individual schools. Zablotsky, Bradshaw, Anderson, and Law (2013) examined individual- and school-level risk factors related to bullying involvement with a national sample of students with autism spectrum disorder. Compared with students who were primarily in special education settings, students in full-inclusion settings were at 3.23 times greater risk, and students who spent the majority of their time in inclusive settings were at 2.55 times greater risk of victimization. Although we did not examine the specific elements of school connectedness in the current study, we explored the role of school connectedness as a protective factor against the harmful effects of victimization.

Current Study

Although previous researchers have examined the associations among suicidality, peer victimization, and contextual buffers (e.g., school connectedness) among discrete populations (e.g., students who identify with a disability or as LGBQ), to our knowledge, no study has examined the intersection of these identities and suicidal ideation with a sample of high
school students. We addressed the following research questions:

*Research Question 1*: Do students who identify with a disability or as LGBQ, or both, report higher levels of suicidal ideation than do students who do not identify with either identity?

*Research Question 2*: Does peer victimization moderate the negative association between identifying with a disability or as LGBQ, or both, and suicidal ideation?

*Research Question 3*: Does school connectedness moderate the positive association between identifying with a disability or as LGBQ, or both, and suicidal ideation?

We hypothesize that students who identified with either identity would report higher levels of suicidal ideation than their straight-identified peers without a disability. For students identifying as LGBQ and with a disability, we expected that they would report higher rates of suicidal ideation when compared with students who identified as LGBQ, students with a disability, or students who did not identify with either identity. In addition, we hypothesized that peer victimization would moderate (specifically, exacerbate) the negative relation between identifying with a disability or as LGBQ, or both, and suicidal ideation and that school connectedness would moderate (specifically, buffer) this relationship.

**Method**

**Participants**

The current study included participants from the 2015 Youth Survey, composed of 11,364 high school students, ages 14 to 18 (*MD* = 16, *SD* = 1.23), from 23 school districts in a large suburban Midwest county. Our sample included 79.7% (*n* = 9,058) White-identified students, with 20.3% of the sample identifying as non-White (*n* = 2,304). A binary variable was created for sexual orientation, with 93.6% students identifying as straight and 6.4% (*n* = 730) identifying as LGBQ. A total of 2.2% (*n* = 250) self-identified with a disability and as LGBQ. With regard to sex, 49.6% (*n* = 5,626) of the sample identified as male and 50.4% (*n* = 5,710) as female. In addition, 9% (*n* = 1,007) of the sample reported having learning, emotional, or physical disabilities that limited them from doing certain educational or physical activities. See Table 1 for more information.

**Procedures**

Data for this study were drawn from the Youth Survey, a 100-item self-report assessment routinely administered by the county’s Youth Commission to capture youth’s perceptions, behaviors, attitudes, and experiences on topics including individual characteristics, exercise and nutrition, family dynamics, peer relations, drug use, aggression, and victimization, as well as school connectedness (Koenig, Espelage, & Biendseil, 2005). In addition, the survey included information on health-related outcomes and potential risk factors for victimization, mental health challenges, and substance abuse. The factor structure of the Youth Survey has been confirmed through factor analyses (Koenig et al., 2005, Koenig & Bettin, 2009).

After institutional review board approval was granted, a formal letter explaining the study was sent home early in the school year, which included a waiver of active parental consent allowing parents to opt their child out of the study. High school students whose parents did not withdraw them from the study, who were at school the day of administration, and who provided written assent independently completed anonymous questionnaires via SurveyMonkey during school hours.

**Measures**

**Suicidal ideation.** We assessed suicidal ideation, the dependent variable, with the following item: “During the past 12 months, have you thought seriously about killing yourself?” Response options were *No* (0), *Yes, but rarely* (1), *Yes, some of the time* (2), and *Yes, almost all of the time* (3). Higher self-reported scores
Table 1. Data for All Variables Across Identity Groups.

