Homophobic Teasing, Psychological Outcomes, and Sexual Orientation Among High School Students: What Influence Do Parents and Schools Have?

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Abstract. Homophobic teasing is often long-term, systematic, and perpetrated by groups of students (Rivers, 2001); it places targets at risk for greater suicidal ideation, depression, and isolation (Elliot & Kilpatrick, 1994). This study fills a gap in the literature by examining buffering influences of positive parental relations and positive school climate on mental health outcomes for high school students who are questioning their sexual orientation. Participants were 13,921 high school students from a Midwestern U.S. public school district. Students completed a survey consisting of a wide range of questions related to their school experiences (bullying, homophobia, school climate), parental support, mood, and drug-alcohol use. Students were categorized into three groups: (a) youth who identified as heterosexual, (b) youth who questioned their sexual orientation, and (c) youth who identified as lesbian, gay, or bisexual (LGB). As hypothesized, sexual minority youth were more likely to report high levels of depressionsuicide feelings and alcohol-marijuana use; students who were questioning their sexual orientation reported more teasing, greater drug use, and more feelings of depression and suicide than either heterosexual or LGB students. Sexually questioning students who experienced homophobic teasing were also more likely than LGB students to use drugs-alcohol and rate their school climate as negative. Finally, positive school climate and parental support protected LGB and questioning students against depression and drug use.

To lead a productive, psychologically healthy life, all individuals must master particular developmental tasks during their adolescent years (Brown, 2002; Radkowsky & Siegel, 1997). According to Radkowsky and Siegel (1997), these tasks include "adjusting to the physical and emotional changes of pu-

berty, establishing effective social and working relationships with peers, achieving independence from primary caretakers, preparing for a vocation, and moving toward a sense of values and definable identity" (p. 191). The development of a secure identity, a positive sense of self, and the capability to merge with

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another in a truly intimate relationship had earlier been identified by McAnarney (1985) as the ultimate goal of adolescence. However, for youth who are gay or questioning their sexual orientation, achieving these tasks can be difficult because of the stigmatization of homosexuality. Oftentimes, these youth are attempting to develop their identities without the support of various social systems including family, peers, and schools (Morrison & L'Heureux, 2001; Radkowsky & Siegel, 1997). As Murdock and Bolch (2005) report, victimization by peers is one of the strongest predictors of school disengagement for gay, lesbian, bisexual, or questioning youth. Mufioz-Plaza, Quinn, and Rounds (2002) describe the classroom as "the most homophobic of all social institutions" (p. 53). Homophobic teasing is one form through which victimization frequently occurs for gay, lesbian, bisexual, or questioning youth in school settings, placing these individuals at risk for greater suicidal ideation, depression, and isolation (Elliot & Kilpatrick, 1994).

Parents and school administrators are often reluctant to ask direct questions about sexual orientation, and youth, not surprisingly, are often hesitant about identifying themselves as lesbian, gay, or bisexual (LGB). It is thought that the conservative nature of American schools and families has lead to the fact that much of the groundbreaking scholarship in this area is being conducted outside of the United States (Hillier & Rosenthal, 2001). U.S.-based studies have focused on prevalence rates and the direct relation between experiencing homophobia and psychological outcomes, with virtually none examining potential protective factors for youth who are questioning their sexual orientation in a heterosexist culture (Savin-Williams, 2001), even though sexually questioning youth have been identified as a group of young people with various needs for support (Hollander, 2000). Although many researchers have included sexually questioning individuals in their samples (Bahr, Brish, & Croteau, 2000; Blackburn, 2005; Savin-Williams & Ream, 2003; Tozer & Hayes, 2004), they fail to

examine the various outcomes (both psychological and educational) for these individuals separate from those who have identified as exclusively homosexual or exclusively heterosexual. As Hollander argues, "rigid social expectations about sexual identity development may further complicate the experiences of these [sexually questioning] youths in schools and communities" (p. 173). This study attempts to fill this gap by examining the buffering influence of positive parental relations and a positive school climate among high school students who are questioning their sexual orientation.

Background and Problem

Homophobia includes negative beliefs, attitudes, stereotypes, and behaviors toward gays and lesbians (Wright, Adams, & Bernat, 1999). Examples of the behavioral component of homophobia include teasing, threats, harassment, and assault (including sexual assault). Gay and lesbian people frequently experience incidents of homophobia. Pilkington and D'Augelli (1995) reported that 83% of gay and lesbian youth experienced some form of victimization, which included verbal insults, threats of violence, physical assault, and sexual assault. In a national postal survey of 4,216 LGB individuals from the United Kingdom, Mason and Palmer (1996) found that, of those respondents under 18 years of age, 40% of all violent attacks had taken place at school, with 50% of those being perpetrated by same- or similar-aged peers. Finally, in a 2002 study, D'Augelli found that 81% of LGB youth reported they had been verbally abused, 38% had been threatened with physical assault, 15% had been physically assaulted, 6% had been assaulted with a weapon, and 16% had been sexually assaulted.

