

Attitudes Toward Gay Men and Lesbians Among College Students at a Christian University: Examining In-Group Social Influence, Attitude Functions, and Ally Identity

Nathan Mather

Azusa Pacific University

Abstract

Discrimination toward nonheterosexuals stems from negative attitudes, which serve psychological functions. This study examined in-group social influence on Christian college students' attitudes toward gay men and lesbians and LGBT ally identity. It was predicted that participants' attitudes would reflect attitudes they were exposed to and that LGBT ally identity would relate to the value-expressive attitude function. Participants (N=140) watched videos expressing positive, negative, and uncertain views on the intersection of homosexuality and Christianity and completed a survey. The videos had no effect. However, negative attitudes were negatively correlated with number of nonheterosexual friends. Positive correlations were found between ally identity and the experiential-schematic attitude function. A negative correlation was found between ally identity and the defensive attitude function. As hypothesized, exposure to nonheterosexual friends predicted positive attitudes. This study validated previous research, such that allies had more positive experiences with nonheterosexuals and responded less defensively to them.

Key Words:

attitude functions, LGBT, Christian college students, ally identity

Despite recent political advances in the legal rights of people who identify as LGBTQ, sexual minorities continue to face oppression in the United States. In 2012, 19.6% (1,135 cases) of single-bias hate crimes reported to the Federal Bureau of Investigation [FBI, 2013] were targeted at people because of their sexual orientation, and this is an underestimate as many hate crimes go unreported (Herek & McLemore, 2013). Research has shown the motivation behind these hate crimes tends to be rooted in sexual stigma, or "the negative regard, inferior status, and relative powerlessness that society collectively accords to nonheterosexual behaviors, identity, relationships, or communities" (Herek, 2009, p. 66). When stigma is internalized, negative attitudes toward members of an out-group become the foundation for prejudice (Jackson, 2011), in this case, sexual prejudice (i.e., prejudice directed at a person

based on that person's sexual orientation) (Herek, 2009).

Both people who exhibit sexual prejudice and people who identify as LGBT allies (supporters/ advocates) have psychological reasons for their attitudes. Herek (1987) identified four major psychological functions for peoples' attitudes toward gay men and lesbians: an experiential-schematic function (allowing people to make sense of their past experiences with nonheterosexuals), a social-expressive function (allowing people to align their views with the views of people whom they trust or respect), a defensive function (allowing people to protect themselves from the perceived threat of nonheterosexuals), and a value-expressive function (allowing people to reduce cognitive dissonance by aligning opinions about nonheterosexuals with moral convictions). Understanding people's attitude functions allows

educational programs to more strategically address attitude change, which can reduce prejudice (Beelmann & Heinemann, 2014). For example, if a group of students with high social-expressive attitude function exhibited a high level of sexual prejudice, attitude change would likely occur if respected members of the students' in-group exhibited positive attitudes toward gay men and lesbians because those with social-expressive attitudes tend to base their attitudes on the attitudes of those they respect (Herek, 1987). Also, in-group social influence would likely be effective in shaping attitudes because, according to Social Identity Theory, people tend to favor the members of their in-group (Turner, Brown, & Tajfel, 1979), and people tend to conform to in-group norms and attitudes toward out-groups (Van Knippenberg & Wilke, 1992).

In addition to examining functions of attitudes toward gay men and lesbians, past studies have also examined the relationship between attitudes and religiosity. Negative attitudes toward gay men and lesbians positively correlated with several religious factors, including: frequency of religious service attendance, self-ratings of religiosity, intrinsic religious orientation, religious fundamentalism, and Christian orthodoxy (Whitley, 2009). However, other factors among people who are religious negatively correlated with negative attitudes toward gay men and lesbians, such as having close gay and lesbian friends (Cunningham & Melton, 2013), having a quest religious orientation (Whitley, 2009), and the self-ascribed identity of being someone who is not prejudiced (Borgman, 2009).

