

# Willingness to Remain Friends and Attend School with Lesbian and Gay Peers: Relational Expressions of Prejudice Among Heterosexual Youth

V. Paul Poteat · Dorothy L. Espelage ·  
Brian W. Koenig

Received: 13 April 2009 / Accepted: 7 May 2009 / Published online: 24 May 2009  
© Springer Science+Business Media, LLC 2009

**Abstract** In this study, heterosexual students' willingness to remain friends with peers who disclose that they are gay or lesbian and their willingness to attend schools that include gay and lesbian students were examined among two large middle school and high school samples (Sample 1:  $n = 20,509$ ; 50.7% girls; Sample 2:  $n = 16,917$ ; 50.2% girls). Boys were less willing than girls to remain friends or attend schools with gay and lesbian peers, as were students in earlier grades than were students in later grades. Further, there was small, yet significant, variability in these scores across schools. Greater racial diversity within the school partially accounted for this school-level variability; students in more racially diverse schools reported greater willingness to remain friends and attend school with gay and lesbian peers. Findings suggest that while intervention programs must continue to address blatant and overt physical aggression against sexual minority youth, there is also a significant need for programming to address the more subtle expressions of sexual prejudice that contribute to unwelcoming and unsafe school climates.

**Keywords** Homophobia · Prejudice · School climate · Peer relationships

## Introduction

Sexual minority youth (e.g., lesbian, gay, bisexual, transgender youth) continue to experience multiple forms of discrimination and marginalization within the school system (Kosciw et al. 2008). As a blatant and overt form of discrimination, physical aggression against these youth remains a serious concern due to the association between victimization and mental health concerns (D'Augelli et al. 2002; Poteat et al. 2009; Williams et al. 2005). Concurrently, other more subtle expressions of prejudice also may negatively impact peer relationships between heterosexual and sexual minority youth and contribute to unsafe or unwelcoming school climates. Because peer relationships and the broader social context influence the psychological and social development of adolescents in general (Rubin et al. 2006), it is important that research attend to heterosexual youth and their attitudes toward and interactions with sexual minority peers. In this study, we examined heterosexual students' willingness to remain friends with gay and lesbian peers who come out and their willingness to attend schools that include gay and lesbian students.

## Sexual Prejudice Among Heterosexual Adolescents

Limited research has examined the attitudes of heterosexual youth toward sexual minorities. However, extant findings suggest both gender and age differences in sexual prejudice; namely, sexual prejudice is higher among boys than among girls, and higher among younger adolescents than older adolescents (Hoover and Fishbein 1999; Horn 2006; Horn et al. 2008; Poteat 2007). Among a homogeneously White adolescent sample, students in Grade 9 reported greater homophobic attitudes than students in Grade 11 (Hoover and Fishbein 1999). Among a more

---

V. Paul Poteat (✉)  
Boston College, Chestnut Hill, MA, USA  
e-mail: poteatp@bc.edu

D. L. Espelage  
University of Illinois, Urbana-Champaign, IL, USA

B. W. Koenig  
K12 Associates, Madison WI, USA

racially diverse sample, students in Grade 10 reported higher levels of sexual prejudice than students in Grade 12 or in college (Horn 2006). More recently, Horn et al. (2008) found that students in Grade 9 reported the exclusion of sexual minority youth to be more acceptable than did students in later grades. Although based on cross-sectional data, these patterns suggest a developmental trend indicating that negative attitudes toward sexual minorities are higher during early adolescence and may decrease during late adolescence.

Whereas certain subgroups of heterosexual students may engage in homophobic physical aggression (Poteat 2007), a larger number of heterosexual students may condone or engage in less blatant or more relationally aggressive expressions of sexual prejudice. In the general aggression literature, relational aggression has been examined extensively as behaviors intended to damage the social relationships of others, and can include behaviors such as group exclusion or rumor-spreading (Crick and Grotpeter 1995). The recent findings of Horn et al. (2008) suggest a connection between relational aggression and forms of sexual prejudice, specifically with regard to attitudes toward the exclusion of sexual minorities from social groups. This might also be evident among heterosexual students in their attitudes toward the exclusion of gay and lesbian peers from their friendship group (e.g., their unwillingness to remain friends with sexual minority peers who come out) or exclusion of gay and lesbian peers from schools (e.g., their unwillingness to attend schools that include gay and lesbian students).

### Experiences of Sexual Minority Youth

In tandem, a number of sexual minority youth are reporting coming out experiences at earlier ages compared to those in previous generations (D'Augelli et al. 2005; Grov et al. 2006). For example, in a study among lesbian, gay, and bisexual (LGB) adults, the 18–24 years old cohort reported coming out to others on average between ages 16 and 17, whereas those in the over-55 years old cohort reported coming out to others on average between the ages of 24 and 27 years (Grov et al. 2006). Participants in a study among LGB youth reported an average age of first disclosure between ages 14 and 15 (D'Augelli et al. 2005). Coming out has been conceptualized as a process (Coleman 1982), and much of the focus has been on adolescents coming out to their parents (e.g., Savin-Williams 2001), with little attention to how disclosure may impact peer relationships.

During adolescence, peer relationships and the school social context are salient and influential in their contribution to the social development of youth (for reviews, see Eccles 2007; Rubin et al. 2006). Peer groups provide a context in which many adolescents learn new social skills and

behaviors that can be translated to later romantic relationships, and peer groups also provide a sense of belonging and group identity (La Greca and Mackey 2007; Laursen et al. 2006). Similarly, for many adolescents the school social context is one in which they spend a significant proportion of their time and in which many of their interactions occur (Eccles 2007). Consequently, there is a need for research to examine how the social climates and social relationships within these contexts may contribute to the experiences of sexual minority youth during adolescence.