These forms of victimization clearly parallel those behaviors associated with bullying as identified by bully researchers. Rivers (2001) reported that name-calling, assault, and teasing (82%, 60%, and 58%, respectively) were frequent forms of bullying experienced by gay and lesbian students, and that a majority of the name-calling was homophobic in

nature. Rumor spreading (59%) and social isolation (27%), which could be considered relational forms of aggression, were also reported.

There has been little effort to integrate the areas of bullying and homophobia, despite the shared interest of these two fields in studying prevalent forms of aggression. Given the reported high rates of victimization from both bullying and homophobia during adolescence (Eslea & Rees, 2001; Pilkington & D'Augelli, 1995), consideration of this association is warranted. Although several qualitative studies have been conducted examining the role of homophobia in aggressive behavior (Kimmel & Mahler, 2003; Phoenix, Frosh, & Pattman, 2003; Plummer, 2001; Rivers, 2001), there are few quantitative studies that have examined the relation between homophobic verbal content and bullying among high school students.

In a quantitative research study of middle school students (Poteat & Espelage, 2005), a significant association was found for both males and females between bullying and homophobic behavior, specifically use of homophobic verbal content. In that study, the Homophobic Content Agent Target scale was developed to assess the extent to which students (a) called other students homophobic epithets (i.e., agents) and (b) were called homophobic epithets by other students (i.e., targets). The scale distinguished between types of relationships (e.g., friends or enemies) and perceived sexual orientation. Strong associations were found between the use of homophobic content and several forms of aggression, including bullying, fighting, and relational aggression. Furthermore, greater use of homophobic content was also associated with lower empathic concern and perspective taking and more frequent delinquent behavior. Students who were targeted more frequently also reported higher levels of anxiety and depression, other forms of victimization, and a lower sense of school belonging.

Research indicates that youth can derive social support from a number of sources to have beneficial effects result. Investigators have often studied social support in the context of how it affects youth who have experienced adverse events, and have examined both

familial and school social support in this capacity. With respect to familial support, adolescents exposed to stress who perceived greater maternal social support reported fewer internalizing and externalizing behaviors (Grant et al., 2000). In addition, among African American males, maternal support buffered youth victimized in dating relationships against psychological distress (Holt & Espelage, 2005). Finally, among sexually abused adolescents, those individuals who described high levels of support from one or both parents had less negative psychological outcomes than those individuals without such high levels of support (Luster & Small, 1997). D'Augelli (2002, 2003) has found that for LGB youth, fewer mental health symptoms were associated for adolescents who had support from parents and peers in comparison to adolescents with less support.

Within the school setting, Murdock and Bolch (2005) found that students' school context was related to school adjustment; however, social support from family and close friends did not buffer the effects of the school environment on any of the adjustment variables as measured by grades, school belonging, and disruptive behavior. In an earlier study, Mufioz-Plaza et al. (2002) concluded that increased institutional support in schools can help to ensure that LGB students continue developing positive self-images that will carry them into adulthood. Finally, looking specifically within the context of suicide prevention, Morrison and L'Heureux (2001) encouraged schools to develop more affirming environments.

Despite strong evidence linking perceived social support to adjustment among youth, the role of perceived social support among youth who are questioning their sexual orientation is not yet clear. As noted within the previous discussion, past research has not looked at sexually questioning individuals separately from those who have identified as exclusively homosexual or exclusively heterosexual despite the fact that these individuals have been recognized with various needs for support. Thus, this current study seeks to understand the degree to which two types of critical social support networks—parental

communication–support and positive school climate—influence psychological outcomes for students who are questioning their sexuality and those who identify themselves as homosexual.

Hypotheses

Based on the limited amount of extant literature, the following hypotheses were examined in this study: (a) students who identify as heterosexual will report less homophobic teasing and general peer victimization than students who are questioning their sexual orientation and students who identify themselves as LGB; (b) students who identify as heterosexual will also report a greater positive school climate, less depressive-suicidal feelings, and less alcohol-marijuana use than the other student groups; (c) sexual orientation status will moderate the association between experiencing homophobic teasing and psychological outcomes, including perceptions of positive school climate, alcohol-marijuana use, and depressive-suicidal feelings. More specifically, the association between being called names about one's sexual orientation will be more strongly associated with less positive school climate, more alcohol-marijuana use, and greater depressive symptoms and suicidal ideation for those students who are questioning than for heterosexual or LGB students; and (d) finally, it is hypothesized that positive parental communication and support and positive school climate will moderate the association between experiencing homophobic teasing and psychological outcomes for students who are sexually questioning and LGB students.

Method

Participants

Participants were 13,921 high school students from 18 different high schools in a Midwestern county. Students completed the Dane County Youth Survey (Koenig, Espelage, & Biendseil, 2005). The sample consisted of 49.7% males and 50.3% females. With respect to race, 78.6% of the respondents

identified themselves as White, 5.4% identified as Biracial, 4.8% identified as Asian, 4.8% identified as Black, and 3.6% identified as Hispanic. The mean age of these students was 15.8 years. Socioeconomic levels varied across the 18 schools, with free or reduced-cost lunch eligibility ranging from 12% to 58%. All schools returned surveys for 90–95% of their student population. Passive parental consent was approved by the institutional review board.