A recent development in the study of attitudes toward gay men and lesbians has been the LGBT ally identity and what motivates people to become allies (Russel, 2011). LGBT allies are heterosexual and/or cisgender people who support and advocate for LGBT communities at multiple levels, ranging from one-on-one interactions to large-scale social activism (Rostosky, Black, Riggle, & Rosenkrantz, 2015). Research has shown that heterosexual LGBT allies are motivated by a commitment to social justice and living congruently with their

values. This motivation extends beyond interaction with LGBT persons and promoting LGBT equality; rather, LGBT advocacy appears to stem from broader ethical or religious convictions (Russel, 2011). Also, females have consistently been found to be more supportive of LGBT individuals (Kite, 1984), and, with the recent development and popularization of the term "ally", to identify as LGBT allies (Russel, 2011).

The present study expanded on previous research in order to investigate two questions related to attitude functions. First, it sought to examine how in-group social influence could impact attitudes toward gay men and lesbians among college students at a Christian university. This influence was presented through videos of actors, posing as Christian college students, voicing their opinions on the intersection of homosexuality and Christianity. It was predicted that the videos would impact participants' attitudes toward gay men and lesbians. More specifically, participants who watched Positive Views Video would express the least negative attitudes, participants who watched Negative Views Video would have the most negative attitudes, and participants who watched Uncertain Views Video would have attitudes more negative than those who watched Positive Views Video but less negative than those who watched Negative Views Video. Participants scoring higher on the social-expressive attitude function were expected to most align their attitudes with the views expressed in the video they watched. This is because those basing their attitudes toward gay men and lesbians on the opinions of in-group others were expected to be more affected by the social influence of the videos.

The second objective of this study was to examine how attitudes toward gay men and lesbians related to LGBT ally identification among students at a Christian university, specifically considering the role of attitude functions. It was predicted that students expressing less negative attitudes would be more likely to identify as allies of the LGBT community. Those scoring high on the value-expressive attitude function and expressing less

negative attitudes toward gay men and lesbians would likely identify as allies because previous research has suggested that many people become LGBT allies in order to express their values (Russel, 2011).

Method

Participants

Participants in this study were 140 young adult college students at an evangelical Christian university in southern California recruited from introductory psychology classes. Their participation in psychology research fulfilled a course requirement. About three-fourths of participants identified as female ($n=107$, 77%) and the rest as male ($n=32$, 23%). The majority of participants were White/Caucasian ($n=66$, 47.5%), and the rest were Hispanic/Latino ($n=33$, 23.7%), Asian/Asian American ($n=19$, 13.7%), Biracial/Multiracial ($n=12$, 8.6%), Black/African-American ($n=8$, 5.8%), or Native American ($n=1$, 0.7%). Most participants identified as Protestant/Christian ($n=83$, 59.7%). Others identified as Catholic/Greek Orthodox ($n=29$, 20.9%), spiritual but not religious ($n=12$, 8.6%), atheist/agnostic ($n=1$, 0.7%), or other ($n=14$, 10.1%). Nearly all participants identified as heterosexual ($n=132$, 95%), and the rest identified as bisexual ($n=4$, 2.9%), homosexual ($n=1$, 0.7%), or other ($n=2$, 1.4%). Participants were intentionally sampled from a Christian university in order to better understand attitudes toward gay men and lesbians in the context of this specific population.

Materials

Videos. Two actors were recruited to pose as Christian college students for the videos. Both were White and in their early twenties. One was female and the other male. For each video, the actors sat in the same position on a couch with a white wall behind them. Each video began with white text over a black screen reading: "Homosexuality is a topic of discussion for many young Christians today. To find out more about current perspectives, we asked some Christian college students what they think." Each video

then alternated between questions (presented in the same format as the introductory statement) and responses from the female and male actors. The questions were the same in each of the three videos: "What is your opinion on homosexuality and Christianity?," "Do you have any friends who are gay and Christian?," and "Would you consider yourself an ally (supporter) of the LGBTQ community?" The responses were formatted similarly, but the underlying views presented in each of the videos differed. Positive Views Video presented a view affirming the integration of homosexuality and Christianity, Uncertain Views Video presented a view of uncertainty, and Negative Views Video negated the integration of homosexuality and Christianity.