The combined findings from heterosexual and sexual minority youth highlight an important area in need of closer attention. Namely, sexual minority youth are coming out at earlier ages, while at the same time younger heterosexual youth report higher levels of sexual prejudice. These dual processes could have significant implications for sexual minority youth because peer groups often represent a primary social support outlet and provide a sense of belonging (Rubin et al. 2006). Sexual minority youth often identify friends as providers of social support that buffer against the effects of homophobic victimization (Anderson 1998; D'Augelli 2003). Similarly, positive school climates predict better academic performance and can buffer against the negative effects of victimization for sexual minority youth (Espelage et al. 2008; Goodenow et al. 2006; Murdock and Bolch 2005; Russell et al. 2001). To provide adequate resources to these youth, school professionals need to be aware of the social climates within schools and within peer groups that sexual minority youth may encounter as they come out at earlier ages. Relational expressions of prejudice may be less noticeable to school professionals relative to blatant and physical expressions. Yet, heterosexual students' attitudes toward remaining friends and attending school with gay and lesbian peers could have significant implications for peer relationships and the broader school climate for sexual minority youth. Thus, attention to these issues is warranted.

### The Current Study

In the current study, we utilized existing data from the 2005 and 2009 Dane County Youth Survey (DCYS) to examine the following two issues. First, we examined the extent to which heterosexual students would be willing to remain friends with peers who disclosed that they were gay or lesbian. Second, we examined the extent to which heterosexual students were willing to attend schools with gay and lesbian peers. The first research question represents the potential removal of an already established social support structure on which many gay and lesbian youth may rely as they negotiate the coming out process. Thus, this could indicate a concern for some gay and lesbian youth who

come out to friends who might no longer provide support. The second research question represents an indicator of school climate toward gay and lesbian youth. While many heterosexual students might not engage in physical aggression against gay and lesbian youth, their preference to attend schools without gay and lesbian youth represents a more subtle expression of prejudice that would likely foster a negative school climate where sexual minority youth feel unwelcome and unsupported. Similarly, these questions also reflect characteristics of relational aggression, in their underlying sense of peer exclusion, which are qualities of relational aggression.

Based on extant research documenting gender and grade differences in sexual prejudice, we tested two primary hypotheses in the current study. First, we hypothesized that boys would report less willingness to remain friends or attend school with gay and lesbian peers than would girls. We based this hypothesis on extant findings that adolescent boys report more homophobic attitudes than do adolescent girls (Horn 2006; Poteat 2007). Second, we hypothesized that students in earlier grades would report less willingness to remain friends or attend school with gay and lesbian peers than would those in later grades. We based this hypothesis on extant findings that students in earlier grades tend to report more homophobic attitudes than students in later grades (Hoover and Fishbein 1999; Horn 2006).

Finally, as an exploratory component, we tested whether differences would be identified across the participating schools. Because previous studies often have been limited to a single school, it remains uncertain the extent to which sexual prejudice varies across schools, or what factors might predict any differences across schools. Thus, using multilevel modeling procedures (Raudenbush and Bryk 2002), we first tested whether there were significant differences in these responses across schools. Following this, we examined several factors, including the overall perceived school climate, overall levels of aggression in the school, school racial diversity, and school size as school-level predictors of differences in willingness to remain friends and attend school with gay and lesbian peers.

## Method

### Participants

Participants in the 2005 DCYS were 7,376 middle school students in Grades 7 and 8 (50.7% girls) and 13,133 high school students in Grades 9 through 12 (50.3% girls), ages 10 through 19 ( $M = 14.80$ ,  $SD = 1.77$ ). The county is located in the Midwestern United States. The middle school

and high school samples were similar in their racial diversity (middle school: 72.7% White, 7.7% bi/multiracial, 6.9% African American, 5.2% Asian American, 3.7% Latino, 1.1% Native American, 2.6% “other”; high school: 79.7% White, 5.2% bi/multiracial, 4.7% Asian American, 4.2% African American, 3.5% Latino, 0.9% Native American, 1.8% “other”). Of the participants, 75.2 and 84.9% were classified as heterosexual among middle school and high school students, respectively. At the middle school level, the remaining students were classified as LGB or questioning (24.8%), and at the high school level the remaining students were classified as LGB or questioning (15.1%). For the purpose of this paper, we focus specifically on those students classified as heterosexual.

Participants in the 2009 DCYS were 5,470 middle school students in Grades 7 and 8 (50.2% girls) and 11,447 high school students in Grades 9 through 12 (49.8% girls), ages 10 through 18 ( $M = 14.85$ ,  $SD = 1.76$ ). The racial diversity was similar to that of the 2005 DCYS (middle school: 71.5% White, 7.7% bi/multiracial, 7.5% African American, 5.2% Latino, 4.4% Asian American, 1.2% Native American, 2.2% “other”; high school: 75.5% White, 6.7% African American, 6.1% bi/multiracial, 4.5% Asian American, 4.1% Latino, 1.0% Native American, 1.7% “other”). Of the participants, 85.3 and 87.9% were classified as heterosexual among middle school and high school students, respectively. At the middle school level, the remaining students were classified as LGBT or questioning (14.7%), and at the high school level the remaining students were classified as LGBT or questioning (12.1%).

