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Sexual Orientation-Based Disparities in School and Juvenile Justice Discipline: A Multiple Group Comparison of Contributing Factors

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There is little data on whether school discipline or juvenile justice sanctions are directed disproportionately toward sexual minority youth (e.g., lesbian, gay, bisexual, or questioning; LGBQ) compared with heterosexual youth and even less on factors that may relate to such disparities. We tested for sexual orientation-based disparities in school suspension and juvenile justice system involvement, and tested a model linking students' sexual orientation to victimization, punishable infractions (substance use, truancy, weapon carriage on school property), and disciplinary actions. Using cross-sectional data from the 2012 Dane County Youth Assessment, we compared 869 LGBQ youth to 869 heterosexual youth (a comparison sample selected through propensity score matching) in Grades 9 to 12 (60.6% female; 74.7% White). LGBQ youth were more likely to report school suspension and juvenile justice system involvement than heterosexual youth. We documented minimal support for a differential behavior explanation: sexual orientation-based differences on discipline were only weakly mediated through victimization and punishable infractions. Instead, a multiple group comparison showed that the paths from infraction engagement to discipline sanctions were not invariant for LGBQ and heterosexual youth: With higher rates of infractions, the odds were greater for LGBQ youth to have experienced punitive discipline than for heterosexual youth. Our findings underscore the need for psychologists, educators, and juvenile justice professionals to give attention to discipline disparities faced by sexual minority youth.

Keywords: school discipline, juvenile justice, LGBQ, health disparities, discrimination

Punitive and exclusionary discipline, ranging from school suspension to incarceration, are directed disproportionately toward certain minority youth populations. For instance, there is robust evidence for bias against racial minority youth (Gregory, Skiba, & Noguera, 2010; Wallace, Goodkind, Wallace, & Bachman, 2008). Students who face these forms of discipline are at greater risk for academic consequences like school dropout (Ekstrom, Goertz, Pollack, & Rock, 1986), and researchers have argued such discipline disparities may be connected to achievement gaps (Gregory et al., 2010). There has been little attention to discipline disparities among sexual minority youth (e.g., lesbian, gay, bisexual, or questioning youth; LGBQ). Yet, for example, sexual minority youth are more likely to report arrests than heterosexual youth (Himmelstein & Brückner, 2011). Beyond documenting that disparities exist, models need to show how multiple factors contribute to these disparities. We propose a model linking sexual orientation to victimization, punishable infractions, and in turn, school and juvenile justice discipline. Further, we test whether the size of associations between victimization, punishable infractions, and disciplinary actions differ for sexual minority youth and heterosexual youth.

A Model of Contributing Factors to Discipline Experiences

We propose a model in which victimization is associated with engagement in punishable infractions—in this case substance use, truancy, and weapon carriage at school—and in which engaging in these infractions is associated with suspension or involvement in the juvenile justice system. Although these prohibited or illicit behaviors have sometimes been labeled as "delinquency," we refrain from using this term because it can imply other negative attributes to the individual. These behaviors could also be ways that youth cope with victimization, as the peer victimization literature has shown that victimization is associated with substance use, truancy, and self-protective strategies such as weapon carriage (Gastic, 2008; Luk, Wang, & Simons-Morton, 2010; Simon, Dent, & Sussman, 1997; Tharp-Taylor, Haviland, & D'Amico, 2009). Although some of these associations are attenuated for youth with adequate support structures or resources to engage in healthier coping strategies, often this buffering effect is small or nonsignificant, particularly for sexual minority youth (Davidson & Demaray, 2007; Eisenberg & Resnick, 2006; Murdock & Bolch, 2005;

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Poteat, Mereish, DiGiovanni, & Koenig, 2011; Ryan, Huebner, Diaz, & Sanchez, 2009; Stadler, Feifel, Rohrmann, Vermeiren, & Poustka, 2010). Further, because they are minors, some of these behaviors associated with or resulting from victimization constitute punishable infractions (e.g., alcohol use, truancy). Thus, the very ways in which some youth react to victimization (e.g., drinking, truancy to avoid victimization, weapon carriage) place them at greater risk for punitive, exclusionary forms of school discipline (e.g., due to truancy) or criminal-justice sanctions (e.g., due to illicit substance use).

Minority Stress Theory as a Framework for Studying Disparities

Minority stress theory adds relevance to our model and the factors composing it when considering discipline disparities based on sexual orientation. According to minority stress theory (Meyer, 2003), sexual minorities experience multiple stressors that stem from their societal marginalization. Related to this point, victimization and discrimination represent major stressors among sexual minorities. This model goes on to propose that sexual minorities are at greater risk for negative physical, mental, and behavioral health issues than heterosexuals (e.g., hypertension, depression, substance use; Meyer, 2003) as a result of experiencing these stressors at greater rates. This model provides a theoretical framework for understanding the process by which sexual minorities report greater concerns than heterosexuals (e.g., they experience more victimization than heterosexuals, which can lead to greater substance use).

Sexual minority youth indeed report more peer victimization than heterosexual youth (Russell, Everett, Rosario, & Birkett, 2014; Russell, Franz, & Driscoll, 2001). These disparities are evident even in studies that do not consider whether youth had disclosed their identity to others (e.g., Russell et al., 2014). Regardless of whether they have disclosed their identity, sexual minority youth may face greater victimization than heterosexual youth because harassment often is directed toward youth on the basis of their assumed sexual minority identity. For instance, some youth may infer their peers' sexual orientation on the basis of appearance or behavioral stereotypes (D'Augelli, Grossman, & Starks, 2006; Phoenix, Frosh, & Pattman, 2003). Further, sexual minority youths' victimization, whether explicitly homophobic or in general, is associated with a range of health and academic concerns, such as alcohol use, depression, poorer grades, truancy, and lower reported intentions to graduate from high school (Almeida, Johnson, Corliss, Molnar, & Azrael, 2009; Birkett, Russell, & Corliss, 2014; D'Augelli, Pilkington, & Hershberger, 2002; Marshal et al., 2008; Newcomb, Heinz, & Mustanski, 2012; Poteat et al., 2011). Meta-analyses have further shown that disparities between heterosexual and sexual minority youth on factors such as victimization, substance use, and mental health are robust (Marshal et al., 2008, 2011; Toomey & Russell, in press). In addition, victimization predicts these outcomes in longitudinal data (Burton, Marshal, Chisolm, Sucato, & Friedman, 2013; Newcomb, Heinz, Birkett, & Mustanski, 2014). Thus, we propose that the minority stress model is relevant to research on exclusionary discipline by providing a conceptual framework that (a) stipulates that sexual orientation-based discipline disparities will exist due to sexual minority youths' marginalized status and (b) highlights important precipitating factors and organizes them in a model that accounts for why sexual minority youth may be more likely to experience discipline sanctions than heterosexual youth.

With this frame in mind, to our knowledge there is only one large scale study that has documented initial evidence of sexual-orientation-based discipline disparities. Using items from the nationally representative Add Health study, Himmelstein and Brückner (2011) found that nonheterosexual youth were more likely than heterosexual youth to indicate that they had ever been stopped by police, ever been arrested before the age of 18, and ever had a juvenile court conviction. These disparities were evident even when controlling for minor to violent transgressive behaviors (e.g., intoxication, stealing, threatening someone with a weapon).

