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## Changing Attitudes toward LGBT Students: An Analysis of an Awareness Training Paradigm Aimed at Increasing Pro-LGBT Attitudes

Melissa A. Deese  
*University of North Georgia*

Bryan L. Dawson  
*University of North Georgia*

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Suicide is the third leading cause of death among young people in the U.S., resulting in the loss of approximately 4,600 youths per year. A study conducted by the Centers for Disease Control and Prevention (2012) found that 15.8 % of young people had seriously considered suicide in the past year and that 7.8 % made a suicide attempt. Non-heterosexual youth were at an increased risk for suicide, being four times more likely to attempt suicide than their heterosexual peers. Suicide attempts by non-heterosexual youth are six times more likely to result in injury, poisoning, or overdose that requires medical treatment (Centers for Disease Control and Prevention, 2011). In order to understand this increased risk, a number of researchers have examined what factors may contribute to the suicide risk of members of this group. Many potential causes include increased likelihood of a lesbian, gay, bisexual, or transgender (LGBT) young adult being ostracized from social and peer groups, as well as being exposed to hate speech and bullying. In areas where there is a negative climate for diversity, members of targeted groups, such as LGBT people, have an increased likelihood to become overburdened and suffer from negative health outcomes, including increased stress and anxiety (Dawson, Thomas, & Goren, 2013). Youth who identify as bisexual or homosexual are at increased risk for adverse physical, social, and psychological outcomes. These outcomes include emotional problems, difficulty in school, verbal abuse from peers, physical assaults, sexual abuse, trouble with the law, substance abuse, eating disorders, and suicide attempts (Saewyc, Bearinger, Heinz, Blum, & Resnick, 1998). Cleary (2000) found that students who reported suicidal behavior were those who were subject to frequent victimization. A popular form of bullying among adolescents consists of attempts to emasculate another person, including calling someone “gay” or “faggot” even if they are not homosexual. Homophobic humor is also commonly present in the conversations of adolescent males (Kehily & Nayak, 1997). Ghail and Haywood (2012) described how adolescent boys are more likely to engage in suicidal behavior due to societal pressures to be masculine. Therefore, homosexual males are at a higher suicidal risk than homosexual females, considering that it is more acceptable for a female to be homosexual than a male, and also that males are, in general, more homophobic and more likely to display homophobic behavior toward their peers (Nayak & Kehily, 1996). Homosexuals also report more problems with their parents, including unaccepting attitudes and conflict, than comparable groups of heterosexuals. Non-heterosexual youths who experience rejection from their families during adolescence are six times more likely to report high levels of depression and eight times more likely to have attempted suicide when compared with those young people who experienced little or no rejection from family members (Leo, 1979; Ryan, Russell, Huebner, Diaz, & Sanchez, 2010). Instances of homophobic bullying and rejection are factors that contribute to the higher suicide risk of LGBT youth. In order to lower these risks among non-heterosexual youths, it is important to consider the history, attitudes, and stigmas that surround homosexuality and how they change over time.

Beach and Ford (1951) conducted a worldwide survey of sexual behavior and found that homosexual behavior was widespread in a large number of human societies. They reported that homosexual behavior was considered normal and socially acceptable for 49 of the 76 societies they studied. Yet, even in many of these societies, this approval was limited to certain expressions of homosexuality such as ritual acts, puberty rites, and youthful premarital affairs. None of these societies studied were predominantly or exclusively homosexual. In the remaining 27 societies, adult homosexual activity was reported to be absent, rare, or practiced only in secrecy. The findings of Beach and Ford reveal that homosexual behavior occurs in many

societies and is not always reprimanded (see Kimmel, 2006; Knauff, 2003). In fact, up until the late 1960s, developmental psychologists in the United States proposed that adolescents would go through a homosexual phase, and that it led to the transition to a normal heterosexual life. The failure to transition to a heterosexual orientation, however, was believed to lead to pathology (Spurlock, 2002). Some adult homosexuals during this time were subject to attempts at a medical intervention, which included psychotherapy, electric shock, and, in some cases, even lobotomy. Homosexuality was officially classified as a mental disorder in the American Psychological Association's first *Diagnostic and Statistical Manual of Mental Disorders* (DSM) in 1952, where it was designated as a personality disturbance. The view of homosexuality as a mental illness at the time coincided with predominant societal attitudes. A later edition of the DSM, published in 1968, listed homosexuality as a sexual deviation, but it was no longer categorized as a personality disturbance. Homosexuality was officially removed as a disorder from the DSM in 1973, as attitudes toward it slowly started to change (Spurlock, 2002). However, homosexuality continued to be viewed as a perversion or psychological disturbance by many.