### Procedures

The DCYS is a county-wide survey administered across all schools in the county as a collaborative project among the schools and several community organizations (e.g., United Way, Department of Human Services). The county represents geographically diverse areas ranging from small working farms to a large city. Free or reduced-cost lunch ranged from 12 to 58% (2005) and 16 to 58% (2009) across the schools. The survey assesses a wide range of physical and mental health indicators, and various attitudes and social behaviors. The 2005 DCYS was completed using a paper and pencil version, and the 2009 DCYS was completed electronically in school computer labs using an online survey provider. Students completed these anonymous surveys independently while in school during proctored sessions. A waiver of active consent was employed and child written assent was used. The study was approved through the participating school district’s IRB and the University of Illinois IRB. Participants for both the 2005 and 2009 DCYS represented between 90 and 95% of the

student populations across the schools ( $n = 36$  schools in 2005;  $n = 35$  schools in 2009).

## Measures

### 2005 DCYS

#### *Remaining Friends with Gay and Lesbian Peers*

We examined students' responses to the following item: "I could never stay friends with someone who told me he or she was gay or lesbian." Response options were: strongly agree (0), agree (1), disagree (2), and strongly disagree (3). Higher scores represented greater willingness to remain friends with a gay or lesbian peer.

#### *Bullying*

The 9-item Bullying Scale (Espelage and Holt 2001) assesses self-reported engagement in bullying behavior during the last 30 days (e.g., "I upset other students for the fun of it"). Response options include *Never* (0), *1 or 2 times* (1), *3 or 4 times* (2), *5 or 6 times* (3), and *7 or more times* (4). Higher scores represent more frequent engagement in bullying behavior. The items were internally consistent,  $\alpha = .89$ .

#### *School Climate*

The assessment of perceived school climate consisted of 6 items assessing indicators of positive school climate: (a) "I feel like I belong at this school", (b) "The rules and expectations are clearly explained at my school", (c) "I usually enjoy going to school", (d) "It is important to me that I graduate from school", (e) "Teachers and other adults at school treat me fairly", and (f) "There are adults I can talk to at school if I have a problem". Response options ranged from 0 (*strongly disagree*) to 3 (*strongly agree*). Higher scores represent the perception of a more positive school climate. The items were internally consistent,  $\alpha = .81$ .

#### *Sexual Orientation*

The 2005 DCYS included an item that stated: "Do you ever feel confused about whether you are lesbian, gay, or bisexual?" Response options included: (a) *Never confused because I am straight*, (b) *Rarely confused*, (c) *Sometimes confused*, (d) *A lot confused*, (e) *Always confused*, and (f) *Never confused because I consider myself to be lesbian, gay, or bisexual*. For this investigation, we focused on those participants who responded as straight (option A) and refer to these students as heterosexual.

### *School Demographics*

We examined several composite factors at the school-level, including school size (small = less than 150 students; medium = between 151 and 899 students; large = greater than 900 students), racial diversity (i.e., the percentage of students who identified as racial minorities within the school), overall perceived school climate (i.e., the average perceived school climate of students within the school), and overall level of bullying within the school (i.e., the average self-reported bullying behavior of students within the school).

### 2009 DCYS

#### *Attending School with Gay and Lesbian Peers*

We examined students' responses to the following item: "I would rather attend a school where there are no gay or lesbian students." Response options were: strongly agree (0), agree (1), disagree (2), and strongly disagree (3). Higher scores represented greater willingness to attend a school with gay and lesbian students. This item had been constructed to replace the previous item from the 2005 DCYS as part of the standard revision process of the survey that occurred between distribution periods to reflect the developing interests of the participating schools and the collaborating community agencies.

#### *Bullying and School Climate*

Students completed the 9-item Bullying Scale (Espelage and Holt 2001) and the 6-item assessment of school climate described previously. Items for both measures were internally consistent,  $\alpha = .89$  (Bullying Scale) and  $\alpha = .81$  (school climate).

#### *Sexual Orientation*

The item assessing sexual orientation was revised from the 2005 DCYS. The 2009 DCYS item stated: "Do you identify yourself as any of the following? (Check all that apply)" Response options included: (a) gay, (b) lesbian, (c) bisexual, (d) transgender, (e) questioning my sexual orientation, or (f) none of the above. For this investigation, we refer to students who only responded 'none of the above' as heterosexual.

### *School Demographics*

We examined the same composite factors described previously at the school level, including school size, racial diversity, overall perceived school climate, and the overall level of bullying within the school.

## Results

### Descriptive Data for Participant Responses

Responses to both items covered the possible range, and response distributions are provided in Table 1. The percentage of boys who strongly agreed or agreed that they could never remain friends with someone who told them he or she was gay or lesbian ranged from 17.0% (Grade 12) through 38.0% (Grade 7). The percentage of girls who strongly agreed or agreed with this statement ranged from 4.9% (Grade 12) through 23.7% (Grade 7). The percentage of boys who strongly agreed or agreed that they would rather attend a school where there were no gay or lesbian students ranged from 29.8% (Grade 12) through 54.2% (Grade 7). The percentage of girls who strongly agreed or agreed with this statement ranged from 10.0% (Grade 11) through 35.0% (Grade 7). We also examined the extent to which these responses were correlated with self-reported levels of bullying and perceived school climate. Among participants in the 2005 DCYS, greater willingness to remain friends with gay or lesbian peers was correlated with less frequent engagement in bullying behavior ( $r = -.11, p < .001$ ) and minimally, yet significantly, correlated with greater perceptions of positive school climate ( $r = .02, p < .001$ ), the latter likely due to the large sample size. Bullying and perceptions of positive school climate were negatively correlated ( $r = -.28, p < .001$ ). Among participants in the 2009 DCYS, greater willingness to attend schools with gay or lesbian peers was correlated with less frequent engagement in bullying behavior ( $r = -.07, p < .001$ ) and minimally correlated with greater perceptions of positive school climate ( $r = .02, p < .001$ ).

