

Gay, Lesbian, and Bisexual Youths' Perceptions of Their High School Environments and Comfort in School

Schools are among the critically important social contexts for adolescent development (Entwisle, 1990). For some gay, lesbian, and bisexual adolescents, educational experiences are marked by stigmatization, prejudice, isolation, and discrimination (Sears, 1991; Smith & Smith, 1998; Telljohann & Price, 1993; Uribe & Harbeck, 1991).

During the past decade, concern about the well-being of gay, lesbian, and bisexual students has received considerable attention from policymakers and national associations of school professionals. After passage of legislation that prohibited discrimination in public schools on the basis of sexual orientation, Massachusetts developed the Safe Schools Program, a state-funded, statewide network of school-based services for gay, lesbian, and bisexual youths (Kuhr, 1997; Massachusetts Governor's Commission on Gay and Lesbian Youth, 1993).

Other states have acted, from developing guides for establishing school-based programs targeting sexual minority youths (Minnesota Department of Education, 1994), to creating civil rights teams to address bias-motivated harassment in the

This study investigated gay, lesbian, and bisexual adolescents' perceptions of their school environment, their experiences with victimization and professional support in school, and individual, peer, and family factors associated with their perceptions of and comfort in their school environments. Data were gathered from 136 self-identified gay, lesbian, and bisexual high school students in northern New England. Multivariate analyses indicated that youths' ratings of their school's positive characteristics, their perceptions of stigmatization, and their social integration with heterosexual peers as openly gay, lesbian, or bisexual people contributed to their feelings of comfort in school. The results suggest that school social workers can play key roles in providing direct services to gay, lesbian, and bisexual students and advocating for school environments that support and affirm these young people. The author suggests that interventions should aim at reducing stigmatization and creating supportive peer environments in schools for gay, lesbian, and bisexual students.

Key words: adolescents; gay, lesbian, and bisexual students; risk and protective factors; schools

schools (Maine Safe Schools Resource Collaborative, 1999).

The U.S. Department of Education (1999), with the National Association of Attorneys General, incorporated the topic of sexual orientation into a comprehensive guide for school districts on protecting students from

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harassment (U.S. Department of Education). The National Education Association (1991), the American Psychological Association (APA) and the National Association of School Psychologists (APA, 1993), and the American School Health Association (Telljohann & Price, 1993) have passed strong resolutions urging schools to proactively address the needs of sexual minority youths.

Despite these public policy initiatives, few empirical studies have examined the educational experiences of gay, lesbian, and bisexual youths still in high school. This study examined youths' assessments of their high school environments, the support they received from school personnel, and individual, family, and peer factors associated with their perceptions of and comfort in school.

Review of the Literature

Several studies with small convenience samples of gay, lesbian, and bisexual youths have consistently found high rates of school problems related to sexual orientation, ranging from 69 percent (Remafedi, 1987) to 72 percent (Telljohann & Price, 1993) among the youths sampled. The problems encountered included rude jokes and comments, discrimination and harassment, vandalism to their lockers, violence from peers, and threats from other students' parents.

Research suggests that verbal harassment is the most common form of victimization, reported by 70 percent of the gay and bisexual boys in one study (Remafedi, 1987) and perpetrated by both peers and teachers (Smith & Smith, 1998; Uribe & Harbeck, 1991). Although less common, physical abuse also occurs. Pilkington and D'Augelli (1995) found that 22 percent of the boys and 29 percent of the girls, in their sample of

194 youths, reported being physically hurt by another student because of their sexual orientation.

A population-based study of high school students found that gay, lesbian, and bisexual students were significantly more likely than their heterosexual peers to experience threats with a weapon, suffer property damage, and be involved in fighting at school (Garofalo, Wolf, Kessel, Palfrey, & DuRant, 1998). Fear of verbal harassment and physical abuse limits sexual minority youths' openness about their sexual orientation with both peers and teachers (Pilkington & D'Augelli, 1995).

Using data from the National Longitudinal Study of Adolescent Health, Russell, Seif, and Truong (2001) found that sexual minority youths reported poorer attitudes toward school (that is, feeling close to people, feeling part of the school, or feeling happy) and more school troubles (that is, with paying attention, completing homework, and getting along with others) than their heterosexual peers.