Beyond these foundational findings, there have not been studies to explain sexual orientation disparities within a broader model. Whereas this initial work controlled for certain infractions to test whether discipline disparities remain evident (Himmelstein & Brückner, 2011), we consider infractions directly within a broader model in which peer victimization predicts engagement in these behaviors, congruent with the sequence proposed by the minority stress model and documented in cross-sectional and longitudinal studies (Birkett et al., 2014; Meyer, 2003; Newcomb et al., 2012). This study also extends the initial findings of Himmelstein and Brückner (2011) by testing for discipline disparities in a separate, large sample of heterosexual and sexual minority adolescents. We also extend this work by considering how such infractions (i.e., substance use, truancy, and weapon carriage) may themselves predict a much greater likelihood of facing discipline sanctions for sexual minority youth than for heterosexual youth.

Differential Behavior Explanations for Sexual Orientation-Based Disparities

There are two perspectives to consider from the juvenile justice literature when applying our minority stress-informed model to study discipline disparities, specifically when examining how certain outcomes of peer victimization (e.g., substance use) predict disciplinary actions. The differential behavior perspective (Piquero, 2008) states that discipline disparities between groups are due to one group's higher rates of infractions. This would suggest a straightforward mediation process in our proposed model: Sexual minority youth are more likely than heterosexual youth to be victimized, which relates to their higher rates of infractions than heterosexual youth, and because they engage in these infractions at higher rates, they are more likely to be suspended from school or be involved in the juvenile justice system.

As noted, sexual minority youth face greater peer victimization than heterosexual youth (Russell et al., 2014), and as a result often engage in externalizing behaviors, including substance use (Marshal et al., 2008; Newcomb et al., 2012; Rosario, Schrimshaw, & Hunter, 2011). Substance use is especially relevant to the issue of discipline disparities because some substances (e.g., cigarettes and alcohol) are illegal for minors to use. The higher rates of substance use among sexual minority youth than heterosexual youth (Marshal et al., 2008) may partly account for their greater likelihood than heterosexual youth to face disciplinary sanctions.

We consider truancy and weapon carriage at school as two more forms of infractions. Drawing on the minority stress model, many sexual minority youth report school avoidance because of safety

concerns; indeed, peer victimization partially accounts for sexual-orientation-based differences in truancy (Birkett et al., 2014). Sexual minority youth also may fight or carry weapons for protection (DuRant, Krowchuk, & Sinal, 1998; Panfil, 2014; Snapp, Hoenig, Fields, & Russell, 2015), as they are more likely than heterosexual youth to report feeling threatened at school (Goodenow, Szalacha, & Westheimer, 2006). Although truancy and weapon carriage may reflect protective strategies, they place sexual minority youth at risk for discipline.

The differential behavior perspective has had mixed support in accounting for race-based discipline disparities (Gregory et al., 2010) and also seems insufficient to explain the sexual orientation-based discipline disparities reported by Himmelstein and Brückner (2011). In their results, disparities remained evident even when controlling for levels of engagement in certain infractions. Thus, we also consider the differential processing perspective in testing our model.

Differential Processing Explanations for Sexual Orientation-Based Disparities

As an alternative to the differential behavior perspective, there may be differences in how school personnel or juvenile justice professionals respond to infractions among heterosexual and sexual minority youth. This would reflect a differential selection and processing perspective (Piquero, 2008). This pattern has been shown among racial minority youth across a range of discipline practices, from classroom office referrals to court sanctions (Piquero, 2008; Skiba, Michael, Nardo, & Peterson, 2002; Wehlage & Rutter, 1986). For instance, African American students may be punished more harshly than White students for the same behavior and more likely to be punished for even lesser infractions (Gregory et al., 2010; Shaw & Braden, 1990; Skiba et al., 2002). Scholars have pointed to bias, prejudice, cultural differences, and stereotypes as factors underlying these patterns (Graham & Lowery, 2004; Gregory et al., 2010).

This explanation may also apply to sexual minority youth. Just as studies have documented discrimination against racial minority youth (Fisher, Wallace, & Fenton, 2000; Rosenbloom & Way, 2004), the same has been documented against sexual minority youth from other students and adults (Kosciw, Greytak, Bartkiewicz, Boesen, & Palmer, 2012; Russell et al., 2014). Similar to the experiences of racial minority youth, ideological beliefs and biases can underlie discriminatory institutional policies directed against sexual minority youth (e.g., prohibition of, and punishment for taking, a same-sex partner to prom; hostility toward gay–straight alliances; banning discussions of sexual minority issues in classrooms; Chesir-Teran & Hughes, 2009; Russell, Kosciw, Horn, & Saewyc, 2010). Although sexual orientation may not be as immediately or readily visible as someone's assumed race or ethnicity, as noted previously, students, teachers, administrators, or juvenile justice professionals may use appearance- or behavior-based stereotypes to infer a student's sexual orientation, or they may have prior knowledge of the student's sexual orientation and bring that to bear on how they react to a student's behavior (Snapp et al., 2015). In effect, discipline disparities may be partly reflective of discrimination and heterosexism at an institutional level. For instance, lawsuits filed by sexual minority youth against their school systems have shown that these youth often were blamed for the victimization they experienced, were at times viewed as instigators of these experiences, and faced added discrimination from adults and authority figures at school as a result (Cianciotto & Cahill, 2012). In this case, infractions may predict a greater likelihood of suspension or juvenile justice involvement for sexual minority youth than for heterosexual youth. This differential processing perspective therefore implies moderation within our minority stress-informed model, in that the paths leading to discipline may be stronger for sexual minority youth than for heterosexual youth.

The Current Study

Research on discipline disparities within schools and the legal system has begun to underscore the need to consider the experiences of sexual minority youth. There remains limited data to document discipline disparities among this population. Moreover, there is an absence of empirically tested models that provide a more comprehensive indication of factors connected to these disparities. Despite the potential connections between minority stress processes and discipline outcomes, there has been little attempt to bridge these areas of research. To address these limitations, we utilized a large population-based sample of youth and tested several models to note the existence of these disparities, underlying contributing factors, and whether the effects of these factors may be differentially applied to sexual minority youth and heterosexual youth.

As our foundational hypothesis, we expected that sexual minority youth would be more likely than heterosexual youth to report school suspension and juvenile justice system involvement. We based this hypothesis on findings that have documented disparities on similar discipline indices (Himmelstein & Brückner, 2011).

Next, we tested models of how multiple factors could be associated with disparate discipline experiences. The first model applied a differential behavior perspective to the minority stress sequence. In this model, sexual minority status would be associated with higher levels of victimization; victimization would be associated with elevated infractions; and, these infractions would be associated with a greater likelihood of being suspended or involved in the juvenile justice system. This model portrays the notion that sexual orientation-based differences on discipline are indirect and mediated through victimization and punishable infractions (i.e., sexual orientation would have significant indirect effects through these factors).