### Gender and Grade Differences

The large sample size increased the likelihood that we would document significant differences if they were to

exist, even for those with very small effects. Thus, we used the partial eta-squared effect size indicator to evaluate the size of significant differences. We used the guidelines of Cohen (1988) to classify effects as small (.01–.059), medium (.06–.139), or large (.14 or above). We considered differences with effect sizes of less than .005 not to be of practical significance because of our sample size. For follow-up post-hoc comparisons, we used the Scheffé method to adjust the significance level criteria, as this is a more stringent adjustment.

We conducted a univariate ANOVA with gender, race, and grade level as independent variables to test for differences on willingness to remain friends with lesbian and gay peers. As hypothesized, we documented a significant main effect for gender with a medium effect size,  $F(1, 16,244) = 1,227.72, p < .001, \eta_p^2 = .07$ , and a significant main effect for grade level with a small effect size,  $F(5, 16,244) = 124.78, p < .001, \eta_p^2 = .04$ . The main effect for race and the interaction effects between independent variables did not qualify as significant using the criteria described above. Boys reported less willingness to remain friends with someone who told them he or she was gay or lesbian than did girls (Boys:  $M = 1.91, SD = 0.94$ ; Girls:  $M = 2.37, SD = 0.78$ ). Follow-up post-hoc comparisons by grade indicated that all grade differences were significant except those between Grades 9 and 10. Students in lower grades reported less willingness to remain friends than did students in higher grades (Grade 7:  $M = 1.89, SD = 0.98$ ; Grade 8:  $M = 1.99, SD = 0.94$ ; Grade 9:  $M = 2.17, SD = 0.88$ ; Grade 10:  $M = 2.20, SD = 0.85$ ; Grade 11:  $M = 2.28, SD = 0.82$ ; Grade 12:  $M = 2.38, SD = 0.79$ ).

We then conducted a second univariate ANOVA with gender, race, and grade level as independent variables to test for differences on willingness to attend a school that included gay and lesbian students. As hypothesized, we documented significant differences for gender with a medium effect size,  $F(1, 13,363) = 1,330.81, p < .001$ ,

**Table 1** Response frequency for remaining friends and attending school with gay and lesbian peers among heterosexual students

Grade	Item 1: "I could never stay friends with someone who told me he or she was gay or lesbian"				Item 2: "I would rather attend a school where there are no gay or lesbian students"			
	Strongly agree	Agree	Disagree	Strongly disagree	Strongly agree	Agree	Disagree	Strongly disagree
Grade 7	12.1	18.3	38.6	31.1	23.5	21.0	31.6	23.9
Grade 8	9.6	16.3	39.8	34.3	15.0	19.0	37.4	28.7
Grade 9	6.7	11.8	39.9	41.6	11.2	15.2	36.8	36.7
Grade 10	5.8	11.0	40.7	42.5	9.5	15.7	37.9	36.9
Grade 11	4.9	8.5	40.2	46.3	9.3	13.8	36.6	40.4
Grade 12	4.2	6.6	36.0	53.1	8.2	12.4	40.4	38.9

Note: Values represent percent endorsement for each response option. Item 1 responses are from 2005 DCYS participants ( $n = 20,509$ ); Item 2 responses are from 2009 DCYS participants ( $n = 16,917$ )

$\eta_p^2 = .09$ , and grade level with a small effect size,  $F(5, 13,636) = 104.72, p < .001, \eta_p^2 = .04$ . The main effect for race and the interaction effects between independent variables did not qualify as significant using the criteria described above. Boys reported less willingness to attend schools that included gay and lesbian students than did girls (Boys:  $M = 1.63, SD = 1.04$ ; Girls:  $M = 2.22, SD = 0.88$ ). Follow-up post-hoc comparisons by grade indicated a general trend where students in earlier grades reported less willingness to attend schools that included gay and lesbian students than did students in later grades (Grade 7:  $M = 1.56, SD = 1.09$ ; Grade 8:  $M = 1.80, SD = 1.02$ ; Grade 9:  $M = 1.99, SD = 0.98$ ; Grade 10:  $M = 2.02, SD = 0.95$ ; Grade 11:  $M = 2.08, SD = 0.95$ ; Grade 12:  $M = 2.10, SD = 0.91$ ). However, these grade differences were in smaller increments among later grades, such that grade differences were not significant between Grades 9 and 10 or between Grades 9 and 11, between Grades 10 and 11 or Grades 10 and 12, or between Grades 11 and 12 ( $ps > .05$ ). However, all other grade comparisons were significant ( $ps < .001$ ).

We also tested for differences between the two samples (i.e., participants in 2005 and 2009) on bullying and perceived school climate. The comparison for bullying, while statistically significant, was minimal and did not reach criteria for practical significance,  $F(1, 30,306) = 243.49, p < .001, \eta_p^2 < .01$ . However, the comparison for perceived school climate indicated significant differences between the two samples with a moderate effect size,  $F(1, 30,532) = 4,506.62, p < .001, \eta_p^2 = .13$ . Participants in the 2009 DCYS reported more positive perceptions of school climate than did participants in the 2005 DCYS (2005 DCYS:  $M = 1.82, SD = 0.51$ ; 2009 DCYS:  $M = 2.22, SD = 0.54$ ).