Despite the pervasiveness of students' victimization, research suggests that many school personnel are ill-equipped to handle the challenges that confront them when faced with students of diverse sexual orientations. Existing empirical studies point to a lack of skills, sensitivity, and knowledge on the part of educators and school guidance counselors (Butler & Byrne, 1992; Sears, 1991; Telljohann, Price, Poureslami, & Easton, 1995) and social workers (Berkman & Zinberg, 1997), which hinders their ability to effectively address the needs of sexual minority youths.

A national survey of school counselors found that only 25 percent felt very competent in assisting gay and lesbian students, 26 percent perceived significant prejudice from teachers

toward gay and lesbian students, and 41 percent believed that their schools were not doing enough to help gay and lesbian students (Price & Telljohann, 1991). In a single-state study of school counselors, the mean rating of counselors' perceptions of students, faculty, and administrators' attitudes toward homosexuality fell in the negative to intolerant range (Fontaine, 1998). A national study of school health education teachers found that fewer than 20 percent received in-service education related to homosexuality, and fewer than half believed that their administrators would support a school-based support group for sexual minority students (Telljohann et al., 1995). Sears (1991) found that the majority of prospective teachers and school guidance counselors that he surveyed reported negative attitudes toward homosexuality and homophobic feelings toward lesbians and gay men. Most disturbing was the finding that these professionals felt more intensely negative in situations that placed them in direct contact with gay and lesbian students, colleagues, and parents.

Gay, lesbian, and bisexual students reported that teachers and administrators often failed to intervene when they witnessed the harassment of students perceived to be gay or lesbian (Dennis & Harlow, 1986; Smith & Smith, 1998). Students perceived teachers' negative attitudes toward homosexuality and gay and lesbian students (Sears, 1991). Although 52 percent of the students in Telljohann and Price's (1993) sample of 120 said that homosexuality was discussed in their classes, 40 percent felt that the topic was handled negatively. Such a hostile environment may undermine the ability of gay, lesbian, and bisexual students to learn, resulting in truancy (Garofalo et al., 1998;

Remafedi, 1987), academic underachievement, and school dropout (Remafedi).

Existing research, although sparse, suggests that many gay, lesbian, and bisexual students hesitate to seek support from school professionals. Telljohann and Price (1993) found that only 25 percent of the students surveyed felt that they were able to discuss sexual orientation issues with their school counselors. On a more hopeful note, however, when disclosures occurred, the majority of the students reported positive experiences: 69 percent of the youths who spoke with a school counselor and 88 percent who disclosed to a teacher (Telljohann & Price).

This study of gay, lesbian, and bisexual adolescents expands earlier work in three ways. First, the present study examines gay, lesbian, and bisexual adolescents' perceptions of their school environment, including both positive and negative characteristics that matter to sexual minority youths, and their experiences with help seeking from professionals. Second, the study reports on the specific forms of victimization experienced by the youths in school. Third, the study examines individual, peer, and family factors associated with the youths' assessments of their school environment and their comfort in school as gay, lesbian, and bisexual adolescents. In contrast to many earlier studies with sexual minority adolescents, this study also includes a larger proportion of young women.

Method

Procedures

The present study was part of a larger investigation examining risk and protective factors related to gay, lesbian, and bisexual adolescents'

mental health and behavioral functioning. The measures discussed in this study were only a small part of the overall assessment. Self-identified gay, lesbian, and bisexual youths, ages 13 to 18, in northern New England, were recruited through community-based support groups, youths' friendship networks, parents, and adolescent service providers, and an advertised toll-free telephone line.

Data collection occurred between July and October 1998. I administered the self-report questionnaires directly. Written informed assent (under age 18) or consent (age 18) was obtained from all participants. I determined with each youth individually whether parental consent requirements should be waived in accordance with federal regulations, because of the risks posed to some adolescents should their parents or legal guardians discover their sexual orientation. In lieu of parental consent, an advocate was used (Fisher, Hoagwood, & Jensen, 1996).