Measures

To provide validation to the study measures described later, data from the 2000 Dane County Youth Survey (Koenig et al., 2005) were used to develop measures. The 2000 Dane County Youth Survey was conducted to provide extensive information on the opinions, behavior, attitudes, and needs of students. The surveys included specific information on the self-reported victimization, substance use, sexual behavior, and quality of relationships with parents, peers, and schools among students in the 9th-12th grades. Data from the 2000 Dane County Youth Survey were subjected to exploratory factor analyses (EFA), and then these scales were calculated for the 2005 data for the analyses in this article.

Measure of Parental Factors

Eleven items from the 2000 Dane County Youth Survey assessed parental factors. An exploratory factor analysis (EFA) with the maximum likelihood method of extraction and a Varimax rotation was used for these 11 items. Examination of the scree plot suggested that a majority of the variance was accounted for by the first four factors. Factor 1 pertained to parental values and had an eigenvalue of 3.76 accounting for 31% of the total variance. Factor 2 comprised parental communication, had an eigenvalue of 2.49, and accounted for 21% of the total variance. Factor 3 consisted of items describing parental support, had an eigenvalue of 1.42, and accounted for 12% of the total variance. And lastly, Factor 4 described parental knowledge, had an eigenvalue of 1.0, and accounted for 7% of the total

variance. Two of the four scales are of interest to this study and are described as follows:

Parental communication. This 4-item scale asks how often participants talked with at least one parent about sex, drugs, personal issues, and their future in the past 12 months ($\alpha = .78$). Items were: "I talked with my parents about the risk of drinking/doing drugs;" "I talked with my parents about risky sex;" "I talked with my parents about personal problems;" and "I talked with my parents about my future." Response options ranged from 0 (*Never*) through 4 (*Very often*).

Parental support. This 2-item scale asks participants how much they feel that their parents care about them and are there when they need them (r = .77). Items were: "My parents are there when I need them" and "My parents care about me." Response options ranged from 0 (*Never*) through 4 (*Very often*).

Measure of School Climate

An EFA conducted with the 2000 data indicated that two factors emerged in the data, one conceptualizing general school climate and the other tapping into perceptions of race and ethnicity discrimination. An EFA with the maximum likelihood method of extraction and a Varimax rotation was used for this 7-item scale.

Analysis of the scree plot indicated a two-factor model would fit the data. Factor 1 included 6 items and pertained to general school climate: "I enjoy going to school;" "The school rules are enforced fairly;" "Curriculum is relevant to my post graduate success;" "I am getting a good, high quality education;" "Teachers care about me and my school success." Factor 1 had an eigenvalue of 2.70, accounting for 38% of the total variance. Factor 2, pertaining to race and ethnicity, consisted of 2 items: "Kids at school treat me unfairly due to race/ethnicity" and "Teachers treat me unfairly due to race." Factor 2 had an eigenvalue of 1.46 and accounted for 21% of the total variance. Response options ranged from 0 (Strongly disagree) through 3 (Strongly agree). Items are scored so that higher scores

indicate greater positive school climate. The coefficient alphas for the general school climate subscale were .78 and .67 for the race–ethnicity subscale.

Dependent Measures

Alcohol and drug use. An EFA with the maximum likelihood method of extraction and a Varimax rotation was used for this 11item scale. Examination of the scree plot suggested that a majority of the variance was accounted for by the first three factors. Factor 1 pertained to hard drug use and assessed the frequency at which an adolescent uses substances such as Ecstasy, hallucinogens, over-the-counter and prescription medication, and cocaine. Factor 1 had an eigenvalue of 6.55, accounting for 55% of the total variance. Factor 2 consisted of 3 items pertaining to the adolescent's use of alcohol and marijuana use. Factor 2 had an eigenvalue of 1.89 and accounted for 16% of the total variance. Factor 3 consisted of 3 items pertaining to cigarette use, had an eigenvalue of 1.00, and accounted for 8% of the total variance.

The results presented above suggest that the substance use scale can be divided into three meaningful subscales. The first subscale assesses the frequency of use of hard drugs ($\alpha=.92$), the second assesses alcohol–marijuana use ($\alpha=.85$) and the third assesses the frequency of smoking behavior ($\alpha=.93$). The final scale included 10 items and assessed how often participants used various drugs and alcohol ($\alpha=.90$). Response options ranged from 0 (*Not at all*) through 5 (*Daily*). Only the alcohol and marijuana use scale was used in this article.

Depressive and suicidal feelings. Depressive feelings were assessed by 2 items ($\alpha = .64$). Items included, "During the past 30 days, have you felt depressed or very sad?" and "During the past 30 days, have you seriously thought about killing yourself?" Response options were (1) No, (2) Yes, but rarely, (3) Yes, some of the time, and (4) Yes, almost all of the time.

