

Attitudes Toward Gay Men and Lesbians Among Heterosexual Male and Female Student-Athletes

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Abstract The purpose of this study was to explore attitudes toward lesbians and gay men among 371 heterosexual male and female collegiate student-athletes in the USA. Attitudes were assessed in relationship to the student-athletes' gender, sport and contact. Participants completed a demographic form and the Attitudes toward Lesbians and Gay Men (ATLG-S) Scale (Herek in *Journal of Homosexuality* 10:39–51, 1984, *Journal of Sex Research* 25:451–477, 1988). Male student-athletes were significantly more negative in their attitudes toward gay men and lesbians than females. With the exception of field hockey, there were no significant differences in the attitudes toward gay men and lesbians for student-athletes competing on different sport teams. Lastly, student-athletes that indicated having contact with gay men and/or lesbians had significantly more positive attitudes toward gay men and lesbians.

Keywords Student-athletes · Attitudes · Sport · Gay men and lesbians

Introduction

A significant amount of attention has been directed toward heterosexuals' attitudes toward gay men and lesbians

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(Herek 1984, 1988, 1994; Herek and Capitanio 1996; Hinrichs and Rosenberg 2002; Lim 2002). While researchers have examined attitudes toward lesbians and gay men among various populations (e.g., psychologists, social workers, college students), no research—to date—has specifically examined attitudes toward lesbians and gay men within the context of sport.

Within Sport Studies, researchers have examined the experiences of gay and lesbian athletes, coaches and administrators (Griffin 1998; Kauer and Krane 2006; Krane 2001; Pronger 1990). Considerable research has documented the homonegative and heterosexist climate of many sport settings (Griffin 1998; Krane 2001; Pronger 1990). Bias and discrimination against gay and lesbian athletes has been found to occur through negative stereotypes, verbal comments, social isolation, homophobic harassment, discrimination in team selection, and negative media attention.

While researchers have explored gay and lesbian athletes sport experiences, no research has specifically investigated heterosexual student-athletes' attitudes toward lesbians and gay men. Studying heterosexual student-athletes' attitudes is critical in acquiring an in-depth understanding of the climate of collegiate sport for the gay and lesbian athlete. Therefore, the purpose of this study was to explore attitudes toward lesbians and gay men among self-identified heterosexual male and female collegiate student-athletes. Attitudes were assessed in relationship to the student-athletes' gender, sport, and contact (with gay men and lesbians).

Homophobia and the University Campus

Research shows significant homophobia and heterosexism on US college campuses (Bowen and Bourgeois 2001; D'Augelli 1992). D'Augelli (1992) indicated that of 121 undergraduate gay and lesbian students at Pennsylvania

State University (a rural campus in Pennsylvania) who completed a questionnaire examining their experiences on campus, 77% had been verbally harassed, 27% had been threatened with physical violence, 22% had been chased, and 5% had been physically assaulted. More recently, research has suggested that gay and lesbian students still experience the college climate as an unwelcoming and unsupportive environment (Rankin 2003). In a nationally recognized study, Rankin (2003) examined the campus climate for gay, lesbian, bisexual, and transgender (GLBT) students, faculty and staff. Rankin surveyed approximately 1,700 GLBT students, faculty and staff at 14 colleges and universities and found that one-third of the participants experienced anti-gay harassment. Forty-three percent of the participants described their campus environment as “homophobic” and as a result expressed a need to conceal their sexual orientation.

Within the university context, the athletic department has been described as “the most homophobic place on campus” (Jacobson 2002, p. A33). An athletic director quoted in *The NCAA News* stated, “athletics has been the last bastion of homophobia. It’s one of the few places left where homophobia is tolerated...the reality is that for many of our gay, lesbian, and bisexual athletes, it’s not safe in intercollegiate athletics” (Hawes 2001, p. 14). It has been further suggested that due to the lack of “out” role models at the professional level, and the negative reception and representation of athletes who do come out, “it’s no wonder college athletes...have stayed closeted” (Jacobson 2002, p. A33).

Social Identity Theory

Developed in 1979, social identity theory was initially used to study the psychological basis of intergroup discrimination (Tajfel and Turner 1979). Concerned with both the psychological and sociological aspects of group behavior, social identity theory is made-up of three components: categorization, identification and comparison. To form one’s identity, social categorization initially occurs, that is, the ways in which an individual attempts to categorically (i.e., student-athlete, lesbian, heterosexual) distinguish one’s self from another. Throughout the identification process, individuals learn the values and norms for the particular group, or category they are situated (referred to as social identity). With social identity comes a sense of belonging and self esteem for an individual. Members of a particular group will compare themselves with other groups in order to view themselves in a “positive” (as defined by themselves) manner (Abrams 1992; Tajfel and Turner 1979).