Measures

The 74-item survey consisted of four subscales and demographic questions. SurveyMonkey was used to create the survey. All participants completed the survey in the same order: Religious Orientation Scale, Quest Scale, Modern Homonegativity Scale, Attitude Function Inventory, and demographics.

Religious orientation scale. Extrinsic and intrinsic religiosities were measured using the 20-item Religious Orientation Scale (Allport and Ross, 1967). Sample items for the extrinsic subscale included: "Although I believe in my religion, I feel there are many more important things in my life" and "I pray chiefly because I have been taught to pray." For the intrinsic subscale, items included: "I try hard to carry my religion over into all my other dealings in life" and "Quite often I have been keenly aware of the presence of God or the Divine Being." Participants rated these items on a Likert scale of 1 to 5, 1 being *strongly disagree* and 5 being *strongly agree*. The Religious Orientation Scale has been shown to be fairly reliable (Cronbach's $\alpha = 0.79$ for the intrinsic subscale and 0.65 for the extrinsic subscale). Although past factor analyses have revealed two separate factors for extrinsic religiosity in religiously diverse samples (extrinsic religiosity for personal benefits and extrinsic religiosity for social

rewards), these factors have been shown to have highly overlapping variance within Protestant and Catholic communities (Genia, 1993). Because this study was conducted at a Christian university, it was determined that grouping the two types of extrinsic religiosity into one factor was appropriate.

Quest scale. Limiting religiosity to intrinsic and extrinsic dimensions alone has been criticized as an oversimplification, leading to the creation of the quest dimension of religiosity, which measures openness and spiritual searching (Batson, 1976). Batson and Schoenrade (1991) created a more reliable version of the Quest Scale ($\alpha=0.75$), which was used for this study. Sample items included: "I was not very interested in religion until I began to ask questions about the meaning and purpose of my life" and "It might be said that I value my religious doubts and uncertainties." Participants rated the 12 items on a 9-point Likert scale, 1 being *strongly disagree* and 9 being *strongly agree*. This scale has been found to be valid by numerous studies—extrinsic religiosity (means), intrinsic religiosity (ends), and quest religiosity have always loaded into three separate, orthogonal factors (Batson & Schoenrade, 1991).

Modern homonegativity scale. Attitudes toward gay men and lesbians were measured using the Modern Homonegativity Scale (Morrison and Morrison, 2002). The 24-item scale, split into two subscales (one measuring homonegativity targeted at gay men and the other measuring homonegativity targeted at lesbians) included items such as: "Gay men seem to focus on the ways in which they differ from heterosexuals, and ignore the ways in which they are the same" and "Celebrations such as Gay Pride Day are ridiculous because they assume that an individual's sexual orientation should constitute a source of pride." Participants responded to each item on a 5-point Likert scale, 1 being *strongly disagree* and 5 being *strongly agree*. Two items pertaining to tax dollars were modified from "Canadians' tax dollars" to "Americans' tax dollars" in order to make the survey relevant to participants. The Cronbach's alpha of this value has been found to be high

($0.81 < \alpha < 0.86$) suggesting that it is a reliable measure (Morrison, Kenny, & Harrington, 2010).

Attitude function inventory. Attitudes toward gay men and lesbians were measured using Herek's (1987) Attitude Function Inventory. The 10-item scale, using 9-point Likert items, 1 being *strongly disagree* and 9 being *strongly agree*, measured four functions of attitudes: experiential-schematic, social expressive, defensive, and value expressive. A varimax rotation conducted by Herek (1987) yielded four factors accounting for 69.6% of variance. Reliability varied among the functions, as some subscales had only two items, with reliability of $0.41 < \alpha < 0.62$ for the social-expressive items, $0.53 < \alpha < 0.61$ for the value-expressive items, $.67 < \alpha < .82$ for the experiential-schematic items, and $0.72 < \alpha < 0.82$ for the defensive items.