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>No Disability, Not LGBQ</th>
<th>Disability</th>
<th>LGBQ</th>
<th>Disability and LGBQ</th>
<th>F Test</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sample, n (%)</strong></td>
<td>11,364</td>
<td>9,377 (83)</td>
<td>1,007 (9)</td>
<td>730 (6)</td>
<td>250 (2)</td>
<td></td>
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<tr>
<td><strong>Demographics, n (%)</strong></td>
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<tr>
<td>Female</td>
<td>5,710 (50.4)</td>
<td>4,426 (78.7)</td>
<td>528 (9.4)</td>
<td>489 (8.7)</td>
<td>183 (3.2)</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>5,626 (49.6)</td>
<td>5,933 (86.4)</td>
<td>476 (8.3)</td>
<td>235 (4.1)</td>
<td>66 (1.2)</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>9,058 (79.7)</td>
<td>7,539 (83.3)</td>
<td>790 (8.7)</td>
<td>547 (6.0)</td>
<td>182 (2.0)</td>
<td></td>
</tr>
<tr>
<td>Non-White</td>
<td>2,304 (20.3)</td>
<td>1,837 (79.6)</td>
<td>216 (9.4)</td>
<td>183 (8.0)</td>
<td>68 (3.0)</td>
<td></td>
</tr>
<tr>
<td><strong>DV: Suicidal ideation, M (SD)</strong></td>
<td>1.24 (0.58)</td>
<td>1.15&lt;sup&gt;a&lt;/sup&gt; (0.45)</td>
<td>1.56&lt;sup&gt;b&lt;/sup&gt; (0.84)</td>
<td>1.58&lt;sup&gt;b&lt;/sup&gt; (0.84)</td>
<td>2.12&lt;sup&gt;c&lt;/sup&gt; (1.03)</td>
<td>495.2&lt;sup&gt;*&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>IV, M (SD)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>School connectedness</td>
<td>12.43 (3.43)</td>
<td>12.68&lt;sup&gt;a&lt;/sup&gt; (1.99)</td>
<td>11.40&lt;sup&gt;b&lt;/sup&gt; (1.80)</td>
<td>11.28&lt;sup&gt;b&lt;/sup&gt; (1.71)</td>
<td>10.34&lt;sup&gt;c&lt;/sup&gt; (1.71)</td>
<td>106.4&lt;sup&gt;*&lt;/sup&gt;</td>
</tr>
<tr>
<td>Peer victimization</td>
<td>1.18 (2.12)</td>
<td>1.03&lt;sup&gt;a&lt;/sup&gt; (1.97)</td>
<td>1.96&lt;sup&gt;b&lt;/sup&gt; (2.73)</td>
<td>1.48&lt;sup&gt;c&lt;/sup&gt; (2.26)</td>
<td>2.91&lt;sup&gt;d&lt;/sup&gt; (3.02)</td>
<td>119.6&lt;sup&gt;*&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

Note. Identical superscripts represent nonsignificant differences. Different superscripts represent significant differences at \( p < .01 \) based on a Bonferroni correction. Missing data are included. Variables with missing data include sex (\( n = 28 \)), race (\( n = 2 \)), suicide ideation (\( n = 173 \); range = 1–4), school connectedness (\( n = 347 \); range = 0–18), peer victimization (\( n = 473 \); range = 0–12). LGBQ = lesbian, gay, bisexual, or questioning; DV = dependent variable; IV = independent variable.

*\( p < .001 \).
indicate more suicidal ideation. We also examined linearity of the suicidal ideation variable using stem and leaf plots, boxplots, and normal probability plots prior to fitting our models. We did this for peer victimization and school connectedness (discussed subsequently) as well.

**Disability.** We used the following item to establish disability status: “Do you have a learning, emotional, or physical disability that limits you from doing certain educational activities?” Response options included Yes (1), No (0), and Not sure (0). We considered the responses of students who reported Not sure to be in the “no disability” subpopulation.