Finally, we tested a model that applied a differential processing perspective to the minority stress sequence. In this model, punishable infractions would be more strongly associated with school suspension and juvenile justice involvement for sexual minority youth than for heterosexual youth. Here, the minority stress model still highlights precipitating factors to discipline experiences; however, this hypothesis proposes that discipline disparities are not the result of a simple indirect process involving greater engagement in these behaviors by sexual minority youth. Rather, this model proposes that the path coefficients (i.e., the strength of associations among these factors) are moderated by sexual orientation, in that punishable infractions more strongly predict disciplinary outcomes for sexual minority youth than for heterosexual youth.

Method

Participants and Procedures

Participants for the current study were high school students who participated in the 2012 Dane County Youth Assessment (DCYA). The DCYA is administered in Dane County, Wisconsin and is modeled in part on the Youth Risk Behavior Survey (YRBS; Centers for Disease Control and Prevention, 2009) to assess a range of student attitudes, behaviors, and experiences. Additional information on the DCYA and the collaborative partners involved can be found through Dane County Human Services (www.danecountyhumanservices.org). The county is geographically diverse and ranges from rural farming areas to a large city (Madison, WI). All but one high school in the county participated in the survey (n = 22 schools). The original sample included 13,866 students in Grades 9 to 12. To decrease the likelihood of including students who did not take the survey seriously, two criteria were established in consultation with Dane County Human Services, the consultant who managed the data collection, and several sexual minority youth organizations in Dane County: (a) youth who reported having all 10 physical and intellectual disabilities assessed in the survey were excluded, and (b) youth who reported using all 10 illicit substances more than one time per month were excluded. This resulted in a final sample of 13,645 students. Table 1 reports the demographic representation of these participants.

The districts approved a waiver of active parental consent based on the determined minimal risk of the study, and parents were requested to inform the school if they did not want their child to participate in the DCYA. Child assent also was obtained. For large student populations within the city-based high schools, 50% of students in these schools were randomly selected by the school systems to complete the survey. All other schools sought participation from their entire student population. The survey was administered electronically in computer labs during normal school hours. There were proctors during these sessions to ensure that students completed the surveys independently and confidentially.

Table 1
Demographic Representation of Participants

Demographic	Sample size (%)
Sexual orientation	
Heterosexual	12,776 (93.6%)
Bisexual	435 (3.2%)
Questioning sexual orientation	278 (2.0%)
Gay or lesbian	156 (1.2%)
Race/ethnicity	
White	10,062 (73.7%)
Black	729 (5.3%)
Hispanic	693 (5.1%)
Non-Hmong Asian	371 (2.7%)
Hmong-identifying Asian	213 (1.6%)
Middle Eastern	80 (0.6%)
Native American	77 (0.6%)
Biracial or multiracial	995 (7.3%)
"Other" self-reported racial/ethnic identity	425 (3.1%)
Gender	
Female	6,840 (50.2%)
Male	6,778 (49.8%)
Grade level	
Grade 9	3,463 (27.1%)
Grade 10	3,298 (25.8%)
Grade 11	3,174 (24.9%)
Grade 12	2,830 (22.2%)

Measures.

Propensity score variables. Student demographic variables of gender identity, age, grade level, race/ethnicity, whether they received a free or reduced-price lunch, and the grades they earned were used as part of forming the propensity scores described later in the statistical analyses section. We dichotomized the race/ethnicity item as either White or racial/ethnic minority. The free or reduced-price lunch item was "Are you eligible for free or reduced-price lunch at school?" Response options were *Yes; No;* or *Do not know*. We dichotomized the item as *yes* or *no/do not know*. The grades earned question was "What grades do you usually get on your report card?" Response options were modeled on the YRBS (Centers for Disease Control and Prevention, 2009) and were *Mostly* A*s*; *Half* A*s and half* B*s*; *Mostly* B*s*; *Half* B*s and half* C*s*; *Mostly* C*s*; *Half* C*s and half* D*s*; *Mostly* D*s*; or *Mostly below D.*

In addition to the demographic variables, participants completed the 7-item bullying scale (Espelage & Holt, 2001) that assessed the frequency with which students engaged in bullying in the past 30 days: (a) I upset other students for the fun of it; (b) I helped harass other students; (c) I spread rumors about other people; (d) I started arguments or conflicts; (e) In a group I made fun of other students; (f) I excluded other students from my group of friends; and (g) I got into a physical fight. Response options were *Never*; *1 or 2 times; 3 or 4 times;* or *5 or more times* (scored 1 to 4). Higher average scale scores reflect more frequent bullying. These self-report scores converge with peer-nominated bullying scores (Espelage & Holt, 2001). The internal consistency estimate was a = .83. All seven individual items were used in forming the propensity scores.

Sexual orientation. Indices of sexual orientation can be based on several factors, such as attraction, behavior, or identity (Institute of Medicine, 2011). The DCYA used an identity-based indicator of students' sexual orientation. The sexual orientation identity item was "Which of the following best describes you?" Response options were *Straight/Heterosexual*; *Gay or lesbian*; *Bisexual*; or *Questioning my sexual orientation*. For the purpose of our analyses, we dichotomized these responses to place students into one of two groups, either heterosexual or sexual minority. The proportion of sexual minority youth in this sample is comparable to other population-based youth surveys (Mustanski, Van Wagenen, Birkett, Eyster, & Corliss, 2014).

Victimization. Participants completed the 4-item victimization scale (Espelage & Holt, 2001) that assessed peer victimization in the past 30 days: (a) I got hit or pushed by other students; (b) Other students picked on me; (c) Other students made fun of me; and (d) Other students called me names. Response options were *Never*; *1 or 2 times; 3 or 4 times;* or *5 or more times* (scored 1 to 4). Higher average scores reflect more frequent victimization. These self-report scores converge with peer-nominated victimization scores (Espelage & Holt, 2001). The internal consistency estimate was α = .87. We used the average scale score of peer victimization in our preliminary analyses, and we used the four items as observed indicators of the latent variable of victimization in our structural models.

Punishable infractions. Participants' reported uses of three substances—cigarettes, alcohol, and marijuana—were used as three indices of punishable infractions in our model. Another 10 substances were assessed in the DCYA (e.g., cocaine, bath salts, heroin), but these were highly skewed and infrequently reported. For cigarette use, they reported the average number of cigarettes they smoked per day in the past 30 days, with the following response options: *I did not smoke cigarettes during the past 30 days; Less than 1 a day; 1 a day; 2–5 a day; 6–10 a day; 11–20 a day;* or *more than 20 a day* (scored 1 to 7). For alcohol use, they reported on how many days in the past 30 days they had at least one alcoholic drink, with the following response options: *Zero days; 1 to 2 days; 3 to 6 days;* or *more than 6 days* (scored 1 to 4). For marijuana use, they reported how many times they used marijuana in the past 12 months, with the following response options: *Never/not at all; Less than one time per month;* or *1 time per month or more* (scored 1 to 3). We analyzed these items independently in our preliminary analyses and treated them as indicators of the latent factor of punishable infractions in our structural models.