Negative attitudes toward GLBT individuals have been considered to be a function of social learning. Applying

social identity theory to study negative attitudes toward gay men and lesbians, Abrams et al. (1989) found that when heterosexual social identity is salient, negative attitudes and prejudice toward gay men and lesbians is elevated. It is important to note, however, that not all group members (i.e., heterosexuals) possess a strong social identity, despite being a group member.

Social identity theory has been used to study and understand the experiences of GLBT athletes (Kauer and Krane 2006) and the ways in which gay friendly sport settings (i.e., The Gay Games) can promote salient and positive identity development among gay and lesbian individuals (Roper and Polasek 2006). Little attention, however, has been directed toward heterosexual athletes’ identity and the ways in which homophobia may serve as a mechanism in which to “bond” and connect with teammates.

Within sport, homophobia is learned and manifested in numerous ways. It is important to recognize that while numerous similarities have been found among the experiences of gay and lesbian athletes, there exist a number of significant differences between the two groups. Sport has historically been defined as a male domain and as such, females participating in sport are often labeled “mannish” or “masculine.” Female participation in sport contradicts stereotypical notions of what it means to be “feminine.” As a result, female athletes often find their sexuality is called into question just because they participate in sport. The fear of being labeled or identified as a lesbian has the potential to intimidate and limit all women in sport (regardless of sexuality) and forces many female athletes to go to extreme lengths to prove (or perform) their heterosexuality (Krane 2001). Consistent with research examining attitudes toward lesbians and gay men outside the sport domain (Lim 2002), lesbian athletes have also been found to receive a greater degree of acceptance compared to gay athletes (Griffin 1998; Jacobson 2002; Pronger 1990).

The culture of sport tends to be especially conservative, and most people within it equate male heterosexuality with strength—and homosexuality with weakness. Participation in sport is perceived to validate a male as heterosexual. As a result, gay athletes are often forced to conceal their sexuality, and similar to the lesbian athlete, perform the heterosexual role. While no research has specifically examined attitudes toward gay men across sport type (individual, team), scholars have argued that gay men will have greater difficulty coming out when on a team sport (compared to an individual sport). As Jacobson (2002) explained:

Athletes who perform individually rather than on teams may have an easier time coming out...they are setting their own goals and working in a more solitary

setting. In team sports, the bonds formed between athletes are so critical that coming out with any personal information that would threaten to undermine or break those bonds is extremely risky for any gay athlete. If one is ostracized on the team, it could be catastrophic for their career as a college athlete, their experience as a college athlete. That's why so few who play team sports are able to risk it.

Moreover, research addressing the homophobic nature of sport has also consistently noted the especially hostile atmosphere of men's mainstream team sports (i.e., basketball, baseball, football, and hockey; Curry 1991, 1998; Kimmel and Messner 2001). Researchers (both in-and outside sport) have found that the most extreme homophobia is often found among tightly-knit groups of men, who need both to deny any sexual component to their bonding and who can increase their solidarity by turning violently on minority groups/individuals (i.e., GLBT individuals; Kimmel and Messner 2001).

While extensive research has examined the experiences of gay and lesbian athletes, no research has specifically examined heterosexual student-athletes' attitudes toward gay men and lesbians. In conducting such research, we work toward acquiring a better understanding of the culture of collegiate sport, as well as the ways in which attitudes may vary across gender, sport, and contact, areas which have received no attention within the literature.

Heterosexuals' Attitudes toward Gay men and Lesbians

While researchers have examined attitudes toward gay men and lesbians among various populations (i.e., medical professionals, psychologists, social workers, college students), the results have been consistently similar. The majority of research suggests that men hold more negative attitudes toward gay men and lesbians than women (Herek 1984; Herek and Capitanio 1996; Lim 2002). Also, men have been found to hold more negative attitudes toward gay men, compared to lesbians (Lim 2002).

It has also been found that individuals with more negative attitudes toward gay men and lesbians are (a) less likely to have personal contact with individuals that identify as gay or lesbian (Herek and Capitanio 1996), (b) more likely to reside in settings in which negative attitudes are the norm (Herek 1984), (c) more likely to be older and less well educated (Herek 1984), (d) more likely to subscribe to a conservative religious ideology (Herek 1988), and (e) more likely to subscribe to traditional attitudes toward sex roles (Hinrichs and Rosenberg 2002).