**Sexual orientation.** We assessed sexual orientation with the following question: “How do you describe yourself?” Students could select all that apply from these options: straight or heterosexual, gay or lesbian, bisexual, or questioning. Response options included Yes (1) and No (0). We transformed LGBQ into a single variable for all respondents who selected Yes for at least one the relevant options (i.e., gay or lesbian, bisexual, or questioning).

**Peer victimization.** We used the four-item University of Illinois Victimization Scale to measure peer victimization experiences (Espelage & Holt, 2001). Students were asked how often the following happened to them in the past 30 days: “Other students called me names,” “Other students made fun of me,” “Other students picked on me,” and “I got hit and pushed by other students.” Response options were Never (0), 1 or 2 times (1), 3 or 4 times (2), and 5 or more times (3). Items were summed, and higher self-reported scores indicated more victimization. We used sum scores to establish larger variability within the construct (e.g., variance). Items that are averaged or summed of the same construct produce the same standardized estimates, although the unstandardized estimates may vary due to differences in the range of the measures. Scores from this scale have good construct validity as well as internal consistency, with a Cronbach’s alpha coefficient of .85. The construct validity of this scale has been supported by exploratory and confirmatory analysis. Average scores have converged with peer nominations of victimization.

**School connectedness.** Students completed a six-item scale of school connectedness (Koenig et al., 2005). Students were asked how strongly they agree or disagree with the following: “The rules and expectations are clearly explained,” “I feel close to people in my school,” “I feel safe at my school,” “Teachers and other adults treat students fairly,” “There are adults I can talk to at school if I have a problem,” and “I feel like I belong at this school.” Response options were Strongly disagree (0), Disagree (1), Agree (2), and Strongly agree (3). Items were summed and showed good internal consistency, with a Cronbach’s alpha coefficient of .86. Higher scores indicate more school connectedness.

**Demographics.** Students were asked to provide information regarding their sex (male = 0, female = 1), grade (9th = 0, 10th = 1, 11th = 2, 12th = 3), race (White = 0, non-White = 1), and age.

**Analytic Plan**

Because students are nested within schools, we first examined the amount of school-level dependency in suicidal ideation. An intraclass correlation indicated that 99.5% of variance lay at the between-person level and only 0.5% at the between-school level. Therefore, we opted against using a multilevel model, given the small amount of variance at the between-school level. Instead, we fit three nested linear regression models to our data using Mplus 7.4. Model 1 included the main effects of school connectedness and peer victimization as well as the demographic variables on suicidal ideation. Model 2 included five two-way interactions: disability status and LGBQ status; LGBQ status and school connectedness and peer victimization, respectively; and
disability status and school connectedness and peer victimization, respectively. Finally, Model 3 included each of the main effect and interaction variables in the two previous models, as well as three-way interactions between disability status and LGBQ status with school connectedness and peer victimization, respectively. Raw estimates and associated confidence intervals are reported in Table 2, and standardized effects are reported in the text ($p < .05$). In any analysis, it is essential to employ a meaningful centering strategy; thus, we centered our continuous predictors (age, school connectedness, and peer victimization) at the grand mean. The following are the reference groups for the given variables: White (race), male (sex), heterosexual (LGBQ), and no self-reported disability (disability).

