Athletic Trainers’ Attitudes Toward Lesbian, Gay, and Bisexual National Collegiate Athletic Association Student-Athletes

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**Context:** Researchers have investigated heterosexuals’ attitudes toward homosexuals, focusing on factors such as sex, race, religion, education, and contact experiences. However, in the context of sport, this research is deficient. We found no published literature investigating athletic trainers (ATs’) attitudes toward lesbian, gay, and bisexual student-athletes (LGB).

**Objective:** To determine heterosexual ATs’ attitudes toward LGB student-athletes in the National Collegiate Athletic Association.

**Design:** Cross-sectional study

**Setting:** E-mailed survey.

**Patients or Other Participants:** A total of 964 ATs employed at member institutions.

**Main Outcome Measure(s):** We measured attitudes using the Attitudes Toward Lesbian, Gay Men, and Bisexuals (ATLGB) Scale. To determine the extent to which sex, religion, and whether having an LGB friend or family member had an effect on ATs’ attitudes, we performed analysis of variance. To establish the effect of age on ATs’ attitudes, we calculated a Pearson correlation. We used an independent t test to identify differences between ATs who reported working with LGB student-athletes and ATs who did not.

**Results:** With ATLGB score as the dependent factor, a main effect was noted for sex, religion, and having an LGB friend or family member (P < .01 for all comparisons). Age and total score were related (P < .01). A difference was seen in the ATLGB scores between ATs who were aware of LGB student-athletes on their teams and ATs who were not (P < .001).

**Conclusions:** Many ATs hold positive attitudes toward LGB student-athletes, especially females, those who have an LGB friend or family member, and those who are aware of LGB student-athletes. Still, it is important to provide an open environment in the athletic training room for all student-athletes.

**Key Words:** athletic training, diversity, sexual orientation

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**Key Points**

- Most athletic trainers held positive attitudes toward lesbian, gay, or bisexual student-athletes. However, nearly 15% held negative attitudes.
- Women and athletic trainers with lesbian, gay, or bisexual friends or family members and those who cared for lesbian, gay, or bisexual student-athletes held more positive attitudes than did men and athletic trainers without these personal connections, respectively.
- Athletic trainers must act to improve the athletic training department environment so that all student-athletes (including lesbian, gay, or bisexual student-athletes) feel safe and respected.

At the 2008 National Collegiate Athletic Association (NCAA) Convention, the NCAA hosted a session titled “Time Out! A Conversation About Including Lesbian, Gay, Bisexual, and Transgender (LGBT) Student-Athletes.” The session was a wake-up call to the collegiate athletic community; participants shared information related to the current culture and climate within collegiate athletics for LGBT student-athletes. Participants discussed the fear that exists, the energy it takes to hide and live a double life, the disparaging comments heard in everyday conversation, and the toll on the athlete. As reported by the NCAA, the session “helped provide awareness of how homophobia adversely affects student-athlete well-being.”

The NCAA has taken legislative action and developed programming initiatives with the intent of providing an inclusive collegiate athletic environment for all students, including LGBT students. The NCAA adopted Constitution 2.6 (the Principle of Nondiscrimination) in 1993 and amended it in 2000 to include reference to sexual orientation. The bylaw states that “the Association shall promote an atmosphere of respect for and sensitivity to the dignity of every person” and shall refrain from discrimination in its activities “including on the basis of age, color, disability, sex, national origin, race, religion, creed or sexual orientation.”

In 2001, the NCAA covered the issue of homophobia in the NCAA News for the first time in an article by Hawes, “H: The Scarlet Letter of Sport,” which asserted that “more people in athletics say it’s time to start talking openly about homophobia.” The NCAA also became an endorsing organization of the “It Takes a Team! Education Campaign,” which focuses on eliminating homophobia as a barrier to males and females in sport, so that the athletic world can be made safe and welcoming for everyone. As part of the program, action guides on what can be done by individuals to make the sport environment safe were developed and made available to athletic directors,
coaches, parents, and student athletes, but such guidelines have not been developed for athletic trainers (ATs).

How can the AT community become a part of the solution in creating a more supportive and inclusive environment for all, including LGBT athletes? What research is currently available on this topic, and what research is needed to assess the current situation as it relates to the athletic training room? How can ATs help to eliminate the taboo of being labeled a homosexual, which causes athletes at some institutions to remain closeted?