#### Variability in Findings Across Schools

To test for variability in student responses across schools, we tested multilevel models using SAS PROC MIXED to analyze the nested data of individuals (Level 1) within their schools (Level 2). We computed two models, one for willingness to remain friends with a gay or lesbian peer (2005 DCYS participants) and one for willingness to attend schools with gay and lesbian students (2009 DCYS participants). First, we computed fully unconditional models without independent variables to identify the amount of variance in scores existing within schools and the amount of variance in scores existing between schools (Raudenbush and Bryk 2002). These models test whether the amount of variance between schools is significantly different from zero. Results indicated that the amount of variance in scores across schools was significant for willingness to remain friends with gay and lesbian peers

( $Z = 3.77, p < .001$ ) and willingness to attend schools with gay and lesbian students ( $Z = 3.31, p < .001$ ). We computed the intraclass correlation coefficient (ICC) to identify the proportion of total variance in scores existing between schools. Higher ICCs indicate a greater proportion of variance in scores between schools relative to within schools. The ICCs for these models were .050 (remaining friends) and .039 (attending school). Thus, while significant, the systematic variance across schools was relatively low. Next, for exploratory purposes, we tested the multi-level models described below to examine the extent to which school characteristics accounted for additional variance in scores over and above individual effects.

#### *Remaining Friends with Gay and Lesbian Peers*

In the initial Level 1 model, we included individuals' centered bullying and perceived school climate scores, gender, race, and grade level to predict willingness to remain friends with gay and lesbian peers. Because our earlier analyses identified the factors of bullying, school climate, and race as weakly associated with this outcome variable, our inclusion of these factors was primarily for statistical control purposes for our subsequent test of these factors as school-level characteristics. Perceptions of a more positive school climate, lower reported levels of bullying behavior, and the demographics of identifying as female, White, and in a higher grade level predicted greater willingness to remain friends with a gay and lesbian peer (Table 2). However, these factors only accounted for 9.50% of the variance at the individual level. Building on this model, we then tested the multilevel model, which, in addition to the inclusion of Level 1 predictors, also included the school-level (Level 2) predictors of overall perceived school climate and levels of bullying for each specific school, and the size and racial diversity of each school. Results indicated that the racial diversity of the school significantly predicted differences in willingness to remain friends with gay and lesbian peers over and above individual-level predictors. Higher levels of racial diversity within the school predicted more willingness to remain friends with gay and lesbian peers (Table 3). This factor accounted for 47.52% of the variance at the school level.

#### *Attending School with Gay and Lesbian Students*

In the initial Level 1 model, we included individuals' centered bullying and perceived school climate scores, gender, race, and grade level to predict willingness to attend school with gay and lesbian students. Lower reported levels of bullying and the demographics of identifying as female, White and in a higher grade level predicted greater willingness to attend school with gay and lesbian

**Table 2** Individual-level factors and characteristics predicting responses

Independent variables	Fixed effects estimates for level 1 model	
	Willingness to remain friends with gay/lesbian peers (DCYS 2005)	Willingness to attend schools with gay/lesbian peers (DCYS 2009)
Perceived school climate	0.0397** (0.0140)	0.0224 (0.0159)
Bullying behavior	−0.1003** (0.0122)	−0.0701*** (0.0168)
Gender	0.4436*** (0.0134)	0.5785*** (0.0164)
Race	0.1291*** (0.0173)	0.0869*** (0.0208)
Grade level	0.0879*** (0.0052)	0.0915*** (0.0059)

*Note:* DCYS = Dane County Youth Survey; Gender = dichotomized variable (1 = male, 2 = female); Race = dichotomized variable (1 = racial minority 2 = White). Values in parentheses are standard error estimates

\*\*  $p < .01$ , \*\*\*  $p < .001$

**Table 3** Contextual effects of school factors predicting willingness to remain friends and attend school with gay and lesbian peers

Intercept predictors for contextual effects	Fixed effects estimates for multilevel model	
	Willingness to remain friends with gay/lesbian peers (DCYS 2005)	Willingness to attend schools with gay/lesbian peers (DCYS 2009)
School climate	−0.1780 (0.2592)	0.6294 (0.3663)
School-level bullying	−0.3071 (0.4147)	0.6786 (0.5944)
Racial diversity of school	0.0051* (0.0022)	0.0044* (0.0022)
School size	0.0270 (0.0480)	0.0304 (0.0559)

*Note:* School climate = composite score of overall perceived school climate among students within each school; School-level bullying = composite score of overall bullying behavior among students within each school; Racial diversity of school = percentage of racial minority students within each school; School size = population size of the school (1 = small, 2 = medium, 3 = large). Values represent fixed effects estimates of the Level 2 (i.e., school-level) predictors while controlling for the effects of individual attitudes and characteristics at Level 1 (see Table 2 for these individual effects). Values in parentheses are standard error estimates

\*  $p < .05$

students (Table 2). These factors accounted for 11.76% of the variance at the individual level. Building on this model, we then tested the multilevel model, which included the school-level predictors of overall perceived school climate and levels of bullying in the school, and the size and racial diversity of the school. Results indicated that greater racial diversity of the school significantly predicted greater willingness to attend school with gay and lesbian peers (Table 3). This factor accounted for 49.63% of the variance at the school level.

## Discussion

Our findings indicate that in addition to the expression of physical aggression against sexual minority youth, a number of heterosexual youth also report relational indicators of prejudice toward sexual minorities. As hypothesized, boys reported less willingness to remain friends and attend school with gay and lesbian peers than did girls, as did students in earlier grades relative to those in later grades. In addition, we identified only a small, yet

significant, amount of variance in these reported levels across the participating schools. A significant amount of this variance at the school level was accounted for by the racial diversity of the school. Our findings indicate an additional need for attention to more subtle and relational expressions of prejudice that contribute to the marginalization of sexual minority youth in schools.