**Missing Data**

There were minimal missing data (about 4%). Key variables with missing data included suicide ideation ($n = 173$), school connectedness ($n = 347$), and peer victimization ($n = 473$). Specifically, missing on key variables by identity group included suicidal ideation (no disability, not LGBQ = 139, disability = 14, LGBQ = 16, disability and LGBQ = 4), school connectedness (no disability, not LGBQ = 280, disability = 46, LGBQ = 18, disability and LGBQ = 3), and peer victimization (no disability, not LGBQ = 368, disability = 71, LGBQ = 29, disability and LGBQ = 5). Much of the missing data for suicidal ideation (80%), school connectedness (81%), and peer victimization (78%) came from individuals who did not have a disability or identify as LGBQ. To examine the missing-at-random assumption, we used nonparametric tests to evaluate significant differences in missing data by identity group. No differences were found for suicide ideation or school connectedness; however, there were some differences found for peer victimization. Although the differences were modest, individuals with disabilities reported significantly more missing data than individuals with no disability and not LGBQ ($\Delta \bar{X} = 0.03$, $p < .01$), LGBQ ($\Delta \bar{X} = 0.03$, $p < .01$), and disability and LGBQ ($\Delta \bar{X} = 0.05$, $p < .01$). However, to avoid listwise deletion for students who did not respond to all of the variables of interest and to ensure that all students were accounted for in the model, we used multiple imputation ($k = 20$) using the SAS 9.4 expectation maximum algorithm. By including peer victimization in our missing data model, the multiple imputation process adjusts for any bias due to missingness caused by peer victimization (Enders, 2010). As such, given the low percentage of missing data and missing at random, the expectation maximum algorithm is appropriate for handling missing data and provides an unbiased estimate (Allison, 2002; McLachlan, Krishman, & Ng, 2004). Thus, the entire sample of students ($N = 11,364$) was included in the results. Among the nested models, differences in model fit were assessed according to significant reductions in the $-2 \log$ likelihood, leading to the following model equation:

$\text{Ideation}_{ij} = \beta_0 + \beta_1 (\text{Age})_{ij} + \beta_2 (\text{Race})_{ij} + \beta_3 (\text{Gender})_{ij} + \beta_4 (\text{LGBQ})_{ij} + \beta_5 (\text{Disability})_{ij} + \beta_6 (\text{PeerVictim})_{ij} + \beta_7 (\text{SchoolConnect})_{ij} + \beta_8 (\text{LGBQ} \times \text{PeerVictim})_{ij} + \beta_9 (\text{Disability} \times \text{PeerVictim})_{ij} + \beta_{10} (\text{LGBQ} \times \text{SchoolConnect})_{ij} + \beta_{11} (\text{Disability} \times \text{SchoolConnect})_{ij} + \beta_{12} (\text{Disability} \times \text{LGBQ})_{ij} + \beta_{13} (\text{Disability} \times \text{LGBQ} \times \text{PeerVictim})_{ij} + \beta_{14} (\text{Disability} \times \text{LGBQ} \times \text{SchoolConnect})_{ij} + e_{ij}$

**Results**

Compared with the data reported by Espelage and Holt (2001) and Koenig and colleagues (2005) from the samples for whom they developed the scales, students reported
Table 2. Estimates of Fixed Effects From a Series of Individual Regression Models.