The following paragraphs provide an overview of available research on attitudes toward lesbian, gay, or bisexual (LGB) individuals and a discussion of the lack of information on this topic as it relates to LGB athletes and the athletic training room.

Researchers investigating heterosexuals’ attitudes toward homosexuals have focused on factors that may predict attitudes, such as sex, race, religion, education, contact experiences, and values. In the context of sport, investigators have studied heterosexual athletes’ and coaches’ experiences and the causes and effects of homophobia in sport. Other authors examined the attitudes of heterosexual athletes toward homosexual athletes.

Although researchers have considered the factors that affect attitudes toward homosexuals (eg, sex, race, religion, education, contact experience, and values), information about these factors in the context of sport is absent. Males have been found to hold more negative attitudes toward homosexuals than do females. Those who are more religious tend to have more negative attitudes toward LGBs. Race also may be a factor in determining attitudes. People with more education tend to have more positive attitudes toward homosexuals than those with less education. Lastly, people with more contact experience with homosexuals tend to hold more positive attitudes toward LGBs.

No published literature could be found investigating ATs’ attitudes toward LGB student-athletes. According to Perrin, “To become more diverse as a profession [athletic training] is to become more inclusive and accepting of students and colleagues regardless of color, national origin, race, religion, sex, or sexual orientation.” Maurer-Starks et al discussed the importance of not tolerating environments that do not support positive physical and mental health for all patients. Although a foundation exists to treat patients equally in athletic training, Maurer-Starks et al suggested that “More activities, research, and policies are needed to provide support services, dialogue, education, and educational materials to current and future athletic trainers.”

To begin to assess the climate and culture within athletic training facilities as related to LGB student-athletes, a number of studies could be conducted. Because the athletic environment is apparently not yet viewed as safe for LGB student-athletes, we selected ATs as the population of study. Previous researchers on LGB issues have relied upon the use of attitudinal scales and measures to assess the climate toward LGB individuals. Therefore, we developed and conducted a study to evaluate the attitudes of ATs toward LGB student-athletes with the idea that collecting benchmark data of this nature would represent one step forward in helping to better understand the situation and the depth of the challenges that may exist.

Thus, the purpose of our study was to determine heterosexual ATs’ attitudes toward LGB student-athletes at NCAA institutions. By understanding these attitudes, we can help the athletic community to become better informed about creating inclusive environments in athletic health care.

**METHODS**

We took a pragmatic advocacy approach to explore the issue through a quantitative survey instrument that was e-mailed to participants. The surveyed group included the full population of ATs at NCAA institutions (numbering 3134). The research questions were as follows: (1) Does sex, religion, or the presence of a family member or friend who identifies as LGB affect the AT’s attitudes toward LGB student-athletes? (2) Does age affect the AT’s attitudes toward LGB student-athletes? (3) Does working with an LGB student-athlete affect the AT’s attitudes toward LGB student-athletes?

The independent variables were sex (male or female), whether the AT had a family member or friend who identified as LGB (yes or no), religion (Catholic, Protestant, Jewish, Mormon, nondenominational, or no religious affiliation), whether the AT worked with a student-athlete who identified as LGB (yes or no), and age. The dependent variable was the score on The Attitudes Toward Lesbians, Gay Men, and Bisexuals Scale (ATLGB).

**Participants**

Of the 3134 ATs contacted, 1315 (42%) returned the survey. Of the returned surveys, 198 were not complete and, therefore, were not used in the analysis. A total of 1117 surveys were usable, for a response rate of 35.6%. Of the 1117 ATs, 86.3% (n = 964) were heterosexual, 10.1% (n = 113) were attracted to the same sex; 2.8% (n = 31) were attracted to both sexes; 0.5% (n = 6) were uncertain; and 0.3% (n = 3) were asexual. We only analyzed data from the 964 heterosexual participants. This research was approved by the Institutional Review Board of The Ohio University, and implied consent was obtained from participants.

To determine representativeness, we compared the sex and ethnicity of our sample with those characteristics of the National Athletic Trainers’ Association membership, in which certified males constituted 50.5% and certified females, 49.5% of the membership. These values were similar to those of our sample, which was 49.7% male and 50.3% female. The Association also reported that 10.2% of its certified membership belonged to a minority ethnicity, a percentage similar to the 8.1% in our sample.