Research examining attitudes toward gay men and lesbians among heterosexual college students suggests that students in the arts and social sciences hold more

positive attitudes than students in science and business. Also, it has been found that individuals involved in a Greek letter social organization (sorority, fraternity) are more likely to hold negative attitudes (Hinrichs and Rosenberg 2002) and negative attitudes have been found to decrease as year in school increases (Seltzer 1992). In order to address "acceptance," some universities and colleges have incorporated "diversity" coursework and workshops into the core curriculum. Research suggests that college courses devoted to homophobia have been found to enhance heterosexual students' attitudes toward gay men and lesbians. However, it is important to acknowledge that students enrolling in such a course may already hold positive attitudes. Also, while there is a trend toward incorporating "diversity" issues as a form of educational reform, often sexual orientation receives little attention, being pushed even further to the margins.

Researchers have argued that contact with diverse groups may increase one's acceptance and assist in the rejection of stereotypes and prejudices toward that particular social group (Allport 1954). More specifically, contact hypothesis suggests, "contact with members of a negatively stereotyped group may decrease negative beliefs and feelings toward the group" (Bowen and Bourgeois 2001, p. 92). Applied to sexual orientation, through interaction with GLBT individuals, negative attitudes may reduce as one begins to perceive that there is little difference between heterosexuals and GLBT individuals. Moreover, research suggests that heterosexuals who know someone who identifies as GLBT are more likely to hold positive attitudes (Altemeyer 2001; Herek and Capitanio 1996). Researchers, however, have also addressed the need to examine the nature and closeness of such contact between heterosexuals and GLBT individuals, suggesting that contact may not be sufficient in reducing negative attitudes (Herek and Capitanio 1996).

Hypotheses

The specific research question examined in this study was: what are self-identified heterosexual male and female student-athletes' attitudes toward gay men and lesbians across gender, sport and contact? Based upon the extensive body of literature examining heterosexuals' attitudes toward gay men and lesbians (outside of sport), we formulated the following three hypotheses: (1) male student-athletes' attitudes toward gay men and lesbians will be more negative compared to female student-athletes (Lim 2002). Also, male student-athletes' attitudes will be more negative when evaluating gay men than when evaluating lesbians (Lim 2002), (2) attitudes toward lesbians and gay men will be more negative among men's team sport participants (basketball, lacrosse, and soccer; Curry 1991, 1998;

Kimmel and Messner 2001) compared to men's individual (swimming/diving, track and field, tennis, golf), women's team (crew, soccer, lacrosse, volleyball, softball, field hockey, cheerleading, basketball), and women's individual sport (swimming/diving, track and field, tennis), and (3) contact experiences (with gay men and lesbians) will be associated with more positive attitudes toward lesbians and gay men (Herek and Capitanio 1996).

Method

Participants

Three hundred and eighty nine student-athletes consented to participate in the present study. Of the 389 student-athletes, 5 self-identified as lesbians, 3 as questioning, and 371 as heterosexual. Data for 10 of the 389 student-athletes were thrown out due to incorrect completion of survey and/or demographic information. Therefore, for the purpose of this study, the participants consisted of 371 self-identified heterosexual collegiate student-athletes from three universities in the Northeast. Of these, 59% (219) were female and 41% (152) were male. The participants represented student-athletes from one Division I university and two Division II universities. One of the universities (Division I) was situated in an urban setting and two in suburban settings. The participants ranged in age from 17 to 25 years (mean=19.4 years, SD=1.22). Racially, 81.1% (301) of the participants self-identified as white, 11.1% (41) as African American/Black, 3.2% (12) as Asian, 2.4% (9) as Hispanic, and 2.2% (8) as Other. The sample was comprised of 34.0% (126) freshman, 31.0% (115) sophomores, 21.8% (81) juniors, and 13.2% (49) senior student-athletes. The participants were also asked to indicate the number of years they had been on their current collegiate athletic team. The breakdown of the sample was as follows: 40.7% (151) 1 year, 31.3% (116) 2 years, 18.3% (68) 3 years, 8.9% (33) 4 years, and .8% (3) 5 years. Table 1 outlines the 12 sports represented by the sample population and provides a gender breakdown for each sport. Sixty-nine percent (258) of the participants indicated having contact with an individual that identified as gay or lesbian.

Procedure

The Athletic Directors at ten universities (all Division I and II) were initially contacted and asked for permission to contact their student-athletes. Three of the ten universities provided approval for the first author to contact the coaching staff ($n=59$). The first author contacted (via e-mail) all 59 head coaches. Twenty-seven of the 59 head coaches provided the researchers with access to their teams.

Table 1 Sport demographics of heterosexual student-athletes.