<table>
<thead>
<tr>
<th>Fixed Effects</th>
<th>Model 1</th>
<th></th>
<th>Model 2</th>
<th></th>
<th>Final Model</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimate (SE)</td>
<td>95% CI</td>
<td>Estimate (SE)</td>
<td>95% CI</td>
<td>Estimate (SE)</td>
<td>95% CI</td>
</tr>
<tr>
<td>Intercept</td>
<td>.36* (.02) [0.32, 0.40]</td>
<td></td>
<td>.11* (.01) [0.09, 0.04]</td>
<td></td>
<td>.11* (.01) [0.09, 0.12]</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.01* (.00) [0.00, 0.02]</td>
<td></td>
<td>.01* (.00) [0.00, 0.02]</td>
<td></td>
<td>.01* (.00) [0.00, 0.02]</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>.11* (.01) [0.09, 0.12]</td>
<td></td>
<td>.10* (.01) [0.09, 0.14]</td>
<td></td>
<td>.10* (.01) [0.09, 0.12]</td>
<td></td>
</tr>
<tr>
<td>Non-White</td>
<td>.02* (.01) [0.00, 0.05]</td>
<td></td>
<td>.02* (.01) [0.00, 0.06]</td>
<td></td>
<td>.02* (.01) [0.00, 0.04]</td>
<td></td>
</tr>
<tr>
<td>LGBQ</td>
<td>.33* (.02) [0.30, 0.37]</td>
<td></td>
<td>.49* (.06) [0.37, 0.38]</td>
<td></td>
<td>.52* (.07) [0.38, 0.66]</td>
<td></td>
</tr>
<tr>
<td>Disability</td>
<td>.30* (.02) [0.27, 0.33]</td>
<td></td>
<td>.47* (.05) [0.37, 0.35]</td>
<td></td>
<td>.50* (.06) [0.39, 0.61]</td>
<td></td>
</tr>
<tr>
<td>School connectedness</td>
<td>−.03* (.00) [−.03, −.02]</td>
<td></td>
<td>−.02* (.00) [−.02, −.02]</td>
<td></td>
<td>−.02* (.00) [−.02, −.02]</td>
<td></td>
</tr>
<tr>
<td>Peer victimization</td>
<td>.05* (.00) [0.04, 0.05]</td>
<td></td>
<td>.04* (.00) [0.04, 0.05]</td>
<td></td>
<td>.04* (.00) [0.03, 0.04]</td>
<td></td>
</tr>
<tr>
<td>LGBQ × Disability</td>
<td>−.02 (.04) [−.10, .06]</td>
<td></td>
<td>−.12 (.14) [−.40, .15]</td>
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<tr>
<td>LGBQ × Peer Victimization</td>
<td>.03* (.01) [.01, .04]</td>
<td></td>
<td>.05* (.01) [.03, .06]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disability × Peer Victimization</td>
<td>.01 (.01) [−.00, .02]</td>
<td></td>
<td>.02* (.01) [.00, .03]</td>
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<td></td>
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<tr>
<td>Disability × School Connectedness</td>
<td>−.02* (.00) [−.02, −.01]</td>
<td></td>
<td>−.02* (.00) [−.03, −.01]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LGBQ × School Connectedness</td>
<td>−.02* (.01) [−.03, −.01]</td>
<td></td>
<td>−.02* (.01) [−.03, −.01]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LGBQ × Disability × School Connectedness</td>
<td>.02 (.01) [−.00, .04]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LGBQ × Disability × Peer Victimization</td>
<td>−.05* (.02) [−.08, −.02]</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Model fit</td>
<td></td>
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<tr>
<td>−2 log likelihood</td>
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<td></td>
<td>15,213.07</td>
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<td>15,194.11</td>
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<tr>
<td>Akaike information criterion</td>
<td>15,306.80</td>
<td></td>
<td>15,241.07</td>
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<td>15,226.11</td>
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<tr>
<td>Bayesian information criterion</td>
<td>15,372.73</td>
<td></td>
<td>15,343.63</td>
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<td>15,343.32</td>
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<tr>
<td>$R^2$ change</td>
<td>.194</td>
<td></td>
<td>.200</td>
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<td>.201</td>
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Note. Model 1 includes the main effects of age, sex, race, sexual orientation, disability status, school connectedness, and peer victimization. Model 2 added two-way interactions (M1 to M2; ΔLR = 75.73, Δdf = 5, $p < .001$). Model 3 added the three-way interactions (M2 to M3; ΔLR = 18.96, Δdf = 2, $p = .001$). LGBQ = lesbian, gay, bisexual, or questioning. *$p < .05$. 

[pageside:149]
relatively low levels of peer victimization ($M = 1.18, SD = 2.12$) and modest levels of school connectedness ($M = 12.43, SD = 3.43$). A total of nearly 17% of the entire sample reported at least “rarely” having suicidal ideation ($M = 1.24, SD = 0.58$). Percentages of reported suicidal ideation for specific groups of students were as follows: 42% for students with disabilities, 47% for students who identified as LGBQ, and 37% for students who identified with a disability or as LGBQ. The majority of demographic variables significantly predicted suicidal ideation such that non-White ($B = .02, SE = .01, p < .01$), older ($B = .01, SE = .00, p < .01$), and female ($B = .11, SE = .01, p < .001$) students reported significantly more suicidal ideation than White, younger, and male students (see Model 1, Table 2).