We also used two items to assess school-based punishable infractions: truancy and weapon carriage on school property. The item for truancy was "In the past 30 days, how often have you skipped or cut classes (absent without permission)?" Response options were *Never; 1 or 2 times;* or *More than 2 times* (scored 1 to 3). The item for weapon carriage was "During the past 30 days, on how many days did you carry a weapon onto school property?" Response options were *I did not carry a weapon on school property; 1 day; 2 or 3 days; 4 or 5 days;* or *6 or more days*. Based on the skewed distribution of responses in which there was little distinction between the various multiple incidents, we dichotomized both items to indicate whether a student had been truant (0 = *not truant*; 1 = *truant at least once*) and whether a student had carried a weapon to school (0 = *no weapon carriage*; 1 = *carried a weapon to school at least one day*). We analyzed these dichotomized items independently in our preliminary analyses and we treated them as indicators of the latent factor of punishable infractions in our structural models.

School suspension and juvenile justice system involvement. Participants reported on two forms of exclusionary discipline: suspension from school and involvement in the juvenile justice system. The item for school suspension was "During this school year, how many times have you been suspended from school?" Response options were *Zero times; 1 time; 2 times;* or *3 or more times*. The item for involvement in the juvenile justice system was "Have you ever been in juvenile corrections/prison for more than 30 days?" Response options were *Never; Yes over 12 months ago;* or *Yes in the last 12 months*. As with the school-based infractions, the distribution of responses was skewed. We dichotomized both items to indicate whether a student had been suspended in the past year (0 = *not suspended*; 1 = *suspended at least once*) or involved in the juvenile justice system (0 = *no juvenile justice involvement*; 1 = *has been in juvenile corrections/prison*).[1] We analyzed these items independently in our preliminary analyses and in our structural models.

Statistical Analyses.

Preliminary analyses. As our set of foundational analyses, we tested for basic differences between heterosexual and LGBQ youth on our measures. We conducted analyses of variance for our set of continuous variables and we conducted logistic regressions to compute odds ratios (ORs) for our set of dichotomized variables. Bivariate correlations were examined among the measures for descriptive purposes, and we examined these associations in greater depth through our primary set of analyses using structural equation modeling.

Propensity score matching. Because the heterosexual sample size was largely disproportional to the LGBQ sample, and to balance the two groups based on potential confounding variables, we used propensity score matching to balance the size of the two samples based on covariates that could be relevant to our outcome variables (Austin, 2011; Rosenbaum & Rubin, 1984). These factors were race/ethnicity, gender, age, whether the student received a free or reduced-price lunch, the average grades students reported receiving, and level of engagement in bullying. We matched heterosexual youth to LGBQ youth with identical propensity scores. When there were more heterosexual youth than LGBQ youth with a given score, we randomly selected the heterosexual youth with that score to be matched to the respective number of LGBQ youth (e.g., if there were 50 heterosexual youth with the same propensity score as five LGBQ youth, we randomly selected five of the 50 heterosexual youth to be in the matched sample). In the few cases where there was not a heterosexual youth with an identical propensity score as a LGBQ youth, we used the nearest neighbor matching approach and selected a heterosexual youth with the closest value to the LGBQ youth (Austin, 2011). The resulting matched sample included 869 LGBQ youth and 869 heterosexual youth. We performed balance diagnostics to ensure similarity of the LGBQ and heterosexual participants in this matched sample on the set of covariates. This was based on the standardized difference of the means (for continuous variables) or prevalence (for dichotomous variables) of these variables between the two groups. A difference of less than .10 is considered negligible (Austin, 2011). All standardized differences on these variables were less than .10, ranging from .00 to .08.

Overall model testing and fit indices. We used structural equation modeling (SEM) in LISREL 8.80 (Jöreskog & Sörbom,

[1] We made efforts to triangulate our data with other publicly available data sources, specifically pertaining to juvenile justice system involvement. Through the Wisconsin Office of Justice Assistance, we accessed publicly available data on juvenile crime reports from every police department in the villages or cities of DCYA schools. To provide some convergent validity that students' reports of justice system involvement corresponded with official records, we examined correlations between (a) total justice system involvement at the school level as reported by youth in the survey and (b) the official juvenile arrests reports from the police department in the village or city in which the school was located. We did this at the school level because neither the DCYA nor the criminal records data contain individual identities. When controlling for the sample size of the school, the correlation was $r = .43$ or .47 (the latter correlation excludes Madison schools, whose data had to be combined for this analysis based on how the police records are compiled). This moderate-size correlation added some assurance to the self-report data. Although it was not extremely high, this could be partly because some youth were not arrested in the same village or city in which their school was located, because some official reports may have been for youth in middle school(s), or due to other extraneous factors that would not automatically infer that a large number of youth had been dishonest. To assess the general validity of truancy and suspension item responses, we presented these data disaggregated by school to each school. School officials noted that the responses did not appear underreported or overreported.

2006) to test our models. Across our models, we used the following fit indices to assess their goodness of fit to the data: incremental fit index (IFI), comparative fit index (CFI), nonnormed fit index (NNFI; equivalent to the Tucker–Lewis Index), root-mean-square error of approximation (RMSEA), and standardized root-mean-square residual (SRMR). Values for the IFI, CFI, and NNFI of at least .90 indicate an adequate fit and values above .95 indicate a good fit; values for the RMSEA of .06 and SRMR of .08 or lower are recommended (Hu & Bentler, 1999). We did not use the chi-square fit statistic as an index of model fit because this is inadvisable for large samples (Bollen, 1989; Chen, 2007; Cheung & Rensvold, 2002). There was some minimal missing data (ranging from 1.5% to 6.8%), and within LISREL we imputed missing values with plausible simulated values based on the available data. This is preferred over other approaches such as listwise deletion or mean substitution, which can introduce statistical bias (Schafer & Graham, 2002; Schlomer, Bauman, & Card, 2010). Also, because some of our variables were dichotomous and others were continuous, we used the polychoric correlation matrix and asymptotic covariance matrix when analyzing our models (Jöreskog, 2005).

Differential behavior model. To test the differential behavior hypothesis wherein sexual orientation disparities on discipline outcomes are accounted for indirectly through victimization and punishable infractions, we followed several steps. First, we tested the fit of a measurement model (Model 1). In this model, each item served as an indicator of its respective latent factor. Indicators were constrained to load only on their respective factor. The peer victimization items served as indicators of the victimization factor. Cigarette, alcohol, and marijuana use, as well as truancy and weapon carriage at school, served as indicators of punishable infractions. The sexual orientation, school suspension, and juvenile justice system factors were indicated by their single respective item. The correlations among the latent factors were free to be estimated. Second, we tested a structural model (Model 2) in which we specified the paths displayed in Figure 1. We also referred to the indirect effects of sexual orientation on discipline outcomes through peer victimization and punishable infractions, as calculated in LISREL.

Differential processing model. We used multiple group comparison analyses to test for the invariance of the model displayed in Figure 2 for LGBQ and heterosexual students. In this case, we tested the differential processing hypothesis (i.e., whether the associations among the variables were stronger for LGBQ than heterosexual youth). We tested for measurement invariance and several forms of structural invariance in progression (Kline, 2011). In Model 3 we tested for configural invariance (i.e., the same items are indicators of the same latent factor for both groups). In Model 4 we tested for invariance of the factor loadings of items between heterosexual and LGBQ students. In Model 5 we added a test of item intercept invariance on top of factor loading invariance. In Model 6 we added residual invariance as a constraint across the groups. In Model 7 we constrained the factor variances and covariances to be equal across the groups. The goal of these steps was to ensure that the latent factors shared the same meaning across heterosexual and LGBQ youth.