While the majority of Americans today agree that homosexuality is not a mental illness, many are unwilling to accept homosexuality as a normal form of sexual expression. Previous studies have found high levels of homophobia in schools and other areas of society occupied mainly by young people (e.g., Kehily & Nayak, 1997; Mac an Ghaill & Haywood, 1994; Nayak & Kehily, 1996). A previous study conducted at North Georgia College & State University in 2004 regarding attitudes toward homosexuals determined that negative attitudes toward homosexuality were widely present. While the faculty/staff largely supported same-sex marriage and the right to adopt children into these marriages, the student population largely did not (Wadell, Mundy, & Dolan, 2004). Although a significant majority of the students responded that homosexuals should have the same civil rights as heterosexuals, most were unsupportive of same-sex marriage and adoption rights. A breakdown of the demographics reveals that the faculty were the most supportive, while members of the Corps of Cadets were the least supportive. The vast majority of faculty/staff and students responded that they knew someone who was homosexual, yet, according to the study, 60 % of all faculty/staff and students reported hearing negative comments about gays, lesbians, and bisexuals, and 53 % responded that they did not know if those of a non-heterosexual orientation felt safe on campus. The overwhelming majority did indicate that homosexuals had the right to feel comfortable in their environment. However, results from the 2004 study showed that of approximately 9 % of faculty/staff and 6 % of students who identified with an orientation other than heterosexual, nearly half reported not feeling safe on campus. A harmful environment toward LGBT persons on campus can present a barrier to learning for the LGBT students and a barrier to connecting with students for the LGBT faculty/staff, and puts both LGBT students and faculty at an increased risk for bullying and potential for suicide.

Some of the main factors affecting people's attitudes toward homosexuals are gender, beliefs about the cause of homosexuality, and religiosity. Adolescent females tend to be more accepting of homosexuality than their male counterparts, with males engaging in more prominent homophobic behavior (Sharpe, 2002). Those that subscribe to the view that homosexuality is adopted by choice are less accepting because a choice is viewed as internal and controllable. In contrast, those people who believe homosexuality has a biological origin hold more positive attitudes toward homosexuals (Haider-Markel & Joslyn, 2005; Hewitt & Moore, 2002; Tygart,

2000; Whitehead, 2010; Wood & Bartowski, 2004). Studies also show that those who are more religious are more likely to view homosexuality as a choice, while those who are less religious tend to view homosexuality as biological in nature. Therefore, more religious individuals are more prone to initial negative attitudes and are more resistant to attitude change compared to non-religious individuals (Whitehead, 2010; Whitehead & Baker, 2012).