**Survey Instrument**

The ATLGB consisted of 3 subscales: the Attitudes Toward Gay Men (ATG), Attitudes Toward Lesbians (ATL), and Attitudes Toward Bisexuals (ATB). The ATG and ATL were developed by Herek to assess heterosexuals’ attitudes toward lesbians and gay men and have been found to be reliable. Herek’s method was used to develop the ATB by rewording the statements of the ATLG to include bisexuals. Of the 37 statements, 32 (86%) were reworded. The other 5 statements were removed because they were not applicable to bisexuals. The pilot survey was...
Attitudes toward lesbians
1. Female homosexuality in itself is no problem, but what society makes of it can be a problem.*
2. Many lesbians are very moral and ethical people.*
3. Lesbians just can’t fit into our society.
4. Female homosexuality is a perversion.
5. Female homosexuality is an inferior form of sexuality.
6. It would be easy for me to have a conversation with a woman I know to be a lesbian.*
7. Female homosexuality is a threat to many of our basic social institutions.
8. A woman’s homosexuality should not be a cause for job discrimination in any situation.*
9. The growing number of lesbians indicates a decline in American morals.
10. Female homosexuality is a sin.

Attitudes toward gay men
1. I would not be too upset if I learned my son were [sic] a homosexual.*
2. Male homosexual couples should be allowed to adopt children the same as heterosexual couples.*
3. Male homosexuals should not be allowed to teach school.
4. Male homosexuality is a perversion.
5. If a man has homosexual feeling [sic], he should do everything he can to overcome them.
6. Male homosexuality is merely a different kind of lifestyle that should not be condemned.*
7. The idea of male homosexual marriages seems ridiculous to me.
8. Homosexual behavior between two men is just plain wrong.
9. Just as in other species, male homosexuality is a natural expression of sexuality in human men.*
10. I would not change my feelings toward a male friend if I learned that he were [sic] a homosexual.*

Attitudes toward bisexuals
1. I would not be too upset if I learned that my son or daughter were [sic] bisexual.*
2. I would not change my feelings toward a friend if I learned they were [sic] bisexual.*
3. Bisexuality is a threat to many of our basic social institutions.
4. Bisexuality is detrimental to society because it breaks down the natural divisions between sexes.
5. Bisexuality is a perversion.
6. Bisexuals just don’t fit into our society.
7. Some of this country’s most valuable citizens have probably been bisexuals.*
8. I would like to have bisexual friends.*
9. The growing number of bisexuals indicates a decline in American morals.
10. There is an element of bisexuality in all men and women.*

* Indicates statements that are reverse scored.

Table 1. Attitudes Toward Lesbians, Gay Men, and Bisexuals Scale

Attitudes toward gay men
1. Strongly Agree
2. Agree
3. Neutral
4. Disagree
5. Strongly Disagree

Results of the study showed a significant difference in attitudes towards gay men and bisexuals. The mean score for gay men was 38.2 (SD = 5.3), while the mean score for bisexuals was 35.8 (SD = 5.1). The Pearson correlation coefficient between age and attitudes was found to be significant (r = 0.2, p < 0.05).

Data Collection

The e-mail addresses of ATs employed at NCAA institutions were acquired from the Web site of each institution. A total of 3134 ATs were contacted via 3 mass electronic mailings. The initial contact e-mail contained the consent form and a link to the electronic survey instrument. The ATs provided consent to participate in the study by clicking on the link to the electronic survey instrument. The following 2 mass electronic mailings reminded potential volunteers about the opportunity to participate in the study and the deadline for responses. The electronic survey took 10 to 15 minutes to complete.

Data Analysis

Descriptive statistics were calculated for all demographic and attitude scale variables. To determine the extent to which gender, religion, and having an LGB friend or family member had an effect on the ATs’ attitudes, we calculated a 2 × 2 × 6 analysis of variance. A Pearson correlation was conducted to identify the effect of age on the ATs’ attitudes. Finally, we performed an independent t test to assess any difference between ATs who said they worked with student-athletes who were LGB and ATs who did not. The α level of .05 was chosen for this study. We processed the data using SPSS (version 15.0; SPSS Inc, Chicago, IL).

RESULTS

The 964 participants in our study had an average age of 32.85 ± 8.5 years, and 876 (90.9%) were Caucasian (Table 2). Of the 964 respondents, 561 (58.2%) reported...
having a close friend or family member who identified as LGB, whereas 403 (41.8%) reported not having a close friend or family member who identified as LGB.

The participants were asked to report if they were aware of any student-athletes on the team(s) for which they provided coverage who were LGB during the 2008–2009 academic year. Of the 964 participants, 564 (58.5%) worked with student-athletes who were LGB and 400 (41.5%) did not. Of the yes group, 507 worked with at least 1 student-athlete who identified as lesbian, 175 with at least 1 student-athlete who identified as gay, and 202 with at least 1 student-athlete who identified as bisexual. The ATs reported a total of 4365 LGB student-athletes. Of that number, 3026 (69.3%) identified as lesbian, 558 (12.8%) as gay, and 781 (17.9%) as bisexual.

The mean score on the ATLGB was $64.89 \pm 23.51$ (Table 3). The ATLGB scores were divided into 4 categories: positive ($30–60$), somewhat positive ($61–90$), somewhat negative ($91–120$), and negative ($121–150$). Of the 964 participants, 497 (51.6%) were positive, 326 (33.8%) were somewhat positive, 117 (12.1%) were somewhat negative, and 24 (2.5%) were negative.

The results of the analysis of variance, with ATLGB score as the dependent factor, indicated main effects for gender ($F_{1,963} = 9.51, P < .01$), religion ($F_{5,963} = 29.60, P < .01$), and having a family member or friend who identified as LGB ($F_{1,963} = 6.68, P = .01$) (Figures 1 and 2). Pearson correlation coefficients revealed that age and total score on the ATLGB were related ($r^2 = 0.093, P < .01$) (Figure 3).

The group that worked with student-athletes identifying as LGB had a lower ATLGB score (61.8 ± 22.2) than the group that did not (69.2 ± 24.7). This difference was significant ($t_{962} = -4.898, P < .001$).

**DISCUSSION**

Based on our results, the majority (86.4%) of AT participants held positive or somewhat positive attitudes toward LGB student-athletes. On the ATLGB, males scored higher (less positive attitudes: 69.4 ± 23.7) than females (60.4 ± 22.4). These findings are consistent with those of previous researchers, who noted that males held more negative attitudes toward gay men than did females. Our outcomes were also similar to those of Wills and Crawford, who found that Catholics and those with no religious affiliation had more positive views toward LGBs than did Protestants.

The ATLGB scores revealed 3 distinct groups. The group with the most positive views was composed of Catholics (mean = 60.2), those with no religious affiliation (mean = 50.9), and Jews (mean = 54.3). The group with the middle scores included Protestants (mean = 71.3) and nondenominational individuals (mean = 71.6). The group with the most negative views toward LGBs was Mormons (mean = 105.5), although it is important to note that there were only 8 respondents in this category.

Wills and Crawford also discussed the religiosity of their participants, and Herek stated that the level of religious conservativeness was a better predictor than was religious orientation. However, because we did not address religiosity, our study offers no insight into whether attitudes are associated with survey respondents’ religiosity.

Our results were consistent with those of Herek and Glunt, who found that people who have had contact with LGBs tend to have more
positive attitudes. Participants without a friend or family member who identified as LGB and participants who did not work with a student-athlete who identified as LGB scored higher (ie, more negatively) on the ATLGB.

The interactions among gender, religion, and whether participants had a friend or family member who identified as LGB were significant. This finding is consistent with that of previous researchers.\(^{10,12,16,20}\) With regard to the ATLGB, males held more negative attitudes toward LGBs, regardless of their religious affiliation. Having a friend or family member who identified as LGB was associated with more positive attitudes that overrode trends associated with religious affiliations. Based on this study, Mormons appeared to hold less positive attitudes, but because the sample was small (5 females, 3 males), more research is needed to support or refute any conclusions.

Age was positively correlated with ATLGB scores. However, plotting the distribution showed that younger participants may have had attitudes that were just as negative as those of older participants and vice versa. Wills and Crawford\(^{20}\) found that people between the ages of 20 and 50 years held more positive views than did those younger than 20 or older than 50. None of the participants in this study were younger than 20 years; those older than 50 years held both positive and negative views.