To determine whether the added constraints across these models produced a relatively poorer fit (and, thus, that there was not invariance for heterosexual and LGBQ youth on the respective constraint), we compared the change in the fit indices as additional constraints were enforced. Although this comparison sometimes utilizes the significance of change in the chi-square statistic, methodologists have cautioned against using this approach, particularly for large samples, for the same reasons as avoiding the use of the chi-square test for model fit in general: It is highly sensitive with large samples and nearly always significant. Instead, some methodologists have recommended that the change in CFI be less than .01, the change in RMSEA be less than .015, and the change in SRMR be less than .03 (Chen, 2007; Cheung & Rensvold, 2002). Changes in fit indices within this range suggest invariance.

Finally, we tested for invariance of each path coefficient, one path at a time. In Model 8 we constrained the path from victimization to infractions to be equal. In Model 9 we constrained the

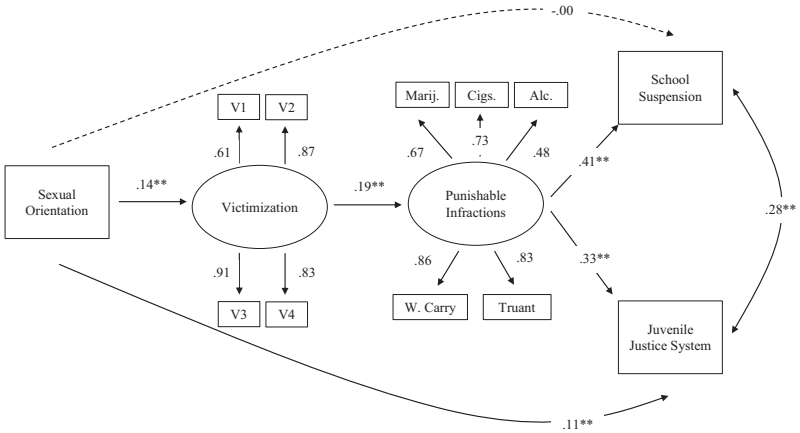

Figure 1. Indirect effects of sexual orientation-based discipline differences through victimization and punishable infractions. Values are standardized coefficient estimates. Dashed line represents a nonsignificant association. Sexual orientation was dichotomized (0= *heterosexual*; 1 = *lesbian, gay, bisexual, or questioning*). V1–V4 = victimization items; Marij. = marijuana use; Cigs. = smoking; Alc. = alcohol use; W. Carry = weapon carriage at school. ** $p < .01$.

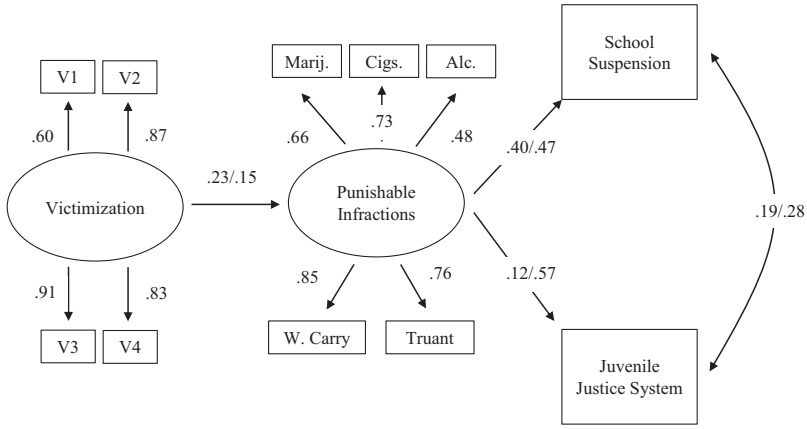

Figure 2. Differential effects of victimization and punishable infractions for heterosexual youth and youth who are lesbian, gay, bisexual, or questioning (LGBQ). For standardized path coefficients, first values are those for heterosexual youth and second values are those for LGBQ youth in an unconstrained multiple group model (subsequent invariance tests of each individual path indicated none were invariant). Factor loadings are equivalent across both groups. V1–V4 = victimization items; Marij. = marijuana use; Cigs. = smoking; Alc. = alcohol use; W. Carry = weapon carriage at school. All paths are significant at $p < .01$.

path from infractions to suspension to be equal. In Model 10 we constrained the path from infractions to juvenile justice involvement to be equal. We used the same criteria as above to determine whether these constraints produced a relatively poorer fit.

Results

Basic Group Differences and Correlations

Group differences and associations among the variables are included in Tables 2 and 3 for descriptive purposes. We focus on patterns of associations among our variables in greater detail as part of our primary analyses in which we test our latent models. In general, however, associations among these variables were conceptually consistent.

We also tested for differences between heterosexual and LGBQ youth on our set of variables. A series of analyses of variance indicated that LGBQ youth reported more frequent peer victimization, $F(1, 12{,}750) = 166.01$, $p < .001$, $\eta_p^2 = .01$; more frequent alcohol use, $F(1, 13{,}644) = 40.96$, $p < .001$, $\eta_p^2 = .003$; more frequent cigarette use, $F(1, 13{,}644) = 240.60$, $p < .001$, $\eta_p^2 = .02$; and more frequent marijuana use, $F(1, 13{,}644) = 90.01$, $p < .001$, $\eta_p^2 = .01$; though all differences had small effect sizes. From our logistic regressions, LGBQ youth were more likely than heterosexual youth to have been truant ($OR = 2.22$, $p < 001$, 95% confidence interval [CI] [1.89, 2.59]) and more likely to have carried a weapon to school ($OR = 2.79$, $p < .001$, 95% CI [2.12, 3.66]).

Sexual Orientation-Based Discipline Disparities

We used logistic regression to test our foundational hypothesis that LGBQ youth would be more likely than heterosexual youth to have been suspended from school and involved in the juvenile justice system. As hypothesized, LGBQ youth were more likely to have been suspended ($OR = 2.41$, $p < .001$, 95% CI [1.86, 3.12])

Table 2
Descriptive Data for the Included Measures

	Heterosexual youth			LGBQ youth			Group difference
Measure	Range	*M* (*SD*)	% Yes	Range	*M* (*SD*)	% Yes	Significance, η_p^2, or *OR*
Victim	1.00–4.00	1.31 (0.54)		1.00–4.00	1.57 (0.75)		$p < .001$, $\eta_p^2 = .01$
Cigarettes	1.00–7.00	1.17 (0.70)		1.00–7.00	1.58 (1.31)		$p < .001$, $\eta_p^2 = .02$
Alcohol	1.00–4.00	1.35 (0.72)		1.00–4.00	1.52 (0.87)		$p < .001$, $\eta_p^2 = .003$
Marijuana	1.00–3.00	1.36 (0.71)		1.00–3.00	1.60 (0.84)		$p < .001$, $\eta_p^2 = .01$
Truancy			17.1			31.3	$p < .001$, $OR = 2.22$
Weapon			3.1			8.3	$p < .001$, $OR = 2.79$
Suspended			4.0			9.1	$p < .001$, $OR = 2.41$
Juvenile justice system			1.1			9.1	$p < .001$, $OR = 9.21$

Note. Victim = victimization in the last 30 days; Cigarettes = cigarette smoking in the last 30 days; Alcohol = alcohol use in the last 30 days; Marijuana = marijuana used in the last 12 months; Truancy = whether the student was truant in the last 30 days; Weapon = whether the student had carried a weapon onto school property in the last 30 days; Suspended = whether the student had been suspended from school; Juvenile justice system = whether the student had been involved in the juvenile justice system; *OR* = odds ratio; LGBQ = lesbian, gay, bisexual, or questioning.