In order to foster safety for members of the LGBT community on a university campus, it is important to change the attitudes of the student body as a whole. One prominent method of attitude change is the contact hypothesis, which states that prejudice can be reduced by interaction between different groups, in this case, contact between heterosexuals and homosexuals (Allport, 1954). Contact allows individuals to confront stereotypes or beliefs they may have long held with the realities of the targeted group. For instance, while a student may buy into the stereotype that homosexual males are effeminate, his/her real world encounter with homosexual males may demonstrate that not all gay men are effeminate and that many exhibit primarily traditionally masculine characteristics. Through increased contact with members of a target group, individuals broaden their perspectives and confront previously held stereotypes that may not be necessarily accurate. Contact with a homosexual has been shown to significantly influence overall attitudes toward homosexuals in a positive direction (Burkholder & Dineen, 1996; Cohen & Lotan, 1995). When direct contact is not possible, other methods shown to foster more positive attitudes are exposure to visual media that portrays homosexuals (Levina, Waldo, & Fitzgerald, 2000; Riggle, Ellis, & Crawford, 1996) and training focused on raising cultural awareness (e.g., Gutiérrez, Kruzich, Jones, & Coronado, 2000; Roberson, Kulik, & Pepper, 2001). Developing awareness in a training setting can help trainees gain useful insight into the similarities and differences that exist between them and the target group (in this case, LGBT people). Ideally, as individuals learn more factual evidence about the cultural and social similarities/distinctions between themselves and the target group, they will rely less on loosely supported stereotypes and instead focus on the factual evidence presented before them when making attitudinal or behavioral decisions in the future. Studies show that providing a biological explanation of sexual orientation can have a positive effect on attitudes as well (Boysen & Vogel, 2007; Landen & Innala, 2002; Pratarelli & Donaldson, 1997). There has been a large amount of research indicating a strong biological connection with homosexuality. Bailey and Pillard (1991) found that 52 % of identical twins and 22 % of fraternal twins were concordant for homosexuality. The rate of homosexuality among non-twin biological siblings was 9.2 %, significantly lower. Blanchard and Klassen (1997) reported that having older brothers increases the odds of being homosexual by 33 % for each brother. The hormonal theory of sexuality states that, just as exposure to certain hormones (such as androgens) plays a role in fetal sex differentiation, it can also influence an individual's sexual orientation. Differences that result from hormones and genes interacting with developing brain cells are believed to be the basis of sex differences in the brain (Bao & Swaab, 2011; Garcia-Falgueras & Swaab, 2010; Savic, Garcia-Falgueras & Swaab, 2010). Studies have also shown that there are differences in certain structures of the heterosexual and homosexual brain, including the hypothalamus (Swaab, Chung, Kruijver, Hofman, & Ishunina, 2002; LeVay, 1991).

## **Current Study**

The current study is built upon the awareness-raising paradigm by informing participants about the biological and social facts regarding homosexuality. This study aimed to investigate whether changes in attitudes toward homosexuals occurred after presentation of information suggesting either a biological basis for homosexuality, information clarifying social differences and similarities between homosexuals and heterosexuals, or a combination of both. By raising awareness of the biological influences on homosexuality, providing evidence that being homosexual is an inherent biologically rooted aspect of the self and not necessarily a choice, we hypothesized that individuals' pro-LGBT attitudes would increase post video. Similarly, by raising awareness of the social and civil rights issues faced by homosexuals, we expected that participants would report heightened pro-LGBT attitudes. Finally, by combining a biological justification for homosexuality with information on the social oppression that stems from stereotypes, we expected the greatest impact on participant attitudes toward LGBT. Raising awareness across campus should serve two purposes: Increasing the pro-LGBT attitudes of students creates a safer campus for LGBT students, and demonstrating institutional support for LGBT students on campus creates a more positive and accepting climate for all students on campus.

## **Method**

### **Participants**

224 students (Male = 61, Female = 163; age  $M = 20.68$ ,  $SD = 2.77$ ) participated in this study. Participants were recruited from a midsize southeastern university and completed surveys using *Instant Survey*. Freshmen ( $n = 81$ ), Sophomores ( $n = 52$ ), Juniors ( $n = 53$ ), and Seniors ( $n = 38$ ) completed the study. The majority of participants were white ( $n = 200$ ). Most participants ( $n = 221$ ) knew someone who was LGBT. Due to the low number of individuals who reported being homosexual ( $n = 2$ ), bisexual ( $n = 12$ ), or other ( $n = 4$ ), only those identifying as heterosexual ( $n=206$ ) were included in the analyses.

### **Procedure**

First, participants completed the 20 item Heterosexual Attitudes toward Homosexuality scale (HATH) (Larson, Reed & Hoffman, 1980),  $\alpha = .964$ . This scale contains 20 items pertaining to the rights of homosexuals, the labeling of homosexuality, and willingness to associate with homosexuals and employs a five-point Likert scale, ranging from [1] "strongly disagree" to [5] "strongly agree." HATH sample items include such statements as "Homosexuality is immoral," "Homosexuality is a sin," and "Homosexuals should be accepted completely into our society."

Next, participants were randomly assigned to either one of three video conditions or one of two control conditions. The first video aimed at promoting awareness of biological differences between heterosexuals and homosexuals, the second video explained social and civil rights disparities between heterosexuals and homosexuals, and the third video was a combination of both the biological cause and social disparity videos. The biological cause video was taken from

a documentary produced by National Geographic titled *In the Womb: Identical Twins*. The video can be found at <https://www.youtube.com/watch?v=rpazFUachHYk>. The social disparity video (found at <https://www.youtube.com/watch?v=drbfMx1xJIw>) includes information regarding the prevalence of homosexuality as well as the laws regarding same-sex marriage, adoption rights, and other social inequalities that currently exist between heterosexuals and homosexuals. Each video lasted between four and five minutes, with the exception of the combined video, which lasted roughly nine minutes. The first control condition presented the participant with a neutral nonLGBT-related video in place of the manipulation video. The second control condition was similar to the first control, but with the order of the pre-test and post-tests switched for the purpose of detecting any test-retest bias.