Demographics. Eight demographic items were included: gender, sexual orientation, religion, ethnicity, political stance (7-point scale, 1 being *very liberal* and 7 being *very conservative*), number of nonheterosexual family members (*none, one, two, three, or four/more*), number of nonheterosexual friends (*none, one, two, three, or four/more*), and willingness to identify as an ally of the LGBT community (on a scale of 1 to 5, 1 being *definitely no*, 5 being *definitely yes*).

Procedures

Prior to running trials, a random number generator was used to create a list of 200 digits (1-3) that would be used to randomly assign participants to one of the three videos. This list was then used to create a list of four-digit codes, the first digit identifying the video that the participant would watch and the last three digits identifying the participant, beginning with 101 (e.g. 1-103 would be the third participant, and s/he would watch the first video).

Participants signed up online for timeslots to participate in the study. The study was conducted in a research room in the psychology department building on a university campus. A maximum of two participants were

able to sign up for each timeslot due to limited space in the research room.

Before participants arrived, the SurveyMonkey survey was opened and minimized on the computer. One of the three videos was pulled up on the screen according to the next number on the list of four-digit codes. Upon arrival, participants were informed of the voluntary nature of the study and their rights as participants, both orally and in writing. Participants then signed two copies of an informed consent form, one that was stored in a filing cabinet in the psychology building and one that they were given to keep. Upon signing the forms, participants were instructed to put on the pair of headphones connected to the computer and watch the video. After the video ended, the survey was pulled onto the screen, the four-digit code was typed into the survey, and the participant was instructed to begin. Upon completion, participants were asked if they had any questions about the study. If they did, their questions were answered. After all questions were answered, participants were thanked and dismissed.

Statistical Analyses

SPSS was used to conduct data analyses. Two-way ANOVA tests were used to compare differences in attitudes toward gay men and lesbians depending on video watched. This method was used because data visualization revealed fairly normal distributions and more than two groups were compared. Independent samples t-tests were used to compare gender differences in attitudes toward gay men and lesbians and gender differences in ally identification because two groups (male and female) were compared. Pearson's r correlations were used to examine relationships between attitudes toward gay men and lesbians and other scaled variables: religiosity and attitude functions. This method was utilized because the comparisons were between scaled variables and parametric assumptions were met. Spearman's rho correlations were used to examine relationships between attitudes and ordinal variables (number of nonheterosexual friends

and number of nonheterosexual family members) and to examine relationships between ally identification (an interval variable) and other scaled variables: religiosity and attitude functions. This method was used because it allowed for the comparison of scaled, interval, and ordinal variables. Chi-square tests were used to examine gender differences in number of nonheterosexual friends and number of nonheterosexual family members because the tests allowed for the comparison of nominal and ordinal variables.

Results

Video Watched, Gender, and Attitudes

It was predicted that video watched would influence attitudes toward gay men and lesbians, such that those who watched Positive Views Video would have the least negative attitudes, while those who watched Negative Views Video would have the most negative attitudes. A two-way ANOVA test was used to test this hypothesis. No statistically significant difference in attitudes toward gay men was found based on the interaction between gender and video watched ($F[1, 134]=1.36, p>.05$), nor based on gender alone ($F[1, 134]=2.42, p>.05$) or video watched alone ($F[1, 134]=0.16, p>.05$). Similarly, no statistically significant difference was found in attitudes toward lesbians based on the interaction between gender and video watched ($F[1, 134]=1.43, p>.05$), nor based on gender alone ($F[1, 134]=3.68, p>.05$) or video watched alone ($F[1, 134]=.01, p>.05$). Descriptive results revealed that, overall, participants had moderately negative attitudes both toward gay men ($M=2.82, SD=0.60$) and lesbians ($M=2.84, SD=0.60$), 1 being *very positive attitudes* and 5 being *very negative attitudes*.