**Students’ Identities and Suicidal Ideation**

Students who identified as LGBQ ($B = .33, SE = .02, p < .001$) and students with a disability ($B = .30, SE = .02, p < .001$) each reported significantly more suicidal ideation than did their straight-identified peers without disabilities (Model 1, Table 2). Because these were categorical variables, we standardized the effect for suicide ideation only to examine the magnitude of these associations. We found that identifying as LGBQ was associated with almost a 1-SD increase in suicidal ideation ($\beta = .92, SE = .11$). Similarly, we found that identifying with a disability was associated with almost a 1-SD increase in suicidal ideation ($\beta = .90, SE = .10$). To examine the association between identifying with both identities and suicidal ideation, we tested the interaction of LGBQ and disability. Contrary to our hypothesis, students who identified as LGBQ and with a disability did not report statistically significant higher levels of suicidal ideation than their peers (Model 2; $B = -.02, SE = .04, p = .61$).

**Peer Victimization and School Connectedness**

Peer victimization ($B = .05, SE = .00, p < .001$) was significantly associated with suicidal ideation. Compared with other students at their school, students who reported higher levels of peer victimization also reported higher average levels of suicidal ideation ($\beta = .18$). In addition, school connectedness ($B = -.03, SE = .00, p < .001$) was significantly associated with suicidal ideation. Compared with other students at their school, students who reported higher levels of school connectedness reported lower average levels of suicidal ideation ($\beta = -.16$).

**Intersecting Identities, Peer Victimization, and School Connectedness**

Given that students who identify as LGBQ or with a disability report higher levels of suicidal ideation, we examined the influence of peer victimization and school connectedness on this association. As hypothesized, peer victimization moderated (specifically, exacerbated) the association between identifying as LGBQ and suicidal ideation (see Figure 1; $B = .05, SE = .01, p < .01$). Students who identified as LGBQ and reported higher levels of peer victimization than their peers reported higher levels of suicidal ideation versus all other groups. Tests of the simple slopes showed that the slopes for both identities—LGBQ ($B = .08, SE = .01, p < .001$) and not LGBQ ($B = .04, SE = .00, p < .001$)—were statistically significant. Also in line with our hypothesis, results indicate that peer victimization moderated (specifically, exacerbated) the effects of identifying with a disability on levels of suicidal ideation (see Figure 2; $B = .02, SE = .01, p < .01$). Students with a disability who also reported higher levels of peer victimization than their peers reported higher levels of suicidal ideation versus all other groups. Tests of the simple slopes showed that each slope—disability ($B = .06, SE = .01, p < .001$) and no disability ($B = .04, SE = .00, p < .001$)—was statistically significant.

As hypothesized, school connectedness moderated (specifically, buffered) the students who identified as LGBQ from significantly higher levels of suicidal ideation (see Figure 3; $B = -.02, SE = .01, p < .001$). Students who identified as LGBQ and reported
higher levels of school connectedness than their peers reported the lowest levels of suicidal ideation versus all other groups. Tests of the simple slopes showed that each identity slope, LGBQ ($B = -.04$, $SE = .13$, $p < .001$) and not LGBQ ($B = -.02$, $SE = .00$, $p < .001$), was statistically significant. Finally, school connectedness moderated (specifically, buffered) the association between students who identified with a disability and
suicidal ideation (see Figure 4; $B = -.02$, $SE = .00$, $p < .001$). Students with a disability who also reported higher levels of school connectedness than their peers reported the lowest levels of suicidal ideation versus all other groups. Tests of the simple slopes showed that each identity slope, disability ($B = -.04$, $SE = .00$, $p < .001$) and no disability ($B = -.02$, $SE = .00$, $p < .001$), was statistically significant.