	Females ($n=219$)		Males ($n=152$)	
	<i>N</i>	Percentage	<i>N</i>	Percentage
Team sports				
Soccer	22	32	47	68
Crew/rowing	57	100	0	0
Lacrosse	14	25	41	79
Volleyball	25	100	0	0
Softball	21	100	0	0
Field hockey	21	100	0	0
Cheerleading	12	52	11	48
Basketball	9	53	8	47
Individual sports				
Swimming/diving	21	55	17	45
Track and field	13	54	11	46
Tennis	4	33	8	67
Golf	0	0	9	100

Each of the 27 head coaches was mailed a package containing materials for the number of student-athletes on her/his team. Five hundred and forty envelopes were disseminated, 389 were returned (response rate of 72%). An informational letter was included which addressed the manner in which the materials should be disseminated to each student-athlete. Each head coach was asked to disseminate the packages to her/his team as a whole (at a team meeting, before/after practice) and to read a script (provided by the authors) stressing the confidentiality of participation. Five hundred and forty envelopes were disseminated, 37.

Each student-athlete received an envelope that contained a letter of information describing the purpose of the study and their potential involvement, a consent form, demographic form and copy of the Attitudes toward Lesbians and Gay Men (ATLG-S) questionnaire (Herek 1984, 1988). All student-athletes were instructed to read the letter of information and sign the consent form if interested in participating. If consenting to participate, the participants were instructed to complete the demographic form and ten-question questionnaire (ATLG-S). Once completed, the participants were instructed to seal all forms in the provided envelope and return to their coach. If not interested in participating, the student-athletes were asked not to sign any of the forms and to return all forms in the same manner in which they were received. Once all envelopes were returned, the coach was responsible for mailing *all* envelopes to the first author in a prepaid envelope (regardless of whether completed or not). It is important to note that all of the individual envelopes that were mailed to the head coaches were returned to the first author.

Measure

Demographic Form

The demographic form asked each participant to report the following information: gender, sexual orientation, race, age, year in school (freshman, sophomore, junior, senior), current sport, number of years on current team, and major. To measure contact (with gay men and lesbians), the participants were asked the following yes/no question: do you have contact with any friends/family members/teammates/coaches that identify as gay or lesbian? Participants that responded “yes” were identified as having contact. There was no hierarchy of contact. Lastly, all participants were asked if they would be willing to participate in an in-depth interview (for a follow-up qualitative study). If willing, each participant was asked to provide her/his e-mail address.

The Attitudes Toward Lesbian and Gay Men Scale (ATLG)

The Attitudes Toward Lesbians and Gay Men (ATLG) Scale is a paper-and-pencil questionnaire that measures heterosexuals’ attitudes toward gay men and lesbians (Herek 1984, 1988). The full ATLG consists of 20 statements, ten about gay men (ATG subscale) and ten about lesbians (ATL subscale). A short version (ATLG-S), consisting of 10 items, was later developed and has been found to correlate highly with the full ATLG (ATLG-S with ATLG, $r=.97$; Herek 1994).

Completion of the questionnaire has been found to require college-educated respondents approximately 30–60 s per item. As employed by others, a five-point Likert scale was used (strongly disagree, disagree, neutral, agree, strongly agree; Berkman and Zinberg 1997). To score the ATLG-S, item responses were reversed as necessary and summed to yield a scale score ranging from 10 to 50, with a higher score indicating a more negative attitude toward gay men or lesbians.

Data Analysis

The data were analyzed using a three-step approach. First, independent sample *t* tests were performed to determine the main effects for gender, sport, and contact (with gay men and lesbians). A separate ANOVA was also conducted to determine the main effects for sport. Second, a correlation analysis was conducted to determine the relationship between the variables. Third, a multivariate analysis of variance (MANOVA) was conducted to account for multiplicity and to investigate the possibility of any interaction effects.

Results

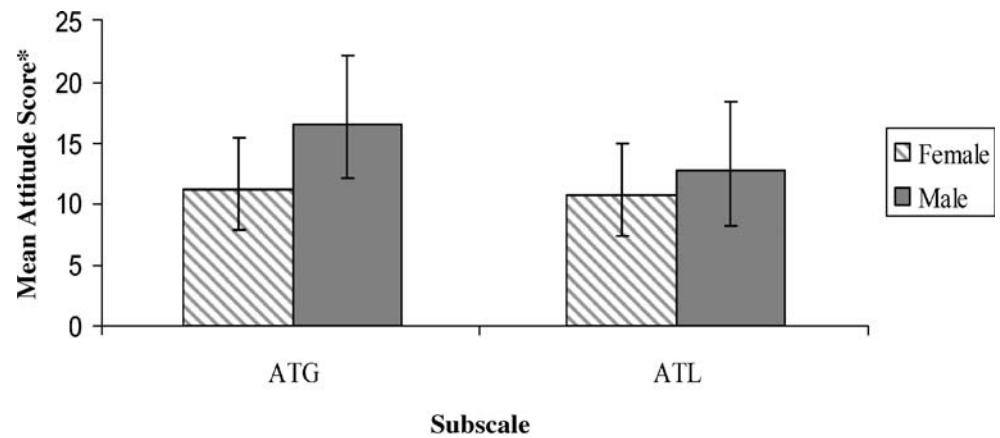
Three hypotheses were tested to assess heterosexual male and female student-athletes’ attitudes toward lesbians and gay men. Attitudes were assessed in relationship to gender, sport, and contact. Separate independent sample *t*-tests were conducted for gender and contact (with gay men and lesbians) in order to examine the main effects on ATL and ATG scores. A separate analysis of variance (ANOVA) was conducted for sport to examine the main effects on ATL and ATG scores. Significant differences in attitudes toward lesbians and gay men were found for gender and contact.