Sixty-five youths indicated that their parents could be contacted, and written, informed consent was obtained. No parents refused permission for their child to participate. The questionnaires were usually administered in small groups and took approximately 1 to 1¹/₄ hours to complete. The Institutional Review Board at Washington University approved all procedures. Youths received a cash payment of \$20 as a behavioral incentive for participating.

Participants

The study sample consisted of 184 youths. Approximately 60 percent of the youths were recruited from youth groups; 40 percent were referred by friends, parents, or adolescent service providers. Of the study sample, 62 percent were girls and 94 percent

were white. The mean age was 16.6 ($SD = 1.1$). The majority of youths lived with one or more parents (72.3 percent) and was still in high school (74.0 percent). Seven percent of the youths had dropped out of school, 12 percent had received a GED or high school diploma, and 7 percent were in college.

Most of the 184 youths lived in rural areas or small towns (56 percent); 44 percent lived in urban or suburban areas. Twenty-five percent of the youths identified as lesbians, 26 percent as gay males, 36 percent as bisexual females, 12 percent as bisexual males, and 1.5 percent as unsure. Only the 136 youths who reported being in high school at the time of their participation in the study were used for the analyses in this report.

Measures

Measures of the study variables, unless otherwise indicated, were developed based on two focus groups conducted with sexual minority adolescents in St. Louis. The entire instrument was pilot tested with sexual minority adolescents before the study's inception. Although all indices displayed modest to good internal consistency ($\alpha \geq .70$), internal consistency does not guarantee homogeneity (Pedhazur & Schmelkin, 1991). Therefore, the unidimensionality or multidimensionality of the indices was determined through exploratory factor analyses (Spector, 1992), using a principal axis method of factor extraction and an orthogonal rotation. Items with factors loadings greater than .40 were retained (Pedhazur & Schmelkin).

Individual Factors

Feelings about Sexual Orientation. Youths' feelings about their sexual orientation were measured

with 15 items on a six-point response scale, ranging from 0 = never to 5 = all of the time. Seven items were similar to items in Nungesser's (1983) Homosexual Attitudes Inventory; I developed eight items with the assistance of the focus groups. A higher score indicated more positive feelings. The Cronbach's alpha coefficient was .87.

Stressful Events Related to Sexual Orientation. A 20-item scale, modeled after the Adolescent Life Events Checklist (Johnson & McCutcheon, 1980), was used to measure stressful events related to sexual orientation that occurred in the youths' lives during the preceding six months. The measure assessed the effect that each endorsed event had on their lives, using a five-point response scale, ranging from 5 = very good effect to 1 = very bad effect. Seven items used by Rotheram-Borus and colleagues (Rosario, Rotheram-Borus, & Reid, 1996; Rotheram-Borus, Hunter, & Rosario, 1994) were slightly modified to simplify the language (for example, "Someone ridiculed your sexual identity" was changed to "Being made fun of because of your sexuality"). Items included coming out to self, parents, siblings, and peers; hiding one's sexual orientation from parents and peers; and people asking about one's sexual orientation. Each youth's score indicates the number of events appraised as having a "bad effect" or "very bad effect" on them.

Perceived Stigmatization. Perceived stigmatization was measured with 16 items on a four-point response scale, ranging from 1 = strongly disagree to 4 = strongly agree, that assessed youths' perceptions of the degree to which gay, lesbian, and bisexual people are negatively evaluated. Examples of items are as follows:

- Most straight people want to avoid gay, lesbian, and bisexual people.
- Most people in my age group would be friends with a gay, lesbian, or bisexual person.
- Most people believe that gay, lesbian, and bisexual people are mentally or emotionally sick.

Positive items were reverse scored so that a higher score indicates greater stigmatization. The Cronbach's alpha coefficient was .85.

Peer and Family Factors

Social Integration. Social integration with heterosexual peers was measured with four questions that asked youths about the number of close heterosexual friends (and those not so close) who were aware of the youths' sexual orientation and the number of close heterosexual friends (and those not so close) with whom the youths could be themselves. These items used a six-point response scale, ranging from 0 = none to 5 = over 20. The items were summed, constituting a composite score of social integration. The internal consistency reliability coefficient was .81.

Supportiveness of Heterosexual Friends. Supportiveness of heterosexual friends was assessed with one item that asked, "Overall, when you think about your heterosexual friends who know that you are g/l/b, how supportive are they towards you about it?" Response choices ranged from 5 = extremely supportive to 1 = not supportive at all.

Openness with Family about Sexual Orientation. Openness was assessed with one item that asked youths to rate how open they were with their family about their sexual orientation, ranging from 0 = not open at all to 6 = totally open.

School Environment

Perceptions of School Environment. The youths' perceptions of their school environment were assessed with 15 items (10 positive and 5 negative) that asked about the extent to which particular qualities of special concern to sexual minority adolescents characterized their school environment. These items were developed on the basis of the focus groups and modeled after indices measuring perceptions of neighborhood and school quality used in a study of adolescent mental health problems and service utilization (Hadley-Ives, Stiffman, Elze, Johnson, & Dore, 2000; Stiffman, Hadley-Ives, Elze, Johnson, & Dore, 1999). Youths identified characteristics of their school environments that they perceived to be supportive of gay, lesbian, and bisexual adolescents, as well as characteristics deemed unsupportive. Response choices were 0 = none, 1 = some, and 2 = a lot.

Before conducting the factor analysis, the negative items were reverse scored so that a higher score indicated a more positive environment for all items. The results indicated a two-factor solution (that is, positive and negative school environment). Negative items were returned to their original scores so that a higher score indicated a more negative environment. The internal consistency reliability coefficients were .84 for positive school characteristics and .70 for negative school characteristics.

Global Assessment of School Environment. Youths' global assessment of their school as a place for gay, lesbian, and bisexual people was measured with one item that asked, "Overall, how positive or negative is your school towards gay, lesbian and bisexual people." Response choices

ranged from 1 = very negative to 5 = very positive.

Comfort in School as a Gay, Lesbian, or Bisexual Person. Youths' comfort in school was measured with one item on a five-point response scale, ranging from 1 = extremely uncomfortable to 5 = extremely comfortable, that asked how comfortable they felt as a gay, lesbian, or bisexual person in their school.

Professional Support. Professional support from school personnel was assessed with five items on a five-point response scale that asked youths to rate the helpfulness of school-based professionals (that is, school counselor, teacher, coach, school nurse, school principal) with whom they spoke in the last year about issues related to their sexuality. Response choices were 1 = not helpful at all, 2 = a little helpful, 3 = somewhat helpful, and 4 = very helpful. The youths' responses were also summed and averaged for a score indicating the overall level of professional support they experienced in school. If youths did not seek support from a professional, they were given a score of "0" on overall support experienced.

Victimization. Victimization was measured with nine items that asked youths the frequency with which they experienced nine forms of violence in their schools during the past six months because of their sexual orientation, ranging from 0 = never to 3 = 3 or more times. Based on Dean, Wu, and Martin's (1992) analysis, and used in previous studies (for example, Hershberger & D'Augelli, 1995), the nine forms of violence were merged into three escalating levels of violence: Level I (verbal insults and threats of violence), level II (objects thrown, personal property damaged, being chased or followed, and being spit on), and level III (being punched,

kicked, hit, or beaten; sexually assaulted; and assaulted with a weapon). Each youth received a total victimization score that was an average of all nine forms of victimization. For descriptive purposes, dichotomous variables were created to indicate whether youths experienced level I (verbal insults or threats) and level II/III (more severe) victimization (coded 1 = yes, 0 = no).

Concerns about School. The Youth Self-Report (Achenbach, 1991), the self-rating version of the Child Behavior Checklist for adolescents ages 11 to 18, included an open-ended question that asked youths to describe any school-related concerns or problems.

Analysis Strategy

Frequency counts were used to describe the youths' reports of in-school victimization, their schools' characteristics, and their help-seeking from professionals. Categorical variables were dummy coded for correlational analyses. Simple correlations were performed to examine the relationships between individual, peer, and family factors and youths' perceptions of and experiences in their school environment. Ordinary least squares regression analyses were conducted to determine the factors most significantly associated with youths' comfort in school.

Because of positively skewed data, logarithmic [$\log^{10}(X_i+1)$] (for substantial skewness) and square root (for moderate skewness) transformations were performed on the victimization and stressful events scales, respectively, before the regression analyses. These transformations reduced the skewness of the distributions and improved the normality, linearity, and homoscedasticity of the residuals (Tabachnick & Fidell, 1996).

Results

In-School Victimization

A majority of the youths (60 percent) experienced victimization in their school based on their sexual orientation, most commonly verbal insults or threats of violence, but 32 percent reported more serious victimization (Table 1). When victimization occurred, most forms were experienced multiple times.

Perceptions of School Environment

The majority of the youths reported the presence of supportive professionals and peers in their schools and the availability of information for gay, lesbian, and bisexual students. Ninety-four percent of the youths perceived caring teachers; 86 percent, teachers who stopped verbal abuse; 83 percent, helpful counselors; and 71 percent, administrators who stop harassment (Table 2). However, over half stated that none of their courses (56 percent) or guest speakers (51 percent) addressed gay, lesbian, or bisexual issues. Over half (58 percent) said they could gain access to relevant posters or brochures.

Despite the presence of helpful professionals, the vast majority of students (84 percent) perceived gay, lesbian, and bisexual students being verbally abused; 50 percent saw antigay graffiti in their schools; nearly half (49 percent) believed that gay, lesbian, and bisexual students were harassed in the locker rooms; and 41 percent stated that teachers told homophobic jokes.

On the Youth Self Report, 25 percent of the youths expressed specific concerns about their school environment, noting their experiences with homophobic harassment, the unresponsiveness of administrators to their complaints, and teachers making

Table 1

Percentages of Gay, Lesbian, and Bisexual Youths Reporting Forms of In-School Victimization in the Past Six Months (N = 136)

In-School Victimization	Never	1 Time	2 Times	3 or More Times
Level I				
Verbal insults	40.4	17.6	9.6	32.4
Threats of violence	72.8	9.6	5.9	11.8
Level II				
Objects thrown	82.4	7.4	2.2	8.1
Property damaged	80.1	8.8	5.1	5.9
Chased	89.7	5.1	0.7	4.4
Spit on	93.4	2.2	1.5	2.9
Level III				
Punched or hit	91.2	3.7	2.2	2.9
Sexually assaulted	94.1	3.7	1.5	0.7
Hurt by a weapon	98.5	0.7	0.7	0.0
Severity of victimization				
Level I victimization	60.3	—	—	—
Level II/III victimization	31.6	—	—	—

— = not applicable.

antigay comments; fears about discrimination from teachers; and worries about friends or teammates finding out about their sexual orientation. One youth wrote, "I get harassed and threatened daily," and another said that he worried about "being beaten to a bloody pulp." Another youth noted that he changed schools because of "extreme harassment."

Professional Support

Over half (57 percent) of the students sought help from a school professional about issues related to sexual orientation: 42 percent from a school counselor or social worker, 37 percent from a teacher, 14 percent from a school nurse, and 11 percent from a coach. The majority of youths rated the professional as helpful; approximately 16 percent of those seeking help from counselors, social workers, and teachers found them very un-

helpful. Despite the pervasiveness of in-school victimization, only 12 percent of the students sought help from principals, 29 percent of whom found the administrator unhelpful.

Factors Associated with Youths' Perceptions of and Comfort in School

Neither gender nor sexual orientation was significantly associated with youths' perceptions of and comfort in school (Table 3). Youths who rated their schools more highly, both on global assessment and on positive characteristics, also reported more positive feelings about their sexual orientation, higher self-esteem, less stigmatization, more social integration with heterosexual peers, and greater openness with their families about their sexual orientation. Less victimization was associated with a more positive global assessment, but not with youths' ratings of positive

Table 2

Percentages of Gay, Lesbian, and Bisexual Youths Reporting Positive and Negative Characteristics of Their School Environment (N = 136)

Perceived Characteristics of School Environment	None %	Some %	A Lot %
Positive characteristics of school environment			
Teachers who care about gay/lesbian/bisexual students	5.2	62.2	32.6
Gay and lesbian posters or brochures	42.2	48.1	9.6
Teachers who stop verbal abuse of gay/lesbian/bisexual students	14.3	58.6	27.1
Counselors who help gay/lesbian/bisexual students	16.7	50.8	32.6
Supportive graffiti	77.4	21.1	1.5
Administrators who stop harassment of gay/lesbian/bisexual students	29.0	47.3	23.7
Guest speakers	50.7	38.2	11.0
Supportive straight students	4.4	60.3	35.3
Courses that address gay/lesbian/bisexual issues	55.6	37.6	6.8
School dances where gay/lesbian/bisexual students can dance	60.6	28.3	11.0
Negative characteristics of school environment			
Verbal abuse of gay/lesbian/bisexual students	16.3	48.9	34.8
Vandalism of gay/lesbian/bisexual students' lockers	70.0	26.2	3.8
Teachers who tell gay jokes	58.8	36.6	4.6
Antigay graffiti	49.6	42.1	8.3
Harassment of gay/lesbian/bisexual students in the locker room	50.8	41.4	7.8

school characteristics. Students who rated their schools higher on negative characteristics reported more gay-related stressful events and greater stigmatization and victimization. Feeling more comfortable in school as a gay, lesbian, or bisexual person was significantly associated with all individual, peer, family, and school variables, with the exception of professional support.

Youths' ratings of their schools' characteristics also were included in the model because of the likelihood that they would predict youths' comfort in school. The results indicate that positive school characteristics, perceived stigmatization, and social integration with heterosexual peers uniquely contributed to youths' feel-

ings of comfort in school as gay, lesbian and bisexual students, explaining 42 percent of the variance (Table 4).

Discussion

This study provides empirical evidence for an association between gay, lesbian, and bisexual adolescents' comfort within their schools and particular qualities of their school environments. The findings also highlight the importance of gay, lesbian, and bisexual adolescents' integration into their heterosexual peer networks to their feelings of well-being in school. These results point to specific steps that schools can take to ensure the welfare of sexual minority students and suggest that interventions should

Table 3

Pearson Product-Moment Correlations between Individual, Peer, and Family Factors and Gay, Lesbian, and Bisexual Youths' Perceptions of and Comfort in Their School Environments (N = 136)

Variable	Global Assessment of School Environment	Perceived Positive Characteristics of School Environment	Perceived Negative Characteristics of School Environment	Comfort in School as a Gay/Lesbian/Bisexual Person
Individual factors				
Gender ^a	.05	.05	-.06	.05
Sexual orientation ^b	.02	-.01	.15	-.07
Feelings about sexual orientation	.22**	.26**	-.07	.37†
Negative gay-related stressful events	-.19	-.14	.23**	-.34†
Perceived stigmatization	-.59†	-.35†	.24**	-.58†
Peer and family factors				
Social integration with heterosexual peers	.37†	.17*	-.07	.40†
Supportiveness of heterosexual friends	.16	.16	-.18*	.31**
Openness with family	.18*	.22**	-.02	.25**
Perceptions of and experiences in the school environment				
Professional support	.11	.21**	.03	.13
Victimization in school	-.22**	-.08	.40***	-.23**

^aFemales coded 1 and males coded 0.

^bGay/lesbian coded 1 and bisexual coded 0.

* $p < .05$. ** $p < .01$. *** $p < .001$. † $p < .0001$.

Table 4

Multiple Regression Models Predicting Youths' Comfort in School as Gay, Lesbian, and Bisexual Students

Source	<i>df</i>	SS	<i>F</i>	β	<i>R</i> ²	Adjusted <i>R</i> ²
Model	9	59.92	25.68		.46	.42
Error	119	69.61				
Total	128	129.53				
Variables						
Positive school characteristics				.23**		
Negative school characteristics				-.14		
Feelings about sexual orientation				.02		
Gay-related stressful events				-.10		
Perceived stigmatization				-.32***		
Social integration with heterosexual peers				.17*		
Supportiveness of heterosexual friends				.10		
Openness with family				.01		
Victimization in school				-.00		

* $p < .05$. ** $p < .01$. *** $p < .001$.

aim to reduce stigmatization and create supportive peer environments within schools for gay, lesbian, and bisexual students.

Consistent with earlier studies (Pilkington & D'Augelli, 1995), this study confirms the pervasiveness of school-based victimization, primarily verbal harassment and abuse, in the lives of sexual minority students. On a positive note, the majority of the youths in this study perceived the presence of helpful professionals in their schools (that is, professionals to whom they could go for problems related to their sexual orientation). However, the availability of such professional support did not uniquely contribute to the youths' comfort. The youths' integration with peers and their perceptions of their school environment, such as observing teachers and administrators who act on their behalf, exert a greater effect on their comfort in school as gay, lesbian, and bisexual students.

For the youths in this study, specific characteristics of their schools made a difference to their comfort levels. School social workers can play key roles in providing school administrators, teachers, and support staff with training on effective methods for interrupting homophobic harassment in ways that educate students and create lasting change. School social workers can guide administrators, school librarians, guidance counselors, and other staff in the acquisition of educational resources for students, teachers, and staff that promote acceptance of students' diversity. Such materials can include fiction that reflects the experience of gay and lesbian youths and posters and brochures that offer positive images of gay, lesbian, and bisexual adolescents.

School guidance and health offices and school resource fairs devoted to contemporary social issues and prevention programs (for example, teenage suicide, alcohol and other drug

abuse) can distribute resource information designed specifically for sexual minority adolescents. School social workers can also act as advisors to school-based gay-straight alliances, youth-led organizations that bring together students of all sexual orientations for socialization, education and advocacy (Szalacha, 2000). Finally, school social workers can advocate with other members of the community for nondiscrimination policies that protect the educational rights of gay and lesbian students (Buckel, 1998).

The study has several limitations. The methodological challenges in conducting research with sexual minority populations are well-documented (Sell & Petruccio, 1996). Like most research with this population, this study relied on a small convenience sample of predominantly white youths willing to disclose their identities. The findings are of unknown generalizability to youths of color, self-identified youths who chose not to participate, and youths with same-sex attractions but not yet self-identified. The study was also limited to adolescents residing in northern New England who may differ in important ways (for example, visibility, access to resources, or influence of public policy) from adolescents in other geographical areas.

Additional research is needed to develop and test the psychometric properties of the measures used in this study (for example, positive and negative school characteristics). Although the measures were developed, pilot tested, and refined with gay, lesbian, and bisexual adolescents in an attempt to improve content validity, content important to the domain of the constructs may have been omitted. Although the measures displayed good internal consistency and per-

formed as theoretically expected, test-retest reliability data and further evidence of their construct validity are needed. Furthermore, like so many measures in sociobehavioral research, the indices of positive and negative school characteristics comprised summated ordinal items. Although they signify degrees of difference, they are not actually of equal interval units (Pedhazur & Schmelkin, 1991). Future research should be devoted to developing these indices, as few instruments exist to measure youths' perceptions of their school environments (Hadley-Ives et al., 2000).

Despite these limitations, this study provides information on gay, lesbian, and bisexual students' perceptions of their school environments that can guide school social workers in developing needed interventions on behalf of these young people. Multiple researchers and practitioners have suggested ways to create supportive school environments for gay, lesbian, and bisexual adolescents (see Besner & Spungin, 1995; Black & Underwood, 1998; Dombrowski, Wodarski, Smokowski, & Bricout, 1995/1996; Treadway & Yoakam, 1992; van Wormer, Wells, & Boes, 2000). However, school social work texts have yet to incorporate practice knowledge to guide school social workers in serving gay, lesbian, and bisexual students and their families and advocate on behalf of students with school administrators, school boards, and other school personnel (Constable, McDonald, & Flynn, 1999). Social work's professional code of ethics mandates that we challenge social injustice (NASW, 2000). The harassment and abuse of gay, lesbian, and bisexual students within educational settings constitute visible forms of social injustice that command social work intervention. ■

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