To determine whether school connectedness moderates the association between identifying with a disability and as LGBQ and suicidal ideation with regard to peer victimization, we added three-way interactions to our model. When the three-way interaction
among LGBQ, disability, and peer victimizations was accounted for, students who identified with both identities reported higher levels of suicidal ideation than did their peers who did not identify with either identity (see Figure 5; $B = -.05$, $SE = .02$, $p < .001$). In contrast, students who did not identify with a disability or as LGBQ reported lower levels of suicidal ideation than any other group regardless of the level of peer victimization (see Figure 5). At low levels of peer victimization, students with a disability who do not also identify as LGBQ reported slightly higher levels of suicidal ideation than did their peers who identify as LGBQ without a disability. However, at high levels of peer victimization, students who identify as LGBQ without a disability reported higher levels of suicidal ideation. Tests of the simple slopes showed that each identity slope was statistically significant: LGBQ-disability ($B = .05$, $SE = .01$, $p < .001$), LGBQ–no disability ($B = .08$, $SE = .01$, $p < .001$), not LGBQ–disability ($B = .06$, $SE = .01$, $p < .001$), and not LGBQ–no disability ($B = .04$, $SE = .00$, $p < .001$). Contrary to our hypothesis, the same results were not found for school connectedness, as the three-way interaction was not statistically significant ($B = .02$, $SE = .01$, $p = .08$).

**Discussion**

The current study adds to the extant literature on peer victimization, students’ intersecting identities (sexual orientation and disability), and suicidality. Consistent with previous research (e.g., D’Augelli et al., 2005; Ludi et al., 2012), our results showed that students identifying with a disability or as LGBQ report higher levels of suicidal ideation than their peers. Although students identifying with both identities (with a disability and as LGBQ) did not report significantly higher levels of suicidal ideation as hypothesized, when students with both identities reported higher levels of victimization versus their peers, they also reported higher levels of suicidal ideation. We believe that this finding underscores the relationship among identity-based victimization, minority stress, and suicidal ideation on just one identity. However,

![Figure 5](image_url)
from our analysis, we cannot conclude which, if either, identity is specifically targeted and victimized for students with both identities. It is possible that the additional identity was not associated with significantly higher levels of suicidal ideation, because one of the identities may have served as a protective factor (e.g., feeling connected to others at school with the same identity, resources available to students identifying with that identity). Our finding may not have been consistent with our hypothesis because we could not account for the specific type of victimization (e.g., victimization of either identity, both identities, or neither). Rather, this finding may speak to the need to address victimization in general.

Aligning with previous research (e.g., Robinson & Espelage, 2011; Rose et al., 2011), students identifying with a disability and as LGBQ reported higher levels of victimization than did their peers. Consistent with our hypotheses, we found that students who reported higher levels of victimization than other students at their school also reported higher levels of suicidal ideation. Further, consistent with previous research (Resnick et al., 1997), students who reported feeling more connected to their school than their peers reported lower levels of suicidal ideation. When we added the interactions of identity with peer victimization and school connectedness on suicidal ideation to our model, we found mixed results based on our hypotheses. We found that peer victimization exacerbates the negative association between students’ identities and reported levels of suicidal ideation for students identifying as LGBQ and with a disability. However, we did not find that school connectedness buffers the positive association between students’ identities and reported levels of school connectedness.

Our findings did suggest that for students identifying with a disability, as LGBQ, or with neither identity, school connectedness was associated with lower levels of suicidal ideation. Although we did not explore what school-level factors may contribute to this finding, it is worth investigating what specific messages schools are relaying to their students about victimization and what resources are available to students experiencing victimization. Interventions designed to improve the school environment could prove especially useful for vulnerable populations. For instance, Meyer and colleagues (2014) suggested that having coping resources available to an individual dealing with the stress associated with identifying as a sexual minority is a starting point. In schools, this means connecting students with their peers in clubs, activities, or other opportunities for prosocial behaviors with similar peers or allies (see Vinoski et al., 2016). This may exist in the form of multiple clubs and organizations for students who identify with a disability or as LGBQ, or both, providing an opportunity to connect with one another regularly and create a stronger sense of belonging (Poteat & Rivers, 2014).