First, we hypothesized that male attitudes toward lesbians and gay men would be more negative compared to female student-athletes and that male student-athletes would have more negative attitudes toward gay men (compared to lesbians). Consistent with our hypothesis, male student-athletes were significantly ($t=-10.35$, $df=369$, $p<.0001$) more negative in their attitudes toward gay men than female student-athletes. Male student-athletes were also significantly ($t=-4.76$, $df=369$, $p<.0001$) more negative in their attitudes toward lesbians than female student-athletes. Figure 1 outlines the participants’ ATL and ATG scores for gender.

Second, we hypothesized that attitudes toward lesbians and gay men would be more negative among men’s team sport participants (basketball, lacrosse, and soccer) compared to men’s individual (swimming/diving, track and field, tennis, golf), women’s team (crew, soccer, lacrosse, volleyball, softball, field hockey, cheerleading, basketball), and women’s individual sport (swimming/diving, track and field, tennis). With the exception of field hockey, there were no significant differences in the attitudes toward gay men and lesbians for student-athletes competing on different sport teams. Figure 2a and b represent the male and female participants’ ATL and ATG scores for sport, respectively. Female student-athletes participating in field hockey reported the most positive (mean=7.52, SD=2.23) attitudes toward gay men and the most positive (mean=7.43, SD=1.91) attitudes toward lesbians. More specifically, ATL and ATG scores for the female field hockey participants were significantly different from the four most negative sports: men’s soccer ($p<.0001$), men’s basketball ($p<.004$), men’s golf, ($p<.006$), and men’s track and field ($p<.10$).

Third, we hypothesized that contact experiences would be associated with more positive attitudes toward lesbians and gay men. Consistent with our hypothesis, student-athletes that indicated having contact with gay men and/or lesbians had significantly ($t=-10.38$, $df=369$, $p<.0001$) more positive attitudes toward gay men. Also, student-athletes who reported having contact with gay men and/or lesbians had significantly ($t=-7.03$, $df=369$, $p<.0001$) more positive attitudes toward lesbians. Figure 3 outlines the participants’ ATL and ATG scores for contact.

Fig. 1 Heterosexual student-athletes' ATL and ATG scores for gender. *Higher score indicates more negative attitude.



Correlations between all variables were examined to determine the effect they had on scores on both the ATL and ATG subscales. A significant correlation ($r=.758$, $n=371$, $p<.001$) was found between the attitudes toward gay men and the attitudes toward lesbians, however, the participants' attitudes toward gay men were significantly more negative than their attitudes toward lesbians.

The multivariate model used both ATL and ATG as dependent variables. A three-way interaction and all two-way interactions were considered for the predictor variables of gender, sport and contact. In support of the aforementioned results, all of the main effects were significant for both ATL and ATG, and all interactions were not. For ATL, the significance levels were $p=.007$ for gender, $p<.0001$ for sport, and $p=.003$ for contact. For ATG, the significance levels were $p<.0001$ for gender, $p=.0001$ for sport, and $p=.005$ for contact. Table 2 summarizes the results for the multivariate analysis.

Discussion

The majority of research examining heterosexuals' attitudes toward lesbians and gay men has been conducted with undergraduate students and various professional groups (i.e., psychologists, social workers, medical professionals). No research has specifically targeted heterosexual student-athletes' attitudes toward lesbians and gay men. The purpose of this study was to explore attitudes toward lesbians and gay men among heterosexual male and female collegiate student-athletes. More specifically, attitudes were assessed in relationship to the student-athletes' gender, sport, and contact (with gay men and lesbians).

Consistent with previous research (Herek and Capitanio 1996; Lim 2002), the results suggested that, compared to female student-athletes, male student-athletes held more negative attitudes toward gay men and lesbians. Also, consistent with Lim (2002), male student-athletes were found to hold more negative attitudes toward gay men

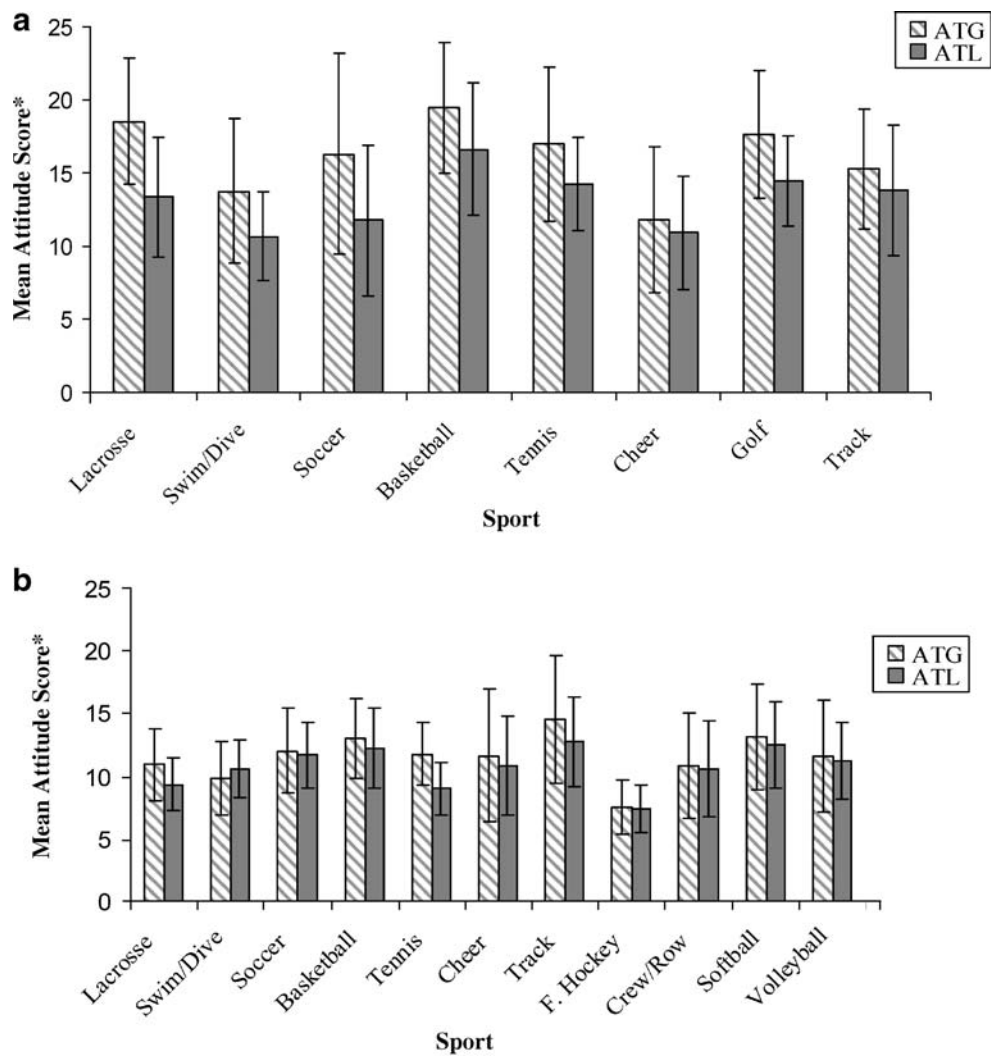
(compared to lesbians). Such findings are not surprising considering the extensive research addressing the homophobic nature of sport in general, and men's sport in particular (Andersen 2002; Pronger 1990).

With the exception of field hockey, there were no significant differences in the attitudes toward gay men and lesbians for student-athletes competing on different sport teams. It is possible that this finding can be attributed to the limited sample size for each of the 12 sports (see Table 1). Female field hockey participants, however, were significantly more positive (than the four most negative sports—basketball, golf, soccer, and track and field) in their attitudes toward gay men and lesbians. Through the process of data collection, the authors were informed (by the field hockey coach herself) that the field hockey coach identified as a lesbian and was “out” to her team. Not surprisingly, all of the field hockey participants indicated having contact with gay men and/or lesbians. Therefore, while field hockey (as a sport) was found to be significantly different, the results may be biased as only one team was represented and that particular team had an openly lesbian coach. The findings do, however, provide further support for the importance of contact in potentially reducing one's negative attitudes toward lesbians and/or gay men.

A significant correlation was found between the attitudes toward gay men and the attitudes toward lesbians; however, the participants' attitudes toward gay men were significantly more negative than their attitudes toward lesbians. Consistent with research outside the sport context, such findings stem from the notion that violating gender roles is interpreted as more severe for men than for women (Lim 2002). Quoted in the *NCAA News*, Eric Anderson stated, “athletics is a breeding ground for homophobia...we have used sport to ‘turn boys into men’ and that has traditionally meant that a ‘real man’ should be everything that's the opposite of what it means to be a woman” (Hawes 2001).

Consistent with previous research (Herek and Capitanio 1996), male and female student-athletes that indicated

Fig. 2 a Heterosexual male student-athletes' ATL and ATG scores for sport. **b** Heterosexual female student-athletes' ATL and ATG scores for sport. *Higher score indicates more negative attitude.



having contact with gay men and/or lesbians had significantly more positive attitudes toward gay men and lesbians. Within the sport context, a recent investigation examining the stereotypes encountered by female athletes suggested that the presence of lesbians and/or bisexual female athletes

on a team helped heterosexual teammates become more accepting and open-minded (Kauer and Krane 2006). As a result of getting to know openly lesbian and bisexual teammates, the heterosexual athletes were more likely to criticize homophobic remarks (Kauer and Krane 2006).

Fig. 3 Heterosexual student-athletes' ATL and ATG scores for contact. *Higher score indicates more negative attitude.

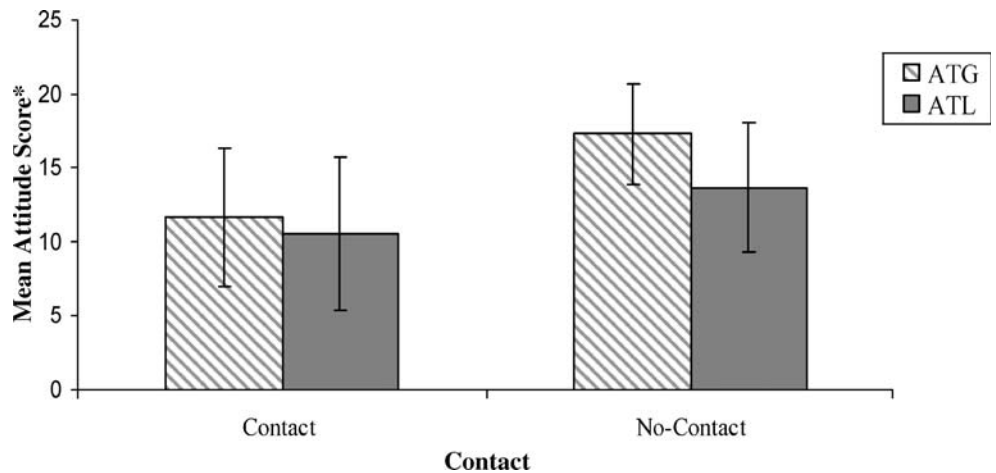


Table 2 Multivariate table for ATL and ATG.

Source	Sum of squares	<i>df</i>	Mean squared	<i>F</i>	<i>P</i>
Corrected model					
ATL	1,770.900 ^a	31	57.126	4.706	.000
ATG	4,731.751 ^b	31	152.673	8.109	.000
Intercept					
ATL	18,453.626	1	18,453.626	1,520.303	.000
ATG	23,516.939	1	23,516.939	1,249.371	.000
Gender					
ATL	89.695	1	89.695	7.389	.007
ATG	307.644	1	307.644	16.344	.000
Sport					
ATL	565.270	11	51.388	4.234	.000
ATG	717.327	11	65.212	3.234	.000
Contact					
ATL	110.812	1	110.812	9.129	.003
ATG	150.828	1	150.828	8.013	.005
Gender × sport					
ATL	124.169	6	20.695	1.705	.119
ATG	164.090	6	27.348	1.453	.194
Gender × contact					
ATL	11.530	9	10.499	.870	.352
ATG	16.877	9	14.519	.771	.381
Gender × sport × contact					
ATL	17.863	2	8.931	.736	.480
ATG	5.597	2	2.799	.149	.862

^a $R^2 = .301$ (adjusted $R^2 = .237$)

^b $R^2 = .426$ (adjusted $R^2 = .373$)

Limitations and Recommendations for Future Research

It is important that the limitations of the present study are addressed as well as the ways in which future researchers can improve upon and build from the present study. It is initially important to note the unique challenges in conducting research pertaining to sexual orientation. During the early stages of this study's development, the first author contacted numerous universities and colleges regarding their potential participation in the present investigation. Many of the athletic directors noted time as a significant deterrent to participation, suggesting that their student-athletes' time was limited (note: participation required approximately 10 min). One athletic director indicated that he would prefer that the student-athletes at his institution not participate in such a study out of fear of "rocking the boat." This particular athletic director perceived that by asking student-athletes to complete a questionnaire exploring their attitudes toward lesbians and gay men, deep-rooted homophobic attitudes would surface, creating a "nightmare" for the Athletic Department. What is clearly evident is the precedence placed on silencing homophobic attitudes rather than exploring attitudes and subsequently addressing ways in which to foster and promote an inclusive athletic environment for *all* student-athletes. While seven of the ten institutions contacted declined

participation, it is also important to note that the athletic directors at the three institutions that did agree to participate all described the study as "important" and "necessary." Also, all three indicated a desire to receive a copy of the results.

The authors recognize the potential problems associated with allowing a head coach to disseminate the materials to their student-athletes. While several mechanisms were designed to ensure the student-athletes felt comfortable and safe completing the various forms, it is impossible to know whether levels of discomfort and concern may have effected data collection. Ideally, due to the sensitive and personal nature of the study, participants should be able to complete the materials at a time and place they feel comfortable and secure. Future research may consider the benefits to online surveys or individually stamped envelopes for each participant, allowing each participant to complete at her/his convenience.

The ATLG-S is a questionnaire designed to examine heterosexuals' attitudes toward lesbians and gay men. However, the ATLG-S has not been used, prior to this study, with an athletic population. Therefore, future research may want to incorporate sport-specific questions pertaining to heterosexual student-athletes' attitudes. Also, the ATLG-S examines attitudes toward lesbians and gay men, excluding heterosexuals' attitudes toward bisexual and transgender individuals. Within Sport Studies, a

growing amount of attention has been devoted to transgender, transsexual (Sykes 2006) and bisexual athletes (Price and Parker 2003; Roper and Polasek 2006), communities that are often further marginalized within society (and even within the GLBT community).

Consistent with research outside the sport context, the male student-athletes were found to hold more negative attitudes toward lesbians and gay men. While researchers have begun to explore the climate and nature of men's sport, and in particular the relationship formation among men in groups (Curry 1991, 1998; Kimmel and Messner 2001), future research needs to explore the role a coach plays (or can play) in fostering and supporting a positive and healthy climate for male athletes.

Future research needs to more closely explore the relationship between sport type and attitudes. While it has been argued that men's team sports foster a culture that is described as more unfriendly and hostile toward gay and bisexual men (Pronger 1990), or even men presumed to be gay, no empirical research has specifically explored attitudes toward lesbians and gay men across sport or sport type (team versus individual).

While the participants were student-athletes competing at the Division I and II levels, their attitudes were not accessed in relationship to Division or geographical location. Future research needs to specifically the experiences of GLBT student-athletes across competitive levels (across Divisions), as well as those that reside in differing geographical locations (i.e., north, west, south) and environments (i.e., suburban, urban, rural).

A limitation of the present study was the manner in which contact was evaluated (through one open-ended question). While contact was found to have a significant impact on attitudes toward lesbians and gay men within the present study, recent research has addressed the need to examine the nature and closeness of such contact between heterosexual and GLBT individuals, suggesting that contact may not be sufficient in reducing negative attitudes (Brewer and Miller 1984; Herek and Capitanio 1996). Therefore, future research needs to explore the quality of contact across sexuality. In order to do so, future researchers may consider qualitatively exploring the unique relationships/friendships that form among heterosexual and GLBT student-athletes within the athletic team setting; focusing on the qualities that cultivate growth-fostering relationships across sexuality in sport.

While social identity was not directly measured in the present study, the findings do suggest a need to explore the role identity plays in the development of negative attitudes toward gay men and lesbians. Moreover, in what ways does the culture of sport create a social context in which prejudice and negative attitudes become "acceptable" and integrated forms of behavior among heterosexual athletes, coaches, and administrators (among other groups in sport)?

Additional directions future researchers may want to consider include the need to not only examine heterosexual student-athletes' attitudes, but also heterosexual coaches, administrators, and other professionals working in the sport domain (i.e., athletic trainers, journalists, sport psychology professionals). Also, within higher education, "diversity" workshops and coursework have been utilized as a way in which to enhance students' attitudes toward gay men and lesbians. The Women's Sport Foundation recently developed an educational program, *It takes a team: Making sports safe for GLBT athletes*, devoted to educating athletes and coaches about the effects of homophobia, however, no research, to date, has examined the use of this—or other similar programs—with athletes and coaches. Therefore, future research needs to focus not only on the homophobic climate of sport, but also to address and explore ways in which to promote an inclusive, positive, and safe environment for GLBT student-athletes.

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