## Individual Differences in Relational Indicators of Sexual Prejudice

The gender differences identified in this investigation parallel those documented in the extant literature and may be explained by several factors. Responses to both items may reflect participants' general attitudes toward sexual minorities, and extant research indicates that boys report higher levels of homophobia than do girls (Horn 2006; Poteat 2007). Also, boys may be especially averse to remaining friends with gay peers out of fear of being perceived as gay by other heterosexual male peers. Adolescent boys often engage in behaviors intended to prove their heterosexuality and masculinity to their peers

(Korobov 2004; Phoenix et al. 2003), which might foster a social climate within peer groups where boys may feel pressured to socially distance themselves from other male peers who identify as gay. This finding was most evident among boys in Grade 7, for which over half indicated that they would prefer to attend schools that did not include gay and lesbian students. Additional research is needed to examine how masculine norms and homophobia impact the relationship dynamics between heterosexual and gay adolescent boys. Future research might also examine this in connection to relational aggression, a component of which can involve social exclusion. Because a number of researchers have suggested relational aggression to be slightly more prominent among girls, researchers might examine more closely how relational aggression may be used among boys (Archer and Coyne 2005). For example, when group exclusion and rumor-spreading are used among boys, they may be connected to the expression of sexual prejudice (e.g., excluding sexual minority youth from groups or spreading rumors about another student's sexual orientation).

Also in line with extant research, our findings indicated that students in later grades reported greater willingness to remain friends and attend school with lesbian and gay peers. This pattern might be explained by extant findings that older adolescents report less homophobic attitudes than do younger adolescents (Hoover and Fishbein 1999; Horn 2006). The effects of sexual minority youth coming out to their peers might also account for this pattern. For some heterosexual youth, learning that one or more of their peers identify as gay or lesbian may challenge them to examine their assumptions, stereotypes, or homophobic attitudes toward sexual minorities. Similarly, the friendship item in this study assessed intended behavior rather than actual behavior. It may be that intended behavior, especially among younger cohorts, may be less predictive of their actual behavior once faced with the situation. Findings from Heinze and Horn (2009) indicate that students who have close interpersonal relationships with gay and lesbian peers report more positive attitudes toward sexual minorities. However, our findings underscore the need for attention to earlier school years during which the social climate appears less welcoming and supportive. Our findings also parallel those of Horn et al. (2008) who documented that students in earlier high school grades rated exclusion of sexual minorities as more acceptable than those in later grades. While research suggests that gay and lesbian youth are beginning to come out in late middle school or early high school (D'Augelli et al. 2005; Grov et al. 2006), it was during this period that the largest proportion of heterosexual students in our study indicated that they would not remain friends with gay and lesbian peers and would rather attend schools without gay and lesbian students.

Although the two samples for the DCYS in 2005 and 2009 were quite similar, we did document significant differences between the samples on perceptions of school climate. Overall, students participating in 2009 reported more positive perceptions of school climate than did participants in 2005. This finding is encouraging and may suggest improvements in some aspects of school climate, yet this did not appear to translate specifically to more positive climates for sexual minority youth, as suggested by responses to the desire to attend schools without gay and lesbian peers. Research might examine and compare general perceptions of school climate to more specific indicators of school climate in relation to diversity. Heterosexual students may not consider the experiences of their sexual minority peers when forming their perceptions of their school climate. However, such perspective-taking may be important to promote more welcoming school climates. Also, although comparisons between the responses to the two items is limited due to different samples, we note the larger proportion of students expressing desire to attend schools without gay and lesbian students relative to the proportion of students expressing unwillingness to remain friends with gay and lesbian peers. Students may consider exclusion at a more abstract and less personal level to be more acceptable or easier to endorse (e.g., attending school with gay and lesbian students) compared to exclusion that would be more personal and directly connected to their own behaviors (e.g., remaining friends with a gay or lesbian peer).

#### Variability in Sexual Prejudice Across Schools

Previous studies often have been limited to participants within a single school, preventing the examination of variability in sexual prejudice across schools. In this study, we documented small, yet significant, systematic variation in relational indicators of sexual prejudice across schools. However, most variance in scores on both items existed within, rather than between, schools. In comparison, Potent (2007) documented substantially more sizable and distinct differences in sexual prejudice attitudes and behaviors between more proximal peer groups. Future research might examine both contexts concurrently to test the extent to which the school climate might influence the more proximal social climates and interpersonal dynamics within the peer groups that exist within the school. We found that membership within more racially diverse schools predicted greater willingness to remain friends and attend school with gay and lesbian peers. This is similar to the findings of Goodenow et al. (2006) who documented that sexual minority students in less racially diverse schools reported higher levels of victimization, truancy, and suicide attempts. As suggested by Goodenow et al. (2006), greater school racial diversity may foster a higher level of

acceptance of other forms of diversity. Our consistent finding of racial diversity as a significant school-level characteristic that predicted both willingness to remain friends and willingness to attend schools with gay and lesbian peers in two different samples suggests this may be a robust and important school-level factor in need of additional attention in future research. However, at least in this investigation, it should be emphasized that, although this factor predicted a significant amount of the variance in scores across schools, most all of the variance in scores on both items was within schools. Thus, our findings suggest that attention to sexual prejudice is needed within all schools as opposed to a select few.

### Implications for School Professionals and Programming

Our findings carry several implications for school professionals. While continued efforts are needed to address physical aggression directed toward sexual minority youth, our findings suggest that school policies and interventions that only address these overt behaviors may be inadequate for improving school climates and relationships among heterosexual and sexual minority youth. Schools must also address subtle ways in which prejudice is expressed. Because peer support and school climate are both factors that promote resiliency among sexual minority youth, there is a need for schools to address attitudes and behaviors that may limit these contributions. Thus, our findings underscore the need for schools to ensure that support structures and resources are available for sexual minority students as they come out to peers, and to facilitate supportive social conditions that promote inclusive and safe school environments that foster respect and affirmation among all students. This is especially needed at earlier grade levels, where our findings suggest relational exclusion and rejection of sexual minority peers is highest. Further, it is during these earlier developmental periods that these youth are less likely to be financially independent and they may have limited access to resources outside of the school.

### Strengths, Limitations, and Future Research

Several strengths and limitations to the current study should be noted, as well as areas for future research. The strengths of this investigation were the use of large, multiple school samples of adolescents in middle school and high school. Thus, our findings are not based on small or convenience samples, and we included middle school students, for whom there exists limited data in the extant literature. However, despite a large sample, it was not a nationally representative sample, but rather one drawn from schools within the same county. Greater variability in

sexual prejudice may exist across schools located in different states or geographic regions relative to differences across schools in the same county. Also, our data were cross-sectional, which limits the extent to which developmental changes can be inferred. Longitudinal research is needed to examine potential within-individual changes. This could include the examination of how the coming out process of sexual minority youth might influence changes in the attitudes and behaviors of their heterosexual peers. Our analyses of single items limits the extent to which we can generalize our results to more complex constructs. Research is needed to examine multifaceted indicators of sexual prejudice and discrimination. However, the patterns we identified for both items were consistent with extant research involving multi-item assessments of sexual prejudice. Finally, the items that assessed sexual orientation were limited. For the 2005 DCYS, the phrasing of the item and response options was problematic. For example, we could not distinguish bisexual students from lesbian or gay students, and the survey did not assess for identification as transgender. The 2009 DCYS improved this item by allowing the selection of specific subgroups within the broader sexual minority community. However, some students who answered “none of the above” may not have identified as heterosexual, but rather may have felt that their sexual orientation was not best captured by those options provided. However, because of the large sample and likelihood that most students who endorsed this option were heterosexual, this likely had a minimal impact on our results.

Our findings indicate a need for research and programming, especially during early adolescence, to address issues of peer support and school climate for sexual minority youth and for programming to address broadly the attitudes and behaviors that contribute to the marginalization of these youth in schools. At the same time, increased attention to protective factors and sexual minority youth resiliency is needed. Peers and schools can promote positive youth development through the provision of social support and belonging, and research might focus on the role of heterosexual allies (e.g., students who actively support and affirm sexual minority students) to compliment and extend research assessing sexual prejudice. Similarly, research might examine the positive impact of school programming efforts and resources, such as Gay-Straight Alliances (GSAs) and the representation of sexual minority issues in school curricula. Data suggest that GSAs and the inclusion of sexual minority issues in school curricula can have positive effects for sexual minority youth (Russell et al. 2006, 2001). Future research might also examine the implications of these school-level factors for heterosexual youth. Attention to the contribution of both peers and schools to the healthy development of sexual minority

youth would provide a broader ecological understanding of the experiences of sexual minority youth during their development throughout adolescence.

## References

- Anderson, A. L. (1998). Strengths of gay male youth: An untold story. *Child and Adolescent Social Work Journal*, 15, 55–71. doi:10.1023/A:1022245504871.
- Archer, J., & Coyne, S. M. (2005). An integrated review of indirect, relational, and social aggression. *Personality and Social Psychology Review*, 9, 212–230. doi:10.1207/s15327957pspr0903\_2.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Coleman, E. (1982). Developmental stages of the coming out process. *Journal of Homosexuality*, 7, 31–43. doi:10.1300/J082v07n02\_06.
- Crick, N. R., & Grotpeter, J. K. (1995). Relational aggression, gender, and social-psychological adjustment. *Child Development*, 66, 710–722.
- D'Augelli, A. R. (2003). Lesbian and bisexual female youths aged 14 to 21: Developmental challenges and victimization experiences. *Journal of Lesbian Studies*, 7, 9–29. doi:10.1300/J155v07n04\_02.
- D'Augelli, A. R., Grossman, A. H., & Starks, M. T. (2005). Parents' awareness of lesbian, gay, and bisexual youths' sexual orientation. *Journal of Marriage and the Family*, 67, 474–482. doi:10.1111/j.0022-2445.2005.00129.x.
- D'Augelli, A. R., Pilkington, N. W., & Hershberger, S. L. (2002). Incidence and mental health impact of sexual orientation victimization of lesbian, gay, and bisexual youths in high school. *School Psychology Quarterly*, 17, 148–167. doi:10.1521/scpq.17.2.148.20854.
- Eccles, J. S. (2007). Families, schools, and developing achievement-related motivations and engagement. In J. E. Grusec & P. D. Hastings (Eds.), *Handbook of socialization: Theory and research* (pp. 665–691). New York, NY: Guilford Press.
- Espelage, D. L., Aragon, S. R., Birkett, M., & Koenig, B. W. (2008). Homophobic teasing, psychological outcomes, and sexual orientation among high school students: What influence do parents and schools have? *School Psychology Review*, 37, 202–216.
- Espelage, D. L., & Holt, M. L. (2001). Bullying and victimization during early adolescence: Peer influences and psychosocial correlates. *Journal of Emotional Abuse*, 2, 123–142. doi:10.1300/J135v02n02\_08.
- Goodenow, C., Szalacha, L., & Westheimer, K. (2006). School support groups, other school factors, and the safety of sexual minority adolescents. *Psychology in the Schools*, 43, 573–589. doi:10.1002/pits.20173.
- Grov, C., Bimbi, D. S., Nanin, J. E., & Parsons, J. T. (2006). Race, ethnicity, gender, and generational factors associated with the coming-out process among gay, lesbian, and bisexual individuals. *Journal of Sex Research*, 43, 115–121.
- Heinze, J. E., & Horn, S. S. Intergroup contact and beliefs about homosexuality in adolescence. *Journal of Youth and Adolescence*. doi:10.1007/s10964-009-9408-x.
- Hoover, R., & Fishbein, H. D. (1999). The development of prejudice and sex role stereotyping in White adolescents and White young adults. *Journal of Applied Developmental Psychology*, 20, 431–448. doi:10.1016/S0193-3973(99)00026-X.
- Horn, S. S. (2006). Heterosexual adolescents' and young adults' beliefs and attitudes about homosexuality and gay and lesbian peers. *Cognitive Development*, 21, 420–440. doi:10.1016/j.cogdev.2006.06.007.
- Horn, S. S., Szalacha, L. A., & Drill, K. (2008). Schooling, sexuality, and rights: An investigation of heterosexual students' social cognition regarding sexual orientation and the rights of gay and lesbian peers in school. *The Journal of Social Issues*, 64, 791–813. doi:10.1111/j.1540-4560.2008.00589.x.
- Korobov, N. (2004). Inoculating against prejudice: A discursive approach to homophobia and sexism in adolescent male talk. *Psychology of Men & Masculinity*, 5, 178–189. doi:10.1037/1524-9220.5.2.178.
- Kosciw, J. G., Diaz, E. M., & Greytak, E. A. (2008). *The 2007 national school climate survey: The experiences of lesbian, gay, bisexual, and transgender youth in our nation's schools*. New York: GLSEN.
- La Greca, A. M., & Mackey, E. R. (2007). Adolescents' anxiety in dating situations: The potential role of friends and romantic partners. *Journal of Clinical Child and Adolescent Psychology*, 36, 522–533.
- Laursen, B., Furman, W., & Mooney, K. S. (2006). Predicting interpersonal competence and self-worth from adolescent relationships and relationship networks: Variable-centered and person-centered perspectives. *Merrill-Palmer Quarterly*, 52, 572–600. doi:10.1353/mpq.2006.0030.
- Murdock, T. B., & Bolch, M. B. (2005). Risk and protective factors for poor school adjustment in lesbian, gay, and bisexual (LGB) high school youth: Variable and person-centered analyses. *Psychology in the Schools*, 42, 159–172. doi:10.1002/pits.20054.
- Phoenix, A., Frosh, S., & Pattman, R. (2003). Producing contradictory masculine subject positions: Narratives of threat, homophobia, and bullying in 11–14 year old boys. *The Journal of Social Issues*, 59, 179–195. doi:10.1111/1540-4560.t01-1-00011.
- Poteat, V. P. (2007). Peer group socialization of homophobic attitudes and behavior during adolescence. *Child Development*, 78, 1830–1842. doi:10.1111/j.1467-8624.2007.01101.x.
- Poteat, V. P., Aragon, S. R., Espelage, D. L., & Koenig, B. W. (2009). Psychosocial concerns of sexual minority youth: Complexity and caution in group differences. *Journal of Consulting and Clinical Psychology*, 77, 196–201. doi:10.1037/a0014158.
- Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods*. Thousand Oaks, CA: Sage.
- Rubin, K. H., Bukowski, W. M., & Parker, J. G. (2006). Peer interactions, relationships, and groups. In W. Damon, R. M. Lerner, & N. Eisenberg (Eds.), *Handbook of child psychology, volume 3, social emotional and personality development* (6th ed., pp. 1003–1067). Hoboken, NJ: John Wiley & Sons.
- Russell, S. T., Kostroski, O., McGuire, J. K., Laub, C., & Manke, E. (2006). *LGBT issues in the curriculum promotes school safety. California Safe Schools Coalition Research Brief No. 4*. San Francisco, CA: California Safe Schools Coalition.
- Russell, S. T., Seif, H., & Truong, N. L. (2001). School outcomes of sexual minority youth in the United States: Evidence from a national study. *Journal of Adolescence*, 24, 111–127. doi:10.1006/jado.2000.0365.
- Savin-Williams, R. C. (2001). *Mom, dad, I'm gay: How families negotiate coming out*. Washington, DC: American Psychological Association.
- Williams, T., Connolly, J., Pepler, D., & Craig, W. (2005). Peer victimization, social support, and psychosocial adjustment of sexual minority adolescents. *Journal of Youth and Adolescence*, 34, 471–482. doi:10.1007/s10964-005-7264-x.

## Author Biographies

**V. Paul Poteat** is Assistant Professor at Boston College in the Department of Counseling, Developmental, and Educational Psychology. He received his PhD in Counseling Psychology at the

University of Illinois at Urbana-Champaign. His research examines the mechanisms by which peers influence the prejudiced attitudes and behaviors of individuals across developmental periods.

**Dorothy L. Espelage** is Professor of Child Development in the Department of Educational Psychology at the University of Illinois at Urbana-Champaign. She received her PhD in Counseling Psychology at Indiana University. Her research interests include bullying, youth

aggression, victimization, childhood sexual abuse, and eating disorders. She is also a Fellow of the American Psychological Association.

**Brian W. Koenig** is the president of K12 Associates, an organization that helps educators improve school climate. He has been a trainer, speaker, and consultant since 1983 and has worked with more than 100 school districts.