Religiosity and Attitudes

A Pearson's r correlation was used to assess the relationship between religiosity and attitudes. Participants reported a mean of 2.41 ($SD=0.71$) for extrinsic religiosity and mean of 3.61 ($SD=0.79$) for intrinsic religiosity, both of which were on a scale of 1 to 5, 1 being not religious and 5 being very religious. Participants

also reported a mean of 5.22 ($SD=1.09$) for quest religiosity, on a scale of 1 to 9, 1 being low quest religiosity and 9 being high quest religiosity. A statistically significant positive relationship was found between intrinsic religiosity and negative attitudes toward gay men ($r[138]=0.22, p<.01$) and lesbians ($r[138]=0.25, p<.01$), such that those with higher intrinsic religiosity had more negative attitudes toward both gay men and lesbians. No statistically significant relationship was found between extrinsic religiosity and negative attitudes toward gay men ($r[138]=-0.07, p>.05$) or lesbians ($r[138]=0.05, p>.05$), nor was a statistically significant relationship found between quest religiosity and negative attitudes toward gay men ($r[138]=-0.08, p>.05$) or lesbians ($r[138]=0.03, p>.05$).

Attitude Functions and Attitudes

A Pearson's r correlation was also used to assess the relationship between the four attitude functions and attitudes toward gay men and lesbians. Participants reported a mean of 6.08 ($SD=1.76$) for the value expressive function, 4.37 ($SD=2.40$) for the social expressive function, 2.91 ($SD=2.10$) for the defensive function, and 3.80 ($SD=2.11$) for the experiential-schematic function, all of which were measured on a scale of 1 to 9, 1 being not a function of attitudes and 9 being a very strong function of attitudes. No statistically significant relationship was found between the value-expressive attitude function and attitudes toward gay men ($r[138]=-0.05, p>.05$) or lesbians ($r[138]=-0.06, p>.05$), nor the social-expressive attitude function and attitudes toward gay men ($r[138]=-0.02, p>.05$) or lesbians ($r[138]=-0.06, p>.05$). However, a moderate positive correlation was found between the defensive attitude function and negative attitudes toward gay men ($r[138]=0.47, p<.01$) and lesbians ($r[138]=0.44, p<.01$), such that those with a higher defensive attitude function had more negative attitudes toward gay men and lesbians. Also, a negative correlation was found between the experiential-schematic attitude function and negative attitudes toward gay men ($r[138]=-0.20, p=.02$) and lesbians ($r[138]=-0.25, p<.01$), such that those with a higher experiential-schematic attitude function

had less negative attitudes toward gay men and lesbians.

Number of Nonheterosexual Friends and Family Members and Attitudes

In order to examine social influence beyond the videos, a Spearman's rho correlation was used to explore the relationship between attitudes and number of nonheterosexual friends and number of nonheterosexual family members. The majority of participants reported having four or more nonheterosexual friends ($n=45, 32.1%$), with the rest reporting one ($n=28, 20.0%$), two ($n=27, 19.3%$), three ($n=19, 13.6%$), or none ($n=20, 14.3%$). The majority of participants reported having no nonheterosexual family members ($n=81, 58.3%$) with the rest reporting either one ($n=28, 20.1%$), two ($n=17, 12.1%$), three ($n=6, 4.3%$) or four or more ($n=7, 5.0%$). A negative correlation was found between number of nonheterosexual friends and negative attitudes toward gay men ($\rho[138]=-0.29, p=.01$) and lesbians ($\rho[138]=-0.34, p<.01$), such that those with a higher number of nonheterosexual friends had less negative attitudes toward gay men and lesbians. No statistically significant relationship was found between number of nonheterosexual family members and attitudes toward gay men ($\rho[138]=-0.08, p>.05$) or lesbians ($\rho[138]=-0.07, p>.05$).

Gender and Attitudes

Gender differences were examined. Females had a mean score of 2.78 ($SD=0.62$) on the scale of negative attitudes toward gay men and 2.79 ($SD=0.61$) on the scale of negative attitudes toward lesