

**Gay, Lesbian, Bisexual, and Transgender Students and their
Engagement in Educationally Purposeful Activities in College**

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Introduction/Literature Review

A wealth of literature in higher education can be found about the benefits of a safe and encouraging campus environment. Indeed, some of the earliest studies specific to the growth of college students point out the need to provide appropriate types of support for college students to grow both intellectually and personally (Sanford, 1962, 1966). The importance of a welcoming and safe environment for women and ethnic minority students has also been documented by a number of scholars (Barna, Haws, & Knefelkamp, 1978; Hall & Sandler, 1984; Hurtado & Carter, 1997), and in recent years, research has demonstrated that the campus environment facilitates student engagement in a number of educationally purposeful activities (Carini, Kuh, & Klein, 2006; Kuh, 2001a, 2001b, 2003; Zhao, Kuh, & Carini, 2004). The engagement patterns of specific types of students have also been assessed, including those of African Americans and Latinos (Nelson Laird, et al., 2004), women (Umbach, Kinzie, Thomas, Palmer, & Kuh, 2003), and commuting students (Kuh, Gonyea, & Palmer, 2001).

However, less research has been done on the environment for gay, lesbian, bisexual, and transgender (GLBT) students (Chism & Lopez, 1993; Rankin, 2003; Waldo, 1998). Indeed, the vast majority of research on the environment for GLBT college students has been done at single institutions and has focused primarily on safety and harassment issues of those students (University of California Santa Cruz, 2003; University of Colorado Bolder, 2001; University of Georgia, 2002), often in response to campus incidents.

These climate surveys have given us insights into the lived experiences of GLBT students on college campuses. In a study of over 1,600 faculty, students, and administrators, Rankin (2003) found that over one-third of primarily gay undergraduates experienced harassment based on their sexual orientation, one-fifth feared for their safety, and over half hid their sexual orientation at some point to avoid harassment or discrimination. Although troubling, this was an improvement over a 1994 study by

Sherrill and Hardesty which found that just under half of GLBT students experienced harassment on campus. While the higher education community has learned much about the discrimination of GLBT college students on individual campuses, more work is needed on a broader, national picture.

Additionally although there has been a long history of scholarship devoted to understanding the coming out process for lesbian and gay individuals (Cass, 1979, 1983; D'Augelli, 1994), not until recently has any work been done connecting a student's development of a gay identity to other academic outcomes (Abes & Jones, 2004).

This study begins a dialog on many of these issues. It provides descriptive information on the engagement experiences of GLBT college students attending multiple institutions, and compares them to heterosexual students. It also compares the experiences of GLBT students who describe themselves as primarily closeted, or not open on campus about their sexuality, to students who identify themselves as mostly out, or very open about their sexual orientation on campus. Also, this study will identify if or how GLBT students differ from their heterosexual peers in terms of their perceptions of their campus environments.

Therefore, three research questions guided this study:

1. What are the demographic and enrollment characteristics of GLBT students attending four year colleges?
2. What is the relationship of GLBT status to student engagement as represented by the NSSE benchmarks of effective educational practice?
3. Do GLBT students who are more open to others about their sexual orientation differ from those who are less open?

Data Sources

Data for this study come from an experimental subset of the 2006 administration of the National Survey of Student Engagement (NSSE). NSSE (pronounced "nessie") measures student behaviors and

institutional factors that matter to student learning and success in college, and is a valid and reliable source of information about the quality of undergraduate education (Kuh, 2001b). NSSE results are organized into five benchmarks, which were used as the dependent variables for the second research question in this study. Benchmark scale descriptions and alpha coefficients are as follows:

1. Academic Challenge: A student's rigorous learning experience is measured by nine items that represent challenging intellectual and creative work. Items include the amount of reading students are asked to do; the number of small (1 - 4 pages), mid-sized (5 – 19 pages), and large (20+ pages) papers they are asked to write; the number of hours students spend preparing for class each week; the amount the student's coursework emphasizes higher order mental activities, namely *analysis*, *synthesis*, *evaluation*, and *application* to practical situations; and the student's rating of the campus in terms of how much emphasis is placed on scholarly and intellectual activities (alpha=.74).
2. Active and Collaborative Learning: Students become active participants in their own learning both by taking initiative on their own and by working collaboratively with peers to solve academic problems. This benchmark is composed of seven items that include participating in class discussions, making presentations, doing group work in and out of the classroom, tutoring other students, participating in service learning, and discussing course material with others outside of class (alpha=.65).
3. Student-Faculty Interaction: Students benefit in several ways when they interact with faculty members inside and outside the classroom. Six items represent this benchmark – including discussing grades and assignments, talking about career plans, receiving prompt feedback, working on activities outside of coursework, discussing course material outside of class, and doing research – all with faculty members or instructors (alpha=.74).
4. Enriching Educational Experiences: This benchmark is a collection basket of items that ask students about special program participations and other high-impact activities such as study

abroad, learning communities, foreign language coursework, cocurricular activities, internships, community service, independent study, and culminating senior experiences. Also included are items that assess the frequency of the student's diversity experiences and use of technology in the student's coursework ($\alpha=.65$).

5. Supportive Campus Environment: NSSE contains six items that ask students to rate their campus environments in terms of the academic, non-academic, and social support they receive, and also the quality of their relationships with other students, faculty, and administrative offices ($\alpha=.77$).

Forty-seven institutions, randomly selected from among the 523 schools that registered for NSSE 2006, were invited to participate in the study by agreeing to allow their students to receive a set of additional questions focused on GLBT-related campus climate issues and student engagement. The invited schools were given time to view the questions in advance, and 38 agreed to participate (including five of seven religiously affiliated institutions). The additional questions were appended to the online version of NSSE. Three of these items provided an opportunity for students to self-report their sexual orientation, how open they are about their sexual orientation, and whether or not they are transgender. These questions and response options read as follows:

1. GLBT Status: Which of the following best describes your sexuality or sexual orientation? (Response options: 'Gay,' 'Lesbian,' 'Bisexual,' 'straight/Heterosexual,' or 'Questioning/Unsure')
2. Transgender Status: Are you transgender? (Response options: 'Yes' or 'No').
3. Sexual Orientation Openness: How open are you about the sexual orientation you identified above with people at this institution? (Response options: 'Not at all open,' 'Open with a few of the people I know,' 'Open with less than half of the people I know,' 'Open with more than half of the people I know,' 'Open with most of the people I know,' or 'Totally open')

Students were coded as GLBT if they responded that they were gay, lesbian, bisexual, or questioning/unsure, or if they responded that they were transgender. GLBT students were further identified as “more out” or “less out” depending on their responses to the openness question. Students responding “not at all open” through “open with less than half” were coded as ‘less out’ and those responding “open with more than half” through “totally open” were coded as ‘more out.’ Thus, the operative GLBT variable used in to answer the second and third research questions in this study contained three possible values: ‘straight’, GLBT-more out, and GLBT-less out.

Seven of the 38 institutions were removed from the data set because each had fewer than five respondents who identified as GLBT. Thus, complete data were obtained from 14,629 randomly sampled first year (51%) and senior students (49%) who completed the online NSSE survey in 2006 when they were attending 31 different four-year colleges and universities in the United States. Two-thirds of respondents were women and 93% were full-time students. Respondents were studying in all types of academic disciplines, with majors in social sciences (16%), arts and humanities (16%), business (13%), professional programs (12%), and education (9%) leading in number.

Students who identified as GLBT numbered 839, or about 6% of all respondents. Among the 31 institutions, this figure ranged from 2% to 39% (median=6%), while the number of GLBT students per institutional sample ranged from 5 to 81 (median=22). GLBT students were evenly divided between the first-year (49%) and senior (51%) classes. Forty-nine respondents (0.3%), or roughly 1 in 300 in the sample, identified as transgender. Forty-nine percent of the GLBT students were classified as ‘more out,’ and 51% were ‘less out’.

Among the 31 participating institutions, six were doctoral level institutions, 17 were master’s level schools, seven were baccalaureate colleges, and one was a fine arts institution. In addition, 15 were private institutions and 16 were public. In terms of selectivity, the schools’ *Barron’s* ratings ranged evenly from “non-competitive” to “most competitive” with the largest number of schools being either “less competitive” or “competitive” (eight schools in each of these categories).

Methods

To answer the first research question, response frequencies were examined to compare GLBT with non-GLBT first-year students and seniors according to selected demographic and enrollment characteristics (Table 1). The frequency distributions allowed us to more closely examine the patterns of student responses to each item, and to assess their relevance to the regression analyses to follow. While no attempt is made to generalize these percentages to the entire population of students attending all U.S. baccalaureate institutions, students were randomly selected and respondent numbers are of sufficient size to view them as a good representation of the students attending the 31 diverse institutions in the study. However, the numbers of GLBT students at individual institutions preclude the possibility of analyzing institutional differences.

To answer the second research question, five parallel OLS regression models were estimated using each of the benchmark scales as dependent variables (Table 2). Student characteristics entered in each model included: class rank (first-year students=1, seniors=0), enrollment status (full time=1, part time=0), major (dummy coded by college type with business as the reference group), race/ethnicity (dummy coded with White left out as reference group), parent's education (approximate sum of years of mother's and father's postsecondary education), transfer status (transfer=1, others=0), and adult students (24+ years=1, under 24=0). Students' self-reported sex (female=1, male=0) from the core NSSE instrument was also entered into the models and deserves special consideration given that we used the transgender question in the definition of GLBT status. Students were able to select 'male,' 'female,' or to leave the question blank, but 'transgender' was not an option. However, not one of the 49 transgender respondents left the question blank.

Two institutional variables were also entered in each model as independent variables: institutional control (private=1, public=0) and Barron's selectivity index (values range from noncompetitive=1 to most competitive=6).

The variable of interest, GLBT status, was dummy-coded and entered with the “GLBT-less out” category as the reference group. These students were left out of the model to facilitate direct comparisons between them and the “more out” GLBT students.

Given that the purpose of this study is descriptive, the point of the regression models was to not maximize the amount of variance explained in each dependent variable, but instead to control for student and institutional characteristics so as to better estimate the net relationships between GLBT status and the student engagement variables.

Results

Results for the first research question are shown in Table 1. Males were slightly more likely to report being GLBT, as were first-year part-time students, though in both cases the differences appear to be trivial. GLBT students appeared twice as likely to major in the arts and humanities and to a lesser extent the social sciences, but less likely to major in business, education, and professional degrees. White students were less likely to identify as GLBT, but rather than seeing the balance in higher GLBT percentages among students of color, the difference is mostly explained by the fact that more GLBT students *preferred not to respond* to the race/ethnicity question. Still, Asian students were somewhat more likely to identify as GLBT. Percentage-wise, about half as many GLBT students are members of social fraternities and sororities than their ‘straight’ peers, and GLBT students by a small fraction are likely to be older. Finally, no meaningful differences are observed between GLBT and non-GLBT students in parental education levels, transfer status, athletic participation, and self-reported grades.

Results for the second research question are shown in Table 2. After controlling for the student and institutional characteristics in the five models, mixed results are found for the effect of GLBT status across the five benchmarks. In the Academic Challenge model, women, full-time students, and seniors were more engaged in academically challenging experiences, as were, relative to business majors, students studying arts and humanities, biological sciences, education, engineering, professional degrees,

and social sciences. Being Latino also has a small positive effect relative to Whites on this benchmark. Students with more educated parents, older students, students attending private and more selective institutions also score higher on academic challenge. In this model, GLBT students are not significantly different from their 'straight' peers, nor are 'more out' GLBT students different from those 'less out,' in the amount of academic challenge they report in their college experiences.

In the Active and Collaborative Learning model positive relationships with the benchmark include such characteristics as being a senior, enrolled full-time, majoring in education (relative to business), being African American or Latino (relative to White), having more educated parents and attending a private institution. With these controls in place, however, we also see that the 'more out' GLBT students report significantly more active and collaborative learning activities than both their 'straight' and 'less out' peers, suggesting that personal openness is related to some aspect of this benchmark. Indeed, students who frequently ask questions in class, make class presentations, and discuss course material may be more personally and intellectually self-confident in public. It could follow that they are also more personally comfortable owning their sexual identities in public.

A different pattern emerged in the Student-Faculty Interaction model. Student characteristics show that seniors, full-time students, and (relative to business) nearly all majors with the exception of engineering are positively related to the benchmark. Students with more educated parents and those attending private and more selective institutions are also more likely to interact with faculty, while transfer students and older students are less likely. Yet GLBT students are more likely to interact with faculty members, and no differences are evident between the 'more out' students and the 'less out' students.

The Enriching Educational Experiences model shows that seniors are much more likely to engage in this collection basket of activities, as are students majoring in arts and humanities, biological sciences, education, and social sciences (relative to business). Women, full-time students, African American and Latino students (relative to White), students with more educated parents, and students

attending private and more selective schools are more likely to score higher on this benchmark. On the other hand, transfer and adult students are much less likely to score well. In terms of GLBT status, this model shows a similar pattern to the Active and Collaborative Learning model, i.e., that GLBT students who are 'more out' are more likely to engage in these special programs and activities than both the other groups. Still, the 'less out' students also score significantly higher than the 'straight' students, though the effect may be trivial in magnitude. Again, it may be that personal openness is related to this benchmark which includes interactions with diversity, taking foreign languages, studying abroad, and other high-impact tasks that require a student not only to be self-assured, but willing to take intellectual risks.

Finally, the Supportive Campus Environment model shows a very different pattern of results. Student characteristics have few significant effects within the model, with the exception of being a first-year student, enrolled full-time, and majoring in social sciences. Attending private and more selective institutions have positive associations. Both GLBT 'more out' students and 'straight' students are more likely than their GLBT 'less out' peers to rate the supportiveness of the campus environment positively, but the effect size of the 'straight' coefficient is greatest overall. This result suggests that GLBT students who are less open about their sexual orientation struggle more with campus social relationships and do not perceive the institution as being supportive of the social and non-academic needs. Yet, all GLBT students, whether or not they are 'out,' rate their campus environment less positively than do the 'straight' students.

Discussion and Implications

This study indicates that a decade later, students may still experience the kind of discrimination that Sherill and Hardesty (1994) documented. However, it also makes clear that for queer students on campus, these negative perceptions of the campus climate do not impede their involvement in educational and extra-curricular activities. Indeed, GLBT students are academically engaged as much as or more than their heterosexual peers.

Like any other student, and especially like other minority groups, GLBT students need to feel that the campus is a safe and engaging place for people like themselves. Although they are more likely to be involved in a number of campus activities, it is still essential that they are able to see queer faculty and staff members who can relate to their experiences and challenges. They also need to see themselves reflected in the curricula of their various majors. When they experience the college as less welcoming or even hostile, they need safe spaces on campus to relay those concerns and for them to be taken seriously. This suggestion mirrors those made by other theorists who study other minority groups' success in higher education (Gloria, Robinson Kurpius, Hamilton, & Wilson, 1999; Torres, 2006).

And just as the authors above have also suggested that an environment more conducive to the discussion and accurate representation of minority issues in and out of the college classroom can have beneficial effects on all students, so too does the comfort level of GLBT students impact their straight peers. In classes where issues of sexuality are able to be discussed openly, students will also be discussing issues of oppression generally and will, necessarily, stumble upon the links that exist between disadvantaged groups – heterosexism and sexism for example. These discussions can also help all students—heterosexual and queer—think about the ways in which homophobia impacts and limits them (Blumenfeld, 1992; Foucault, 1990).

This research challenges educational researchers and practitioners to dig further into the effects of homophobia on the academic, co-curricular, and social lives of their students. It demonstrates that we cannot simply assume that when GLBT students are interacting with faculty and participating in educationally enriching activities experiences, it means that they are satisfied with their campus experiences or that they are experiencing the campus climate as a wholly welcoming and engaging environment. It is incumbent upon those that work with students to understand the ways in which the environment on their campus may lead GLBT students toward feeling disconnected from their peers and campus (Jackson & Sullivan, 1994). And while it is easy to uncover the feelings of out gay students anecdotally on campus, this study also indicates that to do just that is not enough. There are important

differences between the students that are out and those that are closeted. This has broad implications for the sampling techniques used to study GLBT students on campus. Working solely through queer-themed campus organizations may lead to misperceptions about the campus climate (Hekathorn, 1997). All of these findings need to be explored in more depth and future research needs to be conducted to better understand this disparity between GLBT students' activities, experiences, and perceptions on campus.

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Table 1: Demographic and Enrollment Characteristics by GLBT Status

<i>Item</i>	<i>Response</i>	First-Year		Seniors	
		Not GLBT	GLBT	Not GLBT	GLBT
Sex	Male	33%	38%	34%	38%
	Female	67%	62%	66%	62%
Enrollment	Part-time	3%	6%	11%	10%
	Full-time	97%	94%	89%	90%
Primary Major	Arts & Humanities	14%	29%	15%	29%
	Biological Sciences	9%	8%	7%	8%
	Business	12%	7%	14%	9%
	Education	8%	4%	11%	4%
	Engineering	6%	5%	5%	4%
	Physical Science	5%	4%	4%	6%
	Professional	13%	9%	10%	5%
	Social Science	14%	21%	17%	20%
	Other	12%	10%	16%	15%
	Undecided	7%	4%	0%	0%
Race or ethnicity	Amer Ind/AK Native	1%	1%	1%	1%
	Asian/Pac Islander	4%	8%	4%	8%
	Afr Amer/Black	5%	5%	5%	5%
	Caucasian/White	78%	65%	78%	65%
	Hispanic	3%	3%	3%	3%
	Multi-racial/ethnic	2%	2%	2%	2%
	Other	1%	2%	1%	2%
	I prefer not to respond	6%	14%	6%	14%
Father's education	Did not finish h.s.	4%	8%	6%	7%
	Graduated h.s.	21%	23%	21%	22%
	Some college	13%	13%	13%	13%
	Associate's degree	8%	7%	8%	5%
	Bachelor's degree	27%	26%	26%	25%
	Master's degree	17%	13%	16%	16%
	Doctoral degree	9%	11%	9%	11%
Mother's education	Did not finish h.s.	3%	6%	5%	7%
	Graduated h.s.	20%	17%	22%	22%
	Some college	14%	14%	15%	16%
	Associate's degree	13%	12%	12%	11%
	Bachelor's degree	30%	29%	27%	24%
	Master's degree	16%	17%	16%	17%
	Doctoral degree	3%	5%	3%	4%
Transfer	No	95%	92%	67%	66%
	Yes	5%	8%	33%	34%
Older student (24+ years)	No	96%	93%	79%	74%
	Yes	4%	7%	21%	26%
Fraternity or sorority	No	90%	95%	88%	94%
	Yes	10%	5%	12%	6%
Student-athlete	No	90%	90%	94%	95%
	Yes	10%	10%	6%	5%
Self-reported grades	A	20%	19%	23%	25%
	A-	19%	19%	19%	22%
	B+	20%	21%	22%	25%
	B	22%	22%	21%	17%
	B-	8%	8%	8%	6%
	C+	5%	5%	4%	2%
	C	4%	4%	2%	1%
	C- or lower	2%	3%	0%	0%

Table 2: The Effects of GLBT Status on Student Engagement

<i>Independent Variables</i>	Academic Challenge		Active & Collab. Learning		Stu-Fac Interact.		Enriching Educ. Exper.		Support. Campus Envt.	
	<i>B</i>	<i>sig.</i>	<i>B</i>	<i>sig.</i>	<i>B</i>	<i>sig.</i>	<i>B</i>	<i>sig.</i>	<i>B</i>	<i>sig.</i>
(Constant)	-.94	***	-.14	*	.07		-.25	***	-.69	***
GLBT status	<i>GLBT: More Out</i>		.13		.14	*	.06		.16	**
(ref: GLBT-Less Straight Out)			.05		-.06		-.19	***	-.09	*
			.24	***						
Class (FY student=1)	-.26	***	-.60	***	-.64	***	-.99	***	.13	***
Sex (female=1)	.12	***	.03		-.01		.10	***	.04	
Enrollment (fulltime=1)	.36	***	.34	***	.21	***	.26	***	.19	***
Major	<i>arts/humanities</i>		.16	***	-.06		.19	***	.13	***
(ref: business)	<i>biol. sci.</i>		.13	***	.01		.21	***	.14	***
	<i>education</i>		.11	**	.20	***	.13	***	.12	***
	<i>engineering</i>		.17	***	.04		-.11	**	.07	
	<i>phys. sci.</i>		.01		-.06		.24	***	.08	*
	<i>professional</i>		.14	***	.00		.11	**	.05	
	<i>social sci.</i>		.13	***	-.11	***	.11	***	.19	***
	<i>other</i>		-.01		.01		.13	***	.09	**
	<i>undecided</i>		-.18	***	-.32	***	-.16	**	-.07	
Race/ Ethnicity	<i>African Amer.</i>		-.04		.10	**	.09	*	.12	***
(ref: White)	<i>Asian/Asian Amer.</i>		.06		-.03		-.01		.03	
	<i>Hisp./Latino</i>		.11	**	.25	***	.05		.18	***
	<i>Other</i>		.09	**	.07	*	.03		.09	**
Parent's Education (~yrs)	.01	***	.01	***	.01	***	.02	***	.00	
Transfer status (transfer=1)	.00		-.03		-.08	**	-.18	***	-.03	
Older student (24+=1)	.19	***	.07	*	-.09	**	-.24	***	.01	
Control (private=1)	.25	***	.22	***	.21	***	.19	***	.27	***
Selectivity (Barron's)	.11	***	.01		.02	**	.09	***	.04	***
	<i>R-squared</i>	.09	.12		.13		.30		.04	

*** p<.001, ** p<.01, * p<.05