After viewing the video, participants completed the 20 item Attitudes toward Lesbians and Gay Men Scale (ATLG) (Herek, 1984; 1988),  $\alpha = .959$ , to assess changes in attitudes after viewing an awareness video. The ATLG includes 20 items scored on a five-point Likert Scale ranging from [1] “strongly disagree” to [5] “strongly agree,” with half addressing attitudes toward lesbians and half addressing attitudes toward gay men. Research has demonstrated the ATLG to be reliable and valid (Herek, 2000; Lance, 2002; Pettigrew, 1998). ATLG sample items include “Gays and Lesbians just can't fit into our society,” “Male and Female homosexuality is a sin,” and “Male and Female homosexuality is a perversion.” The HATH and the ATLG have been used in conjunction in previous studies and have been shown to measure attitudes toward LGBT people with equal effectiveness (Crisp, 2006; Crisp, 2007; Cardenas & Barrientos, 2008). For ease of interpretation, items were coded so that higher scores on both scales indicated more positive attitudes and lower scores indicated more negative attitudes.

Participants also completed the five item Duke University Religion Index (DUREL) (Koenig, Meador, & Parkerson, 1997),  $\alpha = .823$ . The DUREL has been shown to have strong internal reliability and to accurately assess the religiosity of a particular individual (Koenig & Bussing, 2010). This scale contains five items pertaining to religious involvement, with answers scored on a five-point Likert scale ranging from “definitely not true” to “definitely true.” DUREL sample items include “My religious beliefs are what really lie behind my whole approach to life” and “I try hard to carry my religion over into all other dealings in life.” All participants completed several demographic questions, including gender, sexual orientation, age, class level in school, membership in the Corp of Cadets, and number of LGBT people they knew in real life.

## Results

### Pre-Test Post-Test Differences

Paired Samples t-tests were performed to determine any significant effect of the video conditions. Participants in the control (T1:  $M = 3.88$ ,  $SEM = .12$ ; T2:  $M = 3.85$ ,  $SEM = .10$ ) did not significantly differ in their LGBT attitudes,  $t(62) = .532$ ,  $p = .596$ . Similarly, participants in the flipped control (where the ATLG was administered before the HATH) (T1:  $M = 3.90$ ,  $SEM = .13$ ; T2:  $M = 3.96$ ,  $SEM = .17$ ) did not significantly differ in their LGBT attitudes,  $t(30) = .828$ ,  $p = .414$ . Since there were no differences regardless of order of presentation of the scales, only the

control group that received scales in the same order as the experimental conditions was used for further analyses.

Participants in the Biological Cause condition (T1:  $M = 3.94$ ,  $SEM = .15$ ; T2:  $M = 3.61$ ,  $SEM = .18$ ,  $t(29) = 4.380$ ,  $p < .001$ ) reported a significant decrease in the positivity of their attitudes, as did those in the Social Disparity condition (T1:  $M = 3.87$ ,  $SEM = .12$ ; T2:  $M = 3.55$ ,  $SEM = .14$ ,  $t(39) = 7.369$ ,  $p < .001$ ) and the Combined condition (T1:  $M = 3.70$ ,  $SEM = .14$ ; T2:  $M = 3.40$ ,  $SEM = .14$ ,  $t(41) = 4.652$ ,  $p < .001$ ). None of the conditions differed in T1, in their attitudes,  $F(3,171) = .553$ ,  $p = .647$ ,  $\eta_p^2 = .010$ . Therefore, all participants began the study with similar attitudes.

### **Corps vs. Civilian Differences**

Due to the findings, more exploratory analyses were conducted to better ascertain the effects seen. Based on the findings of prior studies (Wadell, et al., 2004), differences between students in the Corps and civilian students were assessed using independent t-tests. However, students in the Corps ( $n = 18$ , T1:  $M = 3.79$ ,  $SEM = .21$ ) were not significantly different in their pre-video attitudes compared to civilization students ( $n = 157$ , T1:  $M = 3.85$ ,  $SEM = .07$ ),  $t(173) = -.263$ ,  $p = .793$ , nor in their post-video attitudes ( $M = 3.68$ ,  $SEM = .21$ ;  $M = 3.62$ ,  $SEM = .07$ ),  $t(173) = .269$ ,  $p = .789$ . These findings do not echo the findings of previous evaluations of LGBT attitudes nearly a decade ago at North Georgia College and State University (Wadell, Mundy, & Dolan, 2004).

### **Gender Differences**

Next, male and female differences in attitudes were assessed using independent t-tests to determine if participants' gender was influencing the effects seen post-video. Female students (T1:  $M = 3.90$ ,  $SEM = .08$ ) did not exhibit significantly more pro-LGBT attitudes than male students (T1:  $M = 3.71$ ,  $SEM = .13$ ),  $t(173) = -1.294$ ,  $p = .197$ , and the two groups held similar LGBT attitudes post video as well (T2:  $M = 3.68$ ,  $SEM = .08$ ; T2:  $M = 3.49$ ,  $SEM = .14$ )  $t(173) = -1.35$ ,  $p = .180$ .

### **Predicting LGBT Beliefs**

Finally, regression analyses were performed, including the control group, to assess whether the strength of religious beliefs ( $M = 3.79$ ,  $SEM = .10$ ) and how many LGBT people the participant knew prior to the study ( $M = 3.54$ ,  $SEM = .09$ ) predicted initial attitudes. Prior to any video exposure, both variables explain a significant amount of variance in LGBT attitudes,  $R^2 = .359$ ,  $F(2,163) = 45.676$ ,  $p < .001$ . Holding stronger religious beliefs ( $B = -.325$ ) led to more negative attitudes toward LGBT members, while having more contact with LGBT individuals in one's everyday life led to more positive attitudes ( $B = .237$ ). These variables, when including the control group, do significantly predict post-video attitudes,  $R^2 = .355$ ,  $F(2,163) = 44.892$ ,  $p < .001$ . Holding stronger religious beliefs ( $B = -.362$ ) led to more negative attitudes toward LGBT members, while having more contact with LGBT individuals in your everyday life led to more positive attitudes ( $B = .173$ ).

Regression analyses were run excluding the control group to assess whether the strength of religious beliefs ( $M = 3.82$ ,  $SEM = .08$ ) and how many LGBT people the participant knew prior to the study ( $M = 3.47$ ,  $SEM = .09$ ) predicted initial attitudes. Prior to any video exposure, both variables explain a significant amount of variance in LGBT attitudes,  $R^2 = .296$ ,  $F(2,103) = 21.607$ ,  $p < .001$ . Holding stronger religious beliefs ( $B = -.317$ ) led to more negative attitudes toward LGBT members, while having more contact with LGBT individuals in one's everyday life led to more positive attitudes ( $B = .240$ ).

Significantly, however, when the control condition was removed, these two variables no longer significantly predicted post-video attitudes,  $R^2 = .043$ ,  $F(2,103) = 2.050$ ,  $p > .05$ . These results suggest that the video intervention had a significant impact regardless of previous contact with LGBT people or religious beliefs. Surprisingly, though the *difference* in pro-LGBT attitudes noted in pre-video tests *diminished* in the post-video test, the change was not *toward* support of LGBT people, but rather *against* them.

## Discussion

The current study sought to examine the potential differences of three training focuses in the pursuit of increasing pro-LGBT attitudes. Based on the results, the hypothesis that individuals exposed to the combined Biological Cause and Social Disparity condition would have significantly more positive post-test attitudes toward the LGBT community was not supported. In fact, the results suggest that regardless of the content of the training video, participants' pro-LGBT attitudes were significantly decreased. This effect may be due, in part, to over-exposure of LGBT rights and equality arguments in mass media. Individuals who initially held high pro-LGBT attitudes reported significantly lowered pro-LGBT attitudes when challenged on those attitudes and presented with video footage that demonstrated differences between heterosexuals and homosexuals, possibly due to a psychological satiation effect (McSweeney and Swindell, 1999). The satiation effect suggests that people may become habituated to constant exposure to an idea or topic and that after a certain point, any additional attempts to sway or change their opinions may result in a negative effect on the part of the viewer. For instance, in recent years, more media attention has focused on the struggle of LGBT members in our society and their gains and losses in terms of civil rights. Heterosexual people may become worn out by the messages and topic as a whole and, when exposed to a direct message concerning LGBT rights, may be more likely to report negative attitudes. Similar effects have been reported in diversity training, in which companies have seen massive levels of backlash when employees feel as though they have been scolded or perceive that the training mechanism or trainers think they already hold negative viewpoints (Holladay, Knight, Paige, & Quinones, 2003; Kaplan, 2006; Karp & Sammour, 2000).

Moreover, the reduced causal relationship of religious beliefs and prior contact in determining LGBT attitudes before and after videos points to the effects of the video itself in diminishing pro-LGBT attitudes. Prior to viewing the videos, religious beliefs and prior contact played a significant role in explaining LGBT attitudes; post video, they explained very little. This suggests that participants' reduced pro-LGBT attitudes were largely due to the training intervention. Religious beliefs and prior contact explained 29.6 % of the variance in LGBT attitudes pre-video yet only explained 4.3 % in the post-video responses. This suggests that the

exposure to the videos is more likely the cause of the change in attitude rather than long-held beliefs or contact. It is possible that individuals are hesitant to display their true attitudes in the pre-test measure due to a social desirability bias, which is the tendency of respondents to answer questions in a manner that will be viewed favorably by others. They may be more comfortable asserting their negative views after being exposed to a direct message regarding LGBT rights due to the satiation effect, burnout on the topic, or beliefs that the researchers assumed participants held more negative attitudes to begin with.

## **Implications**

Although our study began as an examination of possible alternatives to changing LGBT attitudes, we have found that this particular method of training may actually decrease pro-LGBT attitudes, which may in turn lead to more potential backlash from college students. However, in keeping with Allport's (1954) Contact Theory, individuals who know more LGBT people in their real life hold more pro-LGBT attitudes than those who know very few LGBT people. While we did not assess contact directly through experimental manipulation, many individuals had contact prior to the study. Having real world contact with different group members allows everyone the opportunity to become familiar with and get to know one another in an often friendly setting. Friendships are beneficial for all parties because they allow members from nondominant groups (LGBT members) to explore and express themselves in a relatively open and free environment and allow dominant group members (heterosexual members) to dispel previously conceived notions and expand their awareness of LGBT members.

Perhaps the most effective way to increase positive attitudes toward LGBT members on campus is by allowing heterosexual students the chance to interact and have contact with more members who are LGBT. This may represent a bit of a catch-22: If LGBT students do not perceive their campus as a welcoming environment, then they are less likely to disclose their sexuality to others, and as a result, heterosexual students' beliefs may not be swayed by their friendships with LGBT students. However, in our sample, 98.6 % (n = 221) individuals in our study reported that they knew, on average, three individuals in their life who were LGBT. Since participants' initial attitudes toward LGBT members were fairly positive, and became more negative only after training, it follows that "naturally" formed relationships between LGBT and nonLGBT students produce better results than recognizably artificial ones do.

Future studies should examine the effects of other forms of training on campus, including real life contact, group discussion, and in-person lecture with LGBT trainers who embody the characteristics of the majority of the student population (i.e. white and female) that have proven effective in other forms of diversity training (Roberson, Kulik, & Pepper, 2001). Furthermore, future studies should reexamine the climate for LGBT members on campus as a follow up to the 2004 study, as well as the antecedents to LGBT students' disclosure of their identities and the consequences they may have experienced.

## **Conclusion**

While the current study sought to raise awareness, as outlined by Roberson and colleagues (2001), participants may have felt targeted or that the researchers assumed they held

previously negative beliefs, resulting in more negative climate for LGBT acceptance. Based on the results, the most effective method of increasing the climate for LGBT diversity is through contact with LGBT individuals, though the likelihood is greatly reduced if the campus climate regresses toward the negative when exposed to training. However, many of the students reported knowing several individuals in their lives who were LGBT and initially held moderately positive attitudes toward LGBT members. Regardless of future training formats, more research should be conducted to investigate the backlash effect of LGBT training in a college setting. Furthermore, more research should investigate productive ways of increasing contact between heterosexual and LGBT students on college campuses, as it appears to have the largest positive effect in shifting attitudes.

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