When ATs’ attitudes toward LGB persons were considered with respect to whether they worked with student-athletes who identified as LGB, we noted a significant relationship. Those ATs who provided medical coverage for teams with LGB student-athletes had more positive attitudes than those who did not. This finding is consistent with that of Roper and Halloran,\(^{16}\) who noted that heterosexual student-athletes who knew a lesbian or gay person had more positive attitudes toward them. Unclear from our results is whether the ATs who reported providing coverage to teams having no LGB student-athletes actually did work with student-athletes who identified as LGB.

Our study had some limitations. Homophobia is not a comfortable topic for everyone. It may be that those individuals who felt more comfortable with the topic were more likely to respond to the survey than did those who were not comfortable. A second limitation came in the reporting of whether an AT provided care for a student-athlete who identified as LGB. The ATs were asked, “Are

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**Figure 1.** Attitudes Toward Lesbians, Gay Men, and Bisexuals Scale scores by religious affiliation. Range = 30 (positive attitude) to 150 (negative attitude).

**Figure 2.** Attitudes Toward Lesbians, Gay Men, and Bisexuals Scale scores by religion based on presence or absence of a friend or family member who identified as lesbian, gay male, or bisexual. Range = 30 (positive attitude) to 150 (negative attitude).
you aware of athlete(s) on the team(s) you provided medical coverage for who is (are) lesbian, gay, or bisexual during this 2008–2009 academic year?" The "awareness" concept was left to the discretion of the participant. No attempt was made to determine if the student-athlete had told the AT; the AT was told by another student-athlete, coach, or staff member; or the AT assumed the student-athlete’s orientation. Also, it may be that some student-athletes were aware of their AT’s attitudes toward LGB and thus had not “come out” to the AT. Another factor may relate to the environment of the athletic department or the athletic training department at the university. If the environment is not inclusive, LGB student-athletes may not be open about their sexual orientation. A final limitation involved the gathering of e-mail addresses for our sample. We relied solely on institutional Web sites to collect the ATs’ addresses.

CONCLUSIONS

We examined the attitude of ATs toward NCAA LGB student-athletes via the ATLGB scale in order to begin to assess the climate and culture within athletic training facilities. Most ATs held slightly positive to positive attitudes toward LGB student-athletes. Women appeared to hold more positive attitudes toward LGB student-athletes than did men. Those ATs who had LGB friends or family members or who were aware of LGB student-athletes within their programs appeared to hold more positive attitudes toward LGB student-athletes than did their counterparts. A small but significant portion (14.6% of participants) held negative attitudes toward LGB student-athletes.

Holding a negative attitude toward LGB student-athletes does not necessarily translate into negative behavior toward them, just as positive attitudes toward LGB individuals do not necessarily translate into positive (non-negative) behavior. However, we suggest that the greater the positive attitude, the more likely the positive behavior toward LGB student-athletes, and vice versa. Even though many attitudes were on the slightly positive to positive side of the attitude spectrum, the existence of 15% negative attitudes indicates that greater attention may be needed to ensure that the athletic training environment is open to all student-athletes. As Maurer-Starks et al27 stated, “The profession should not tolerate an environment that does not support positive physical and mental health for all its patients, regardless of their characteristics.”

Understanding AT attitudes toward LGB student-athletes sets the foundation for further research and supports the need for further education in this area. We recommend that investigators determine how all student-athletes, including LGB student-athletes, perceive the athletic training room environment as it relates to diversity issues, including sexual orientation. Strategies should be identified to provide a more inclusive environment. Our study should be repeated and expanded to include the transgendered population. From a programmatic perspective, we advocate extension of the “It Takes a Team” Education Program to include the development and distribution of an action guide for ATs, so that they can become more educated and aware of the topic and improve the environment of athletic training facilities, enabling all student-athletes, including LGB student-athletes, to feel safe and respected. In addition, assessing other diversity education initiatives would be helpful in determining the

Figure 3. Scatterplot demonstrating the relationship between Attitudes Toward Lesbians, Gay Men, and Bisexuals Scale score and age. Range = 30 (positive attitude) to 150 (negative attitude).
effectiveness of diversity education in athletic training education programs.

REFERENCES


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