Table 3
Correlations Among the Measures

Measure	Victim	Alcohol	Cigarettes	Marijuana	Truancy	Weapon	Suspension	J. justice
Victim	—							
Alcohol	.07***	—						
Cigarettes	.10***	.33***	—					
Marijuana	.07***	.52***	.38***	—				
Truancy	.08***	.35***	.27***	.41***	—			
Weapon	.14***	.15***	.20***	.14***	.16***	—		
Suspension	.12***	.13***	.24***	.22***	.23***	.23***	—	
J. justice	.06***	.08***	.23***	.12***	.13***	.19***	.25***	—

Note. Victim = victimization in the last 30 days; Alcohol = alcohol use in the last 30 days; Cigarettes = cigarette smoking in the last 30 days; Marijuana = marijuana used in the last 12 months; Truancy = truant in the last 30 days (1 = *truant*); Weapon = weapon carriage onto school property in the last 30 days (1 = carried weapon); Suspension = suspension from school (1 = *suspended*); J. justice = juvenile justice involvement (1 = *involved in the juvenile justice system*).
*** $p < .001$.

and more likely to have been in juvenile corrections ($OR = 9.21$, $p < .001$, 95% CI [6.89, 12.31]).

Testing the Differential Behavior Hypothesis

In LISREL, we first tested the measurement model for our model in which differences between heterosexual and LGBQ youth on disciplinary sanctions were indirect through victimization and punishable infractions. Model 1 represented the measurement model. The factor loadings of the observed indicators for this measurement model are presented in Table 4. This model was a good fit to the data (see Table 5). Next, we tested Model 2, our structural model. This model also was a good fit to the data (see Table 5). Figure 1 includes all path coefficients for this model. As hypothesized, LGBQ youth reported higher rates of peer victimization than heterosexual youth ($\beta = .14$, $p < .01$), victimization was associated with higher rates of punishable infractions ($\beta = .19$, $p < .01$), and these infractions were associated with a greater likelihood of having been suspended ($\beta = .41$, $p < .01$) or involved in the juvenile justice system ($\beta = .33$, $p < .01$). The standardized indirect effects of sexual orientation on suspension ($\beta = .01$, $p < .05$) and juvenile justice system involvement ($\beta = .01$, $p < .05$) were significant but small, thus providing minimal support to the hypothesis that sexual orientation differences in discipline could be explained indirectly through differential engagement in punishable infractions. All direct, indirect, and total effects for this model (Model 2) are reported in Table 6.

Table 4
Factor Loadings, Means, and Standard Deviations of Items in the Measurement Model for Differential Behavior (Model 1)

Item	Factor loading	*M* or % Yes	*SD*
Sexual orientation	1.00		
Victimization			
Victim 1	.61	1.34	0.68
Victim 2	.87	1.54	0.82
Victim 3	.91	1.59	0.84
Victim 4	.83	1.55	0.88
Punishable infractions			
Smoking	.72	1.45	1.16
Alcohol use	.49	1.48	0.83
Marijuana use	.67	1.54	0.81
Truancy	.84	28.5%	
Weapon carriage	.85	7.0%	
School Ssuspension	1.00	9.4%	
Juvenile justice involvement	1.00	5.5%	

Note. Standardized factor loadings are reported. There were 869 heterosexual and 869 lesbian, gay, bisexual, or questioning youth. Sexual orientation, school suspension, and juvenile justice involvement were represented by their single-item indicators.

Testing the Differential Processing Hypothesis With Multiple Group Comparisons

Next, we tested our hypothesis that engaging in more punishable infractions would not be an equally strong predictor of the likelihood of having been suspended or involved in the juvenile justice system for heterosexual and LGBQ youth. We also tested whether victimization was an equally strong predictor of these infractions for heterosexual and LGBQ youth. We tested a sequence of models (Models 3 to 10) in which we placed an increasing number of constraints on parameter estimates to be invariant between our two groups of heterosexual and LGBQ youth. The differential processing model is displayed in Figure 2.

The first model tested for configural invariance (Model 3), followed by factor loading invariance (Model 4), intercept invariance (Model 5), and finally residual invariance (Model 6). The fit indices of all these models are reported in Table 5, and the change in model fit across these models was within the suggested ranges to denote measurement invariance between the two groups of heterosexual and LGBQ youth (i.e., a change in CFI of less than .01, a change in RMSEA of less than .015, and a change in SRMR of less than .03; Chen, 2007; Cheung & Rensvold, 2002). Further, a test of structural invariance of the factor variances and covariances also indicated changes in fit indices within these acceptable ranges (Model 7). By establishing these forms of invariance, we were able to test for the invariance of the path coefficients in the structural model that corresponded with our hypotheses.

For Model 8, we determined that the path from victimization to punishable infractions was not invariant between groups (i.e., the size of the path coefficient was not equal between the two groups; Table 5), based on the larger than recommended changes in fit indices when adding the path constraint (Chen, 2007; Cheung & Rensvold, 2002). The path from victimization to punishable infractions was stronger for heterosexual youth than LGBQ youth. For the same reason, as hy-

Table 5
Fit Indices for the Tested Models

Model and description	IFI	CFI	NNFI	RMSEA 90% CI	SRMR
Differential behavior/indirect effects models					
1. Measurement model	.98	.98	.97	.061 [.055, .067]	.076
2. Structural model	.98	.98	.97	.061 [.055, .067]	.085
Differential processing/multiple group comparison models					
3. Configural invariance	.98	.98	.98	.057 [.050, .064]	.085
4. Factor loading invariance	.98	.98	.98	.055 [.049, .062]	.098
5. Intercept invariance	.98	.98	.98	.055 [.049, .062]	.084
6. Residual invariance	.98	.98	.98	.048 [.042, .055]	.090
7. Factor variance and covariance invariance	.98	.98	.98	.048 [.042, .054]	.086
8. Path invariance: Victimization to punishable infractions	.88	.88	.88	.108 [.10, .11]	.12
9. Path invariance: Punishable infractions to suspension	.88	.88	.88	.108 [.10, .11]	.12
10. Path invariance: Punishable infractions to juvenile justice	.88	.88	.87	.110 [.10, .12]	.15

Note. Models 1 and 2 correspond with the test of the differential behavior perspective, with path coefficients presented in Figure 1. Models 3–10 correspond with the test of the differential selection and processing perspective, with path coefficients for heterosexual and lesbian, gay, bisexual, or questioning youth (deemed as noninvariant) presented in Figure 2. IFI = incremental fit index; CFI = comparative fit index; NNFI = nonnormed fit index; RMSEA = root-mean-square error of approximation; SRMR = standardized root mean square residual.

pothesized, the paths from punishable infractions to school suspension (Model 9) and to juvenile justice system involvement (Model 10) were not invariant for heterosexual and LGBQ youth (see Table 5). As hypothesized, punishable infractions were more strongly associated with school suspension and juvenile justice system involvement for LGBQ youth than heterosexual youth (see Figure 2). The direct, indirect, and total effects for heterosexual youth and for LGBQ youth (i.e., without constraints on path coefficients) are reported in Table 6.

Discussion

Our findings offer evidence that sexual minority youth face higher rates of punitive and exclusionary discipline in the form of school suspension and juvenile justice system involvement compared with heterosexual youth. Further, we documented support for a minority stress-informed model in which peer victimization and engagement in punishable infractions were related to discipline experiences. Whereas there was little support for the differential behavior explanation based on the size of the indirect effects, there was more support for the differential processing explanation: Engaging in punishable infractions was connected more strongly to discipline sanctions for sexual minority youth than heterosexual youth.

Sexual Orientation Disparities in Discipline Experiences

In support of our foundational hypothesis, we identified sexual-orientation-based disparities for two forms of discipline, school suspension and juvenile justice involvement. Our results mirror findings from the sizable literature on racial disparities in discipline practices (Gregory et al., 2010; Wallace et al., 2008). Similar to racial minority youth, sexual minority youth face discrimination particularly in schools as well as in larger society. Pertinent to issues of discipline, other studies have documented bias wherein sexual minority youth are blamed for their victimization or they are selectively punished for actions more frequently permissible among heterosexual youth (Chesir-Teran & Hughes, 2009; Cianciotto & Cahill, 2012; Kosciw et al., 2012; Snapp et al., 2015). Our findings are also congruent with those of the only other large-scale study that, our knowledge, has documented sexual orientation-based discipline disparities in juvenile arrests and court convictions (Himmelstein & Brückner, 2011).

Identifying Important Factors Related to Discipline Disparities

We extended work that has examined discipline experiences among sexual minority youth (Curtin, 2002; Himmelstein & Brückner, 2011; Irvine, 2010; Snapp et al., 2015) by documenting support for a minority stress-informed model of factors that were related to these discipline experiences. We drew from the minority stress model (Meyer, 2003) because it has conceptually and empirically highlighted disparities among sexual minority youth and heterosexual youth on several important factors (e.g., victimization, substance use; Marshal et al., 2008; Russell et al., 2014) that are relevant to the issue of discipline.

We looked directly at how factors relevant to the minority stress model were associated with discipline outcomes. These factors included peer victimization and several punishable infractions (i.e., substance use, truancy, weapon carriage on school property). Similar to other studies (Himmelstein & Brückner, 2011), we controlled for the effects of additional factors when examining these disparities, in this case through propensity score matching based on race/ethnicity, gender, age, receiving a free or reduced-price lunch, average grades, and bullying. As hypothesized, sexual minority youth reported more peer victimization than heterosexual youth, congruent with past studies and minority stress theory (Birkett et al., 2014; Poteat et al., 2011; Russell et al., 2001, 2014). Further, victimization was associated with greater engagement in punishable infractions. This, too, was congruent with cross-sectional and longitudinal qualitative and quantitative findings that show victimization predicts these outcomes among heterosexual and sexual minority youth (Birkett et al., 2014; Gastic, 2008; Luk et al., 2010; Newcomb et al., 2012; Rosario et al., 2011; Snapp et al., 2015). Although not tied to our main set of hypotheses, victimization was a stronger predictor of infractions for heterosexual youth than sexual minority youth. This could be a pattern unique to our particular sample, or this could be due to the fact that sexual

Table 6
Standardized Parameter Estimates of Direct, Indirect, and Total Effects for Differential Behavior and Differential Processing Models

	Sexual orientation	Victimization	Infractions
Differential behavior: Figure 1			
Victimization	.14 (5.70)		
	—		
	.14 (5.70)		
Infractions	—	.19 (6.45)	
	.03 (4.36)	—	
	.03 (4.36)	.19 (6.45)	
School suspension	−.00 (−0.09)	—	.41 (13.64)
	.01 (4.26)	.08 (6.15)	—
	.01 (0.42)	.08 (6.15)	.41 (13.64)
Juvenile justice	.11 (4.98)	—	.33 (11.16)
	.01 (4.16)	.06 (5.86)	—
	.12 (5.36)	.06 (5.86)	.33 (11.16)
Differential processing: Figure 2	Heterosexual youth		
Infractions	—	.23 (5.58)	
		—	
		.23 (5.58)	
School suspension		—	.40 (10.36)
	—	.09 (5.13)	—
		.09 (5.13)	.40 (10.36)
Juvenile justice		—	.12 (3.38)
	—	.03 (2.93)	—
		.03 (2.93)	.12 (3.38)
Differential processing: Figure 2	LGBQ youth		
Infractions	—	.15 (3.70)	
		—	
		.15 (3.70)	
School suspension		—	.47 (12.17)
	—	.07 (3.65)	—
		.07 (3.65)	.47 (12.17)
Juvenile justice		—	.57 (15.73)
	—	.08 (3.63)	—
		.08 (3.63)	.57 (15.73)

Note. The top value represents the direct effect, when applicable; the middle value represents the indirect effect, when applicable; the bottom value represents the total effect. *T* values are presented in parentheses. Sexual orientation was not a variable in the differential selection and processing model, as this variable corresponded to the two groups for which path coefficients were being compared. LGBQ = lesbian, gay, bisexual, or questioning. Dashes indicate that the respective direct or indirect effect is not applicable.

minority youth face systemic oppression, with school-based victimization as only one such index, and it may be a constellation of factors that contribute to disparities for sexual minority youth as opposed to any single factor. Finally, as a bridge between extant minority stress research and discipline research, punishable infractions were related to a greater likelihood of experiencing punitive discipline in our model. Because our model is partly based on minority stress theory (Meyer, 2003), its applicability to other marginalized populations could be tested in future research (e.g., among racial minority youth or transgender youth).

Minimal Support for the Differential Behavior Model

An additional goal of this study was to test whether a differential behavior or differential processing perspective (Piquero, 2008) best explained how these factors contributed to the identified sexual orientation-based discipline disparities. We documented minimal support for the differential behavior perspective, which proposed that sexual orientation-based differences on discipline are mediated through victimization and punishable infractions (see Figure 1). The actual size of the indirect effects of sexual orientation on discipline through peer victimization and engagement in punishable infractions were very small. Thus, although the fit of the overall model was good, the indirect effects reflecting the differential behavior model were negligible.

In our preliminary analyses, sexual minority youth reported more substance use and school-based infractions than heterosexual youth. The effect sizes were small, however, and stood in contrast to the effect size differences between sexual minority youth and heterosexual youth on reported discipline experiences. The same mixed or weak support for the differential behavior perspective has been found for racial discipline disparities (Gregory et al., 2010). Our findings of small indirect effects also coincide with the findings of Himmelstein and Brückner (2011) that disparities remained evident on similar discipline indices even when controlling for differential rates of punishable infractions. Simply put: The findings did not support the view that sexual orientation-based disparities can be explained by higher rates of victimization and punishable infractions.

Support for the Differential Processing Model

Instead, our multiple group comparison results supported the differential processing perspective (Piquero, 2008). As hypothesized, punishable infractions were associated with punitive discipline more strongly for sexual minority youth than for heterosexual youth. The lack of invariance in these paths indicated that, with higher rates of infractions, the odds were greater for sexual minority youth to have experienced punitive discipline than for heterosexual youth. These moderated effects would not be anticipated solely based on a differential behavior perspective. Instead, this finding may be partly attributable to the differential selection and processing perspective (Piquero, 2008) that would anticipate this kind of moderation within our minority stress-informed model of factors contributing to discipline experiences. These findings are similar to previous findings that youth of color are penalized more harshly than White youth in school discipline practices and in the criminal justice system even when controlling for their offenses and the severity of the crime (Shook & Goodkind, 2009; Skiba et al., 2002; Wordes, Bynum, & Corley, 1994). Indeed, the differential selection and processing explanation has received support in discipline disparities research among racial minority youth (Piquero, 2008; Skiba et al., 2002; Wehlage & Rutter, 1986), and our findings suggest that it also may apply to sexual minority youth.

Although our data do not capture explicit instances of discrimination and bias directed toward sexual minority youth based on these behaviors, they do allude to potential bias in how sexual minority youth may be penalized when they engage in similar rates of punishable infractions compared with heterosexual youth. Evidence of victim blaming, wrongful punishment, harassment, and other instances of bias directed against sexual minority youth from school officials have been documented from legal cases filed by sexual minority youth against school systems and correctional facilities and as reported by sexual minority youth in other studies (Chesir-Teran & Hughes, 2009; Cianciotto & Cahill, 2012; Estrada & Marksamer,

2006; Kosciw et al., 2012; Snapp et al., 2015). At minimum, our findings justify much closer attention to potential bias to determine whether sexual minority youth are penalized more harshly than heterosexual youth. This would extend work that has documented such bias against racial minority youth (Rodriguez, 2010; Shook & Goodkind, 2009; Wordes et al., 1994).

Strengths and Limitations

Research on school and criminal justice discipline sanctions has overlooked the experiences of sexual minority youth. Thus, a major contribution of our study was documenting the overrepresentation of sexual minority youth involved in punitive and exclusionary discipline practices. Further, we moved beyond noting basic disparities by documenting support for a theory-based model of factors connected to these disparities. This represented a major extension of extant work in this area. Moreover, we documented larger associations between infraction engagement and discipline experiences for sexual minority youth compared with heterosexual youth. Finally, we drew from a large population-based sample, which was critical to allow us to compare our model for heterosexual youth and sexual minority youth. This large sample also allowed us to avoid limitations inherent to smaller convenience samples of sexual minority youth (e.g., insufficient sample sizes for these analyses, limited representativeness of the general sexual minority youth population).

Although this study advances research on discipline disparities among sexual minority youth, we note several limitations. Our cross-sectional data limit our ability to make causal statements, even as our models are based on established theories (e.g., Meyer, 2003; Piquero, 2008). Longitudinal data, however, are critical: these factors may recursively predict one another over time in an increasingly detrimental process. For instance, punitive discipline may exacerbate existing health or academic risks, which may prompt heightened engagement in behaviors that constitute punishable infractions that then lead to future sanctions. In addition, although we made efforts to control for several relevant or confounding factors (e.g., bullying) through our propensity score matching, additional covariates should be considered. Also, although our data were from a large sample, it was limited to the Midwest. The data were also all youth self-reported. Future research should test the generalizability of our results across geographic regions and use multi-informant data when possible. Similarly, our sample was predominantly White. This prevented us from considering the intersection of race with sexual orientation. It would be essential for future research to consider the unique experiences of sexual minority youth of color, given the discipline disparities documented among racial minority youth (who have been assumed to be heterosexual) and the health disparities for sexual minority youth of color compared with sexual minority White youth (Greene, 2000; Meyer, Schwartz, & Frost, 2008). In the same manner, although our study focused on sexual minority youth, future research needs to give direct attention to gender minority youth, such as transgender youth. Emerging findings show that gender-variant and transgender youth are at greater risk for facing disciplinary bias (Snapp et al., 2015). As with other population-based youth surveillance systems (e.g., the YRBS), the DCYA used a number of single-item indices for specific factors from a desire to compile as comprehensive a survey as possible while maintaining a reasonable survey length. However, these single items have strong face value and capture specific and direct interests of schools (e.g., truancy, weapon carriage on campus). As in most other studies, we also used a general index of victimization as opposed to one specifying homophobic victimization. Given emerging findings that bias-based victimization is associated with even greater health and academic risks than general victimization (Russell et al., 2012), future studies might consider how the paths in our model may be even stronger when bias-based victimization is included.

Implications for Research, Practice, and Policy

Our findings underscore the need for more attention to sexual minorities in relation to discipline disparities and for psychologists and educators to address this issue in their research and practice. More interdisciplinary research is needed on this issue (Gregory et al., 2010), as the contributing factors in our model are relevant across the professions of psychology, education, and juvenile justice. Research should also attend to the immediate and long-term academic effects of office referrals, suspension, expulsion, or juvenile justice involvement, as well as their psychological and social consequences for sexual minority youth. Outcomes such as school dropout could be tied to exclusionary discipline experiences among sexual minority youth who already experience isolation at school. In addition, research should test how minority stressors (e.g., homophobic victimization) and students' reactions to such stressors (e.g., school avoidance, substance use) affect their mental health and academic performance (e.g., their ability to process complex course material or perform optimally on exams; Poteat, Scheer, & Mereish, 2014). Finally, research also needs to identify factors that predict the likelihood for adults to engage in disciplinary bias against sexual minority youth.

Our findings also have implications for addressing discipline disparities in practice and policy. Mental health professionals and educators who work directly with sexual minority youth should be mindful of potential connections between mental health, exclusionary discipline, and academic concerns when considering resource referrals and to inform their informal or formal interventions to support sexual minority youth. For example, when addressing youths' academic concerns, practitioners should consider how discipline experiences and mental health concerns may be disrupting learning and performance. Preservice or in-service trainings for psychologists, educators, and juvenile justice professionals should also raise awareness of the discrimination and additional stressors faced by sexual minority youth that place them at risk for discipline sanctions, mental health concerns, and poorer academic performance. Practitioners might also work with school-based professionals to consider discipline policies that do not further exclude sexual minority youth from school and are least disruptive to student learning, motivation, and academic performance.

In sum, sexual orientation-based discipline disparities constitute a major priority in need of greater attention from researchers, practitioners, and policymakers alike. Disciplinary issues cannot be considered in isolation and instead must be examined in connection with other precipitating stressors and risk factors. This requires a broad examination of individual and systems-level factors that contribute to such disparities. This work is integral to larger efforts to ensure the safety of sexual minority youth at school, their access to educational opportunities, and their overall development.

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