Sexual orientation, homophobic teasing, and general victimization. The following is a description of how sexual orientation, homophobic teasing, and general victimization were measured.

Sexual orientation. Like many studies of this type, the school district did not approve a direct question about sexual orientation, but instead approved the following question: "Do you ever feel confused about whether you are lesbian, gay, or bisexual?" Students were given the options of (1) never confused because I do not consider myself lesbian, gay, or bisexual; (2) rarely; (3) sometimes; (4) a lot; (5) always; or (6) never confused because I do consider myself to be lesbian, gay, or bisexual. Responses were split into three levels. Participants who indicated that they rarely or never were confused about their sexual orientation because they were straight were placed into one level and made up 86% (n = 11,924) and are referred to as heterosexual throughout remainder of this article. Participants who indicated that they sometimes, a lot, or always were confused over their sexual orientation were placed into a second category that made up 6.7% (n = 932) and referred to as sexually questioning students. Participants who indicated that they were never confused about their sexual orientation because they considered themselves to be lesbian, gay, or bisexual were placed into a third category that made up 7.7% (n = 1,065) and are referred to as LGB students. Percentages of males and females across the three groups did not differ.

Homophobic teasing. Homophobic teasing was assessed with 1 item: "In the past 12 months have you ever been teased, threatened or harassed about being gay, lesbian or bisexual?" Response options include 0 (Never), 1 (Rarely), 2 (Sometimes), 3 (Often), and 4 (Very Often).

General peer victimization. Victimization from peers was assessed using the University of Illinois Victimization Scale (Espelage & Holt, 2001). Students are asked how often the following things have happened to them in the past 30 days: "Other students called me

names;" "Other students made fun of me;" "Other students picked on me;" and "I got hit and pushed by other students." Response options include 1 (*Never*), 2 (*1 or 2 times*), 3 (*3 or 4 times*), 4 (*5 or 6 times*), and 5 (*7 or more times*). Higher scores indicate more self-reported victimization. A Cronbach alpha coefficient of .88 was found for the current study.

Procedures

Data were collected in collaboration with school administrators, teachers, and community representatives. Consent forms were mailed to parents of all registered students by the school district and parents were provided with phone numbers, addresses, and fax numbers to return the form if they did not wish their son/daughter to participate in the project. All schools returned surveys for 90%-95% of their student population. At the beginning of the data collection, students were informed that the researchers were interested in knowing how they think and feel about some things in their lives, like school, where they live, friends, and family. They were asked to give their written consent by signing their name on the survey coversheet. Students were informed that their name would be converted to a number as soon as the surveys were collected and that no teachers or parents would ever have access to their answers. Students were assured of their anonymity and confidentiality. Those students who elected not to participate or who had consent forms sent back were removed and went to another supervised classroom. The entire procedure lasted approximately 40 min.

Results

Differences in Experiences Across Sexual Orientation Status

To examine differences across the three sexual orientation status groups, a series of multivariate analyses of variance (MANOVAs) were calculated and significant overall multivariate effects were followed by analyses of variance (ANOVAs). Effect size data (partial $\eta^2)$ are presented to evaluate the strength of the effects.

Table 1	
Sexual Orientation Group Differences on Study	Measures

	Heterosexual $(N = 11,924)$		Questioning $(N = 932)$			GB 1065)	ANOVA		
	M	SD	M	SD	M	SD	F	η^2	
Homophobic teasing	0.20	0.66	0.84	1.33	0.57	1.13	375.94*	.05	
Peer victimization	0.45	0.75	0.95	1.18	0.56	0.90	166.54*	.03	
Depression-suicidal									
ideation	0.63	0.67	1.07	0.95	0.77	0.82	176.48*	.03	
Alcohol-marijuana	0.80	0.97	1.36	1.51	1.00	1.16	138.82*	.02	
School climate	1.79	0.49	1.63	0.65	1.72	0.56	49.13*	.01	
Racism	0.61	0.67	1.03	0.82	0.82	0.76	193.31*	.03	
Parent communication	1.89	0.95	1.79	1.13	1.84	1.07	5.63*	.00	
Parent support	3.31	0.65	2.83	0.93	3.14	0.80	231.73*	.03	

Note. LGB = gay, lesbian, bisexual; ANOVA = analysis of variance. * p < .01.

Because the sample size is large, the analyses are powered to detect relatively small effects. Partial eta-squared is the total variation in the dependent variable that is attributed to the independent variable (or factor) partialling out other factors (Haase, 1983). For example, imagine a partial η^2 of .02 for sexual orientation (independent variable) and depression (dependent variable); this means that sexual orientation by itself accounted for only 2% of the overall (effect + error) variance of depression. Significant ANOVAs were then followed with Tukey's post hoc comparisons.

Homophobic teasing and general peer victimization. It was hypothesized that students who identified themselves as heterosexual would differ from students who were questioning their sexual orientation and students who identified as LGB on their experiences of homophobic teasing and general peer victimization. Thus, one MANOVA was conducted with the single homophobic teasing item (i.e., "How often are you teased for being gay, lesbian, or bisexual?") and the general peer victimization scale as dependent variables and sexual orientation status as the independent variable. An overall MANOVA effect was found for sexual orientation status

(Wilks's $\lambda = .94$, p < .001, $\eta^2 = .03$), and univariate analyses indicated that the groups differed on the homophobic teasing and general victimization experiences (η^2 values = .05 and .03). Table 1 indicates that sexually questioning students reported more teasing and general victimization than heterosexual and LGB students. In addition, LGB students reported significantly more homophobic teasing than heterosexual students, but LGB students did not differ significantly from heterosexual students on general victimization experiences.

Depression-suicidal feelings and alcohol-marijuana use. It was then hypothesized that heterosexual students would report less depression and suicidal feelings and less alcohol and marijuana use than sexually quesstudents. or LGB tioning Thus, MANOVA was conducted with the depression-suicidal feelings scale and the alcoholmarijuana scale used as the dependent variables and the sexual orientation status variable as the independent variable. An overall MANOVA effect was found for sexual orientation status (Wilks's $\lambda = .96, p < .001, \eta^2 =$.02), and univariate analyses indicated that the groups differed on both the depression-suicidal feelings and the alcohol–marijuana use scales (η^2 values = .03 and .02). Table 1 indicates that sexually questioning students reported more depression–suicidal feelings and greater use of alcohol–marijuana than the other two groups. In addition, LGB students did not report significantly more depression–suicidal feelings than did heterosexual students, but did report significantly more use of alcohol–marijuana in comparison to the heterosexual students.

Positive school climate and perceptions of racism. It was then hypothesized that LGB and sexually questioning students might perceive the school climate as less positive than heterosexual students. It was also hypothesized that heterosexual students might not perceive as much racism when compared to the other groups given that students questioning or those that are LGB might be more sensitive to racism. Thus, one MANOVA was conducted with the positive school climate scale and the racism scale as dependent variables and sexual orientation as the independent variable. An overall MANOVA effect was found for sexual orientation status (Wilks's $\lambda = .97, p < .001, \eta^2 = .02$; Table 1), and univariate analyses indicated that the groups differed on both scales (η^2 values = .01 and .03); however, the effect size was negligible for positive school climate, and thus the hypothesis that the groups would differ on positive school climate was not supported. However, heterosexual students reported perceiving significantly less racism than both LGB and sexually questioning students.

Parental communication and support. Given that some sexually questioning and LGB students are struggling with their sexual orientation, many of them might communicate less with their parents and therefore might perceive their parents as less supportive in comparison to heterosexual students. Thus, one MANOVA was conducted with the two parent scales, communication and support, as dependent variables and sexual orientation as the independent variable. An overall MANOVA effect was found for sexual orien-

tation status (Wilks's $\lambda = .97$, p < .001, $\eta^2 = .02$; Table 1), and univariate analyses indicated that the groups differed on both scales (η^2 values = .001 and.03); however, the effect size was negligible for communication. That is, groups did not differ in perceptions of their communication with their parents. However, sexually questioning students reported significantly less support from their parents in comparison to both heterosexual and LGB students.

Sexual Orientation Moderates Effect of Homophobic Teasing and Outcomes

The next set of analyses involved examining whether sexual orientation status moderated the associations between homophobic teasing and the outcomes of interest, including positive school climate, depression-suicidal feelings, and alcohol-marijuana use. It was hypothesized that the association between experiencing homophobic teasing and outcomes would be stronger for sexually questioning and LGB students in comparison to heterosexual students. In addition, it was further hypothesized that experiencing homophobic teasing would be more strongly related to these outcomes for sexually questioning students when compared to LGB students. Three ANOVAs were calculated to test these hypotheses separately for each of the three outcomes. Responses to the homophobic teasing item were converted to a categorical variable, with three levels: (a) students who reported never being teased, (b) students who reported that they were teased rarely or sometimes, and (c) students who reported that they were teased often or very often. Thus, the two independent variables included the sexual orientation status (heterosexual, sexually questioning, LGB) and the categorical homophobic teasing item. Means and standard deviations, F statistics, and effect size data for the significant interactions are presented in Table 2. Of note, effects of the interactions appear to be small, as indicated by the small effect size statistics.

Depression-suicidal feelings. In the first ANOVA, the interaction between homophobic teasing and sexual orientation status

Table 2
Sexual Orientation as a Moderator of Gay Teasing and Outcomes

	Heterosexual (N = 11,924)		Questioning $(N = 932)$		LGB (<i>N</i> = 1065)		ANOVA	
	M	SD	M	SD	M	SD	Interaction F	η^2
Depression–suicidal ideation							19.97*	.01
Gay teasing—never	0.60	0.65	0.91	0.87	0.59	0.69		
Gay teasing—rarely or sometimes	0.78	0.75	1.30	.93	1.18	0.87		
Gay teasing—often or very often	0.92	0.92	1.45	1.12	1.42	1.08		
Alcohol-marijuana use							19.34*	.01
Gay teasing—never	0.78	0.95	1.11	1.33	0.90	1.09		
Gay teasing—rarely or sometimes	0.84	0.94	1.28	1.32	1.14	1.10		
Gay teasing—often or very often	1.26	1.47	2.58	1.93	1.60	1.60		
School climate							4.55*	.00
Gay teasing—never	1.80	0.48	1.69	0.61	1.77	0.53		
Gay teasing—rarely or sometimes	1.73	0.48	1.68	0.56	1.68	0.56		
Gay teasing—often or very often	1.54	0.63	1.24	0.78	1.37	0.67		

Note. LGB = lesbian, gay, bisexual; ANOVA = analysis of variance. p < .001.

was significant, indicating moderation. Results indicated that the effect of homophobic teasing on depression–suicidal feeling was greater for sexually questioning youth and LGB students than for heterosexual students.

Alcohol–marijuana use. A similar pattern emerged in the second ANOVA. The interaction between homophobic teasing and sexual orientation status was significant, indicating moderation. Again, the effect of homophobic teasing on alcohol–marijuana use was greater for sexually questioning youth and LGB students than for heterosexual students. However, most notable is the finding that sexually questioning students who experienced the most homophobic teasing also reported the highest level of alcohol–marijuana use.

Positive school climate. In the final ANOVA, again the interaction between homophobic teasing and sexual orientation status was significant, indicating moderation. The effect of homophobic teasing on perceptions of positive school climate varied across sexual

orientation status. Positive school climate was greatest for all students who did not experience homophobic teasing; however, sexually questioning students who experienced homophobic teasing at the greatest frequency reported their school climate as less positive in comparison to LGB and heterosexual students who experienced homophobic teasing at the same frequency.

Parental Support and School Climate Moderates Effect of Homophobic Teasing on Outcomes

The next set of ANOVAs tested the hypotheses that parental support would moderate the association between experiences of homophobic teasing and depression—suicidal feelings, and the association between experiences of homophobic teasing and alcohol—marijuana use. Analyses were conducted for the sexually questioning students and the LGB students only; heterosexual students were not included in these analyses. Two ANOVAs were calcu-

Table 3
Parental Support as a Moderator of Gay Teasing and Outcomes; Means and Standard Deviations

	Questioning $(N = 932)$ Parental Support			LGB $(N = 1065)$				
				Pare	ental Sur	ANOVA		
	Low M (SD)	Mod M (SD)	High M (SD)	Low M (SD)	Mod M (SD)	High M (SD)	Two-way Interaction F	η^2
Depression–suicidal ideation							1.54	.00
Gay teasing—never	1.06	0.86	0.70	0.72	0.58	0.51		
	(1.00)	(0.77)	(0.74)	(0.78)	(0.68)	(0.63)		
Gay teasing—rarely or sometimes	1.53	1.09	1.10	1.45	1.15	0.90		
	(0.94)	(0.87)	(0.85)	(0.96)	(0.83)	(0.67)		
Gay teasing—often or very often	1.59	1.20	1.40	1.64	1.17	1.31		
	(1.16)	(1.01)	(1.10)	(1.13)	(0.93)	(1.16)		
Alcohol-marijuana use							5.75*	.01
Gay teasing—never	1.47	0.86	0.91	1.33	0.92	0.56		
	(1.39)	(1.06)	(1.28)	(1.25)	(1.06)	(0.86)		
Gay teasing—rarely or sometimes	1.58	0.96	1.09	1.44	1.08	0.82		
	(1.39)	(1.06)	(1.47)	(1.10)	(1.13)	(0.95)		
Gay teasing—often or very often	3.11	1.44	2.53	1.89	0.93	1.70		
	(1.79)	(1.63)	(2.06)	(1.73)	(1.05)	(1.68)		

Note. Standard deviations in parentheses. LGB = lesbian, gay, bisexual; ANOVA = analysis of variance; Mod = moderate.

lated with depression-suicidal feelings as the dependent variable in the first ANOVA and alcohol-marijuana use as the dependent variable in the second ANOVA. Independent variables included the categorical homophobic teasing variable, a categorical parental support variable, and the sexual orientation status variable with two levels (questioning, LGB). A tertiary split of the parental support scale was used to create three levels of the variable, including low, moderate, and high support, such that 33.3% of participants were in each of the three groups. Of interest were the two-way interactions between homophobic teasing and parental support, and the three-way interactions between homophobic teasing experience, parental support, and sexual orientation status.

Means, standard deviations, effect size data, and F statistics are presented in Table

3. For depression–suicidal feelings, the twoway interaction between homophobic teasing and parental support was not significant, and the three-way interaction was also not significant—indicating that parental support did not moderate the association between depression-suicidal feelings and homophobic teasing. For alcohol-marijuana use, the two-way interaction between homophobic teasing and parental support was significant with a small effect. Students with the highest frequency of homophobic teasing experiences with low parental support report the highest levels of alcohol-marijuana use. Students who reported moderate to high levels of parental support and moderate levels of homophobic teasing reported significantly less depression-suicidal feelings and less alcohol-marijuana use.

^{*}p < .001.

Table 4
School Climate as a Moderator of Gay Teasing and Outcomes

	Questioning $(N = 932)$			LGB $(N = 1065)$				
	School Climate			School Climate			ANOVA	
	Low M (SD)	Mod M (SD)	High M (SD)	Low M (SD)	Mod M (SD)	High M (SD)	Two-way Interaction	η^2
Depression–suicidal ideation							7.38*	.02
Gay teasing—never	1.14	0.85	0.76	0.72	0.54	0.55		
	(0.96)	(0.78)	(0.83)	(0.80)	(0.62)	(0.67)		
Gay teasing—rarely or sometimes	1.59	1.07	1.30	1.54	1.01	0.90		
	(0.99)	(0.76)	(0.93)	(0.93)	(0.83)	(0.67)		
Gay teasing—often or very often	1.87	1.01	0.83	1.83	1.08	0.87		
, ,	(1.16)	(0.84)	(0.97)	(1.12)	(0.98)	(0.61)		
Alcohol-marijuana use	. ,	, ,	, ,		. ,	, ,	2.07	.00
Gay teasing—never	1.65	0.97	0.75	1.40	0.80	0.65		
, .	(1.49)	(1.11)	(1.19)	(1.26)	(0.99)	(0.93)		
Gay teasing—rarely or sometimes	1.68	1.15	0.98	1.46	1.17	0.83		
	(1.41)	(1.23)	(1.19)	(1.15)	(1.19)	(0.84)		
Gay teasing—often or very often	3.23	1.66	2.03	1.97	1.33	1.04		
	(1.84)	(1.51)	(2.04)	(1.79)	(1.42)	(1.06)		

Note. LGB = lesbian, gay, bisexual; ANOVA = analysis of variance; Mod = moderate.

p < .001.

With respect to the moderating effect of school climate, a slightly different pattern emerged than for parental support. See Table 4 for means, standard deviations, and statistics. That is, the two-way interaction between homophobic teasing experiences and positive school climate was significant for depressionsuicidal feelings with a small effect. Students with the highest frequency of homophobic teasing who perceived the lowest positive school climate reported the highest depression-suicidal feelings and alcohol-marijuana use; students who reported moderate to high levels of positive school climate reported significantly less depression-suicidal feelings. The three-way interaction was not significant, indicating that this moderation did not vary for questioning youth versus LGB youth.

For alcohol and marijuana use as an outcome, the two-way interaction between ho-

mophobic teasing and school climate was not significant, and the three-way interaction was also not significant. These findings indicated that school climate did not moderate the association between homophobic teasing.

Discussion

This study has highlighted the important role that the social environment plays in protecting our children and adolescents from negative psychological and behavioral outcomes. Although past research has strongly linked social support networks to psychological adjustment among LGB youth, virtually no evidence exists that looks at this influence on students who are questioning their sexual orientation. The current body of research has placed questioning students in the same category as those who have exclusively identified

themselves as homosexual even though evidence exists that these individuals may have different needs for support. The present study has highlighted the influence that two critical support networks—parental communication—support and positive school climate—have on certain psychological outcomes for students who are questioning their sexuality and those who identify themselves as homosexual.

Although all children or adolescents will experience negative consequences when parents and schools are unsupportive, this study confirms that sexual minority students are particularly susceptible to these outcomes and in need of support. These results expand on previous research that has shown that social and institutional support are essential components of maintaining well-being in sexual minority youth, as well as all students (D'Augelli, 2002, 2003; Hershberger & D'Augelli, 1995; Mufioz-Plaza et al., 2002). As hypothesized, this study also found that sexual minority youth were more likely to report high levels of depression-suicidal feelings and alcohol-marijuana use. These results support previous literature indicating that LGB youth report higher prevalence of depression (D'Augelli, 2002; D'Augelli, Pilkington, & Hershberger, 2002; Rivers, 2001), suicide (D'Augelli, 2002; Elliot & Kilpatrick, 1994), and drug use (Orenstein, 2001; Rosario, Hunter, & Gwadz, 1997). Although many sexual minority students indicate high rates of these negative outcomes, students receiving support from parents and schools reported significantly less depression-suicidal feelings or less alcohol-mariiuana use.

Although this study expands on previous work by demonstrating how social and institutional support can influence the experiences of sexual minority youth, this study also demonstrates another way in which the experiences of sexual minority youth may differ. Results indicated that experiences of youth differed based on sexual orientation status, with students who are questioning their sexual orientation reporting more teasing, greater drug use, and more feelings of depression and suicide than either heterosexual or LGB students. Homophobic teasing may also affect questioning students more than it affects LGB

students, as it was found that sexually questioning students that experienced homophobic teasing were more likely than LGB students to use drugs-alcohol. Questioning youth who experienced homophobic teasing were also more likely to rate their school climate as negative in comparison to both heterosexual and LGB students. One possible explanation for these findings is that LGB students are able to draw on the support of other gay and lesbian youth in the school, which may cause them to not use drugs and alcohol at as high of a rate as questioning youth and to perceive the school environment as being more supportive. Obviously, sexually questioning youth need to be studied more closely to fully understand their unique experiences.

The lack of previous research on sexually questioning youth makes this study particularly valuable in facilitating an understanding of the complex influence of sexual orientation (Williams, Connolly, Pepler, & Craig, 2005). However, it is important to emphasize that the study is not suggesting that students were teased about their sexuality, which in turn led to their questioning. Nor is it suggesting that students were questioning their sexuality first, which in turn facilitated the teasing that took place. It is not clear which scenario came first. An additional strength of this study is its broad sampling of all school children across many high schools. Much of the previous research on LGB students has been conducted on convenience samples of LGB children, who are often involved in community LGB organizations (Williams et al., 2005). By utilizing a normative sample, this study shows a more accurate view of all students, not just those who identify themselves publicly as LGB.

Although many hypotheses received support, we did not find evidence that LGB, questioning, and heterosexual students differed on their reports of positive school climate or parental communication. After consideration, these results make theoretical sense. Sexual orientation does not determine the level of support one receives from the environment, either in the school community or from parents. Many LGB and questioning

students come from loving, warm, and accepting families and communities. Likewise, many heterosexual students come from more unsupportive environments. Instead of sexual orientation determining the environment, the relationship is that the environment moderates the outcomes associated with sexual orientation. Students with either an LGB or questioning orientation will more likely be depressed, suicidal, and drug users if their families or communities are unsupportive of them.

Another surprising finding was that although LGB students reported significantly more homophobic teasing than heterosexual students, they did not differ in their reports of general victimization experience. They did, however, score differently on a homophobic bullying scale. This suggests that homophobic bullying is not assessed very well by current victimization measures. However, homophobic bullying is a prevalent form of abuse in schools that leads to numerous negative outcomes for the children involved. If schools and researchers wish to prevent victimization in schools, homophobic bullying and teasing must be assessed with a more direct measure than one assessing general victimization experience. This is supported by other research that has found that homophobia and bullying, although related, are two different but equally important constructs that must be assessed (Poteat & Espelage, 2005).

Perhaps the most crucial finding is that both the school and the home environment are able to protect LGB and questioning students. Not all students who identify themselves as LGB or questioning will suffer high rates of depression and drug use when families or schools are supportive of their sexual orientation. Besides highlighting the protective power of the environment, this study also suggests that bullying and violence prevention programs consider a new framework. Many of the youth victimized in schools happen to identify themselves as gay and questioning students; therefore, it is important that prevention efforts do not overlook assessing homophobic bullying and the level of school support of LGB and questioning students. Additionally, this research suggests that prevention programs may need to target youth who are

questioning their sexual orientation, as these children are more at risk of experiencing negative outcomes than either heterosexual or LGB students.

The findings of this research are particularly informative for school psychologists. As the mental health experts in schools who have expertise in the area of child development, they hold a critical role in educating teachers, administrators, and parents about research exploring sexual orientation in children and the effect of unsupportive educational and family climates. School psychologists can also play a direct role in improving the social and emotional climate in their own schools by influencing school policy and the implementation of outreach programs for students.

Limitations

Despite the methodological strengths of this study, a few limitations exist. Although statistically significant differences were found, effect sizes generally were small. However, the results of the study are important despite the small effects because they provide preliminary evidence that programs for LGB need to include building positive supports at school and with adults. It is plausible that the influences of these support systems might have long-lasting effects that are not adequately assessed in this crosssectional examination. Although the study was able to form a partial picture of LGB and questioning students, future research must focus on youth who are questioning their sexual orientation in order to form a complete picture of these individuals. In addition, the makeup of questioning adolescents in this study may be quite heterogeneous as participants in this category had the option to describe themselves as sometimes, a lot, or always worried about being LGB. Future studies should focus on explaining some of the within-group differences of this understudied population. Currently, it is difficult for researchers to receive approval on school-based research that asks children about their sexual orientation. For an accurate view of youth, however, school districts must be more open to allowing researchers to include questions about sexual orientation. Furthermore, although differences were

found across the three student groups, the survey design does not allow for causal conclusions to be drawn. It is clear that sexually questioning youth are different from their LGB and heterosexual peers, but this study can only speculate why these differences occur. Future research must address this by focusing on why differences occur in sexually questioning youth in comparison to LGB youth. Moreover, one must be cautious about generalizing the findings of any research to other populations. Although the large sample size across numerous schools suggests that our findings might be generalizable to other high schools, our study was conducted in a specific geographic region, which might have skewed our results. Another limitation was the use of some one-item scales that might have influenced the validity of the data, as there are no additional items against which to validate their responses. And finally, as with all self-report studies, it is plausible that some participants misunderstood the questioning in the study.

Despite these limitations, the study does provide theoretical support for future research examining various outcomes for students who are questioning their sexual orientation. Practitioners are encouraged to determine ways in which the school can play an active role in promoting more supportive environments for all students, but particularly questioning students. Finally, parents and schools are encouraged to collaborate in creating more collaborative social environments.

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