For students identifying with a disability, as LGBQ, or with neither identity, school connectedness was associated with lower levels of suicidal ideation.

Although the rates of victimization are particularly high for students who identify as LGBQ, school-based supports (e.g., supportive staff, Gay–Straight Alliances) may enrich the school climate and protect against the negative effects of victimization. Similarly, teacher interventions mitigating identity-based victimization and harassment have been found to be most effective when teachers know people who identify as LGBQ, are aware of victimization and harassment, and feel efficacious about preventing homophobic remarks (Greytak & Kosciw, 2014). Thus, improving teachers’ and staff members’ knowledge and awareness of LGBQ issues and efforts to connect with students who identify as LGBQ may reduce the chance of identity-based victimization and improve students’ feelings of connectedness. Certain social–emotional learning programs with teacher-led lessons have proven effective in reducing victimization among students with
disabilities (Espelage, Rose, & Polanin, 2015a). Second Step is one such program that has been found to have beneficial effects for middle school students with and without disabilities; its implementation was associated with decreases in relational victimization and bully perpetration and increases in willingness to intervene against bullying among students with disabilities (Espelage et al., 2015a, 2015b).

Conclusion

The current study adds to the literature on victimization and students with exceptionalities in two ways. First, cultural identities matter in all contexts but are rarely considered in scholarship on victimization. We examined the unique influence of intersectionality in this dynamic. Second, our study includes a large sample of high school students with disabilities who did or did not identify as LGBQ. Future studies should continue to strive for large sample sizes of students with exceptionalities.

Although the strengths of the current study are noteworthy, no study is without limitations. One limitation of this study is that students reported their own disability status. A preferred method would be to collect school records documenting a student’s disability—but this method is not without flaws as well, given the considerable variability in what constitutes identification for disability services (MacMillan, Gresham, & Forness, 1996). Future research may consider examining these findings within specific disabilities (e.g., learning disabilities, autism spectrum disorder, physical disabilities) and sexual orientation (e.g., gay, lesbian, bisexual, questioning). Second, the data were collected on high school students from a Midwestern area. As such, the generalizability of the study’s findings is geographically limited. In addition, the focus on high school students limits the findings, as they may not generalize to younger or older individuals. Third, the correlational analyses based on cross-sectional models further limit the generalizability of the findings (data not shown). The analyses used did not provide any information about change over time. Although we can conclude that students with disabilities and students identifying as LGBQ were victimized more than their peers, we cannot definitively conclude that this was due to these specific identities. Future studies may use longitudinal data and structural equation models to examine change over time among different identities. Fourth, given the low average rates of peer victimization and suicidal ideation, there is the potential of a floor effect. However, we took multiple steps to ensure that the effects were robust, although the possibility remains. Fifth, it would be inappropriate to conclude that testing main effects and interactions is a proxy for intersectionality (Cole, 2009). Instead, we hope that the current study will be a starting point for future research exploring the intersection of sexual orientation and disability in regard to mental health outcomes based on a more informed understanding of the phenomena identified in this study. Finally, suicidal ideation was assessed with a single item. A more robust measure is suggested for future studies focusing on suicidal ideation.

In sum, our findings suggest the need to examine the contribution of intersecting identities to victimization among all students. In addition, these findings provide further evidence to employ targeted school-based interventions that directly address victimization and promote a positive, accepting school culture. Further, it is important for educators and administrators to engage all students creatively in inclusive and prosocial conversations, activities, and programs to foster a positive and inclusive environment.

References


Resnick, M. D., Bearman, P. S., Blum, R. W., Bearman, K. E., Harris, K. M., Jones, J., . . .


**Supplemental Material**

The supplemental material is available in the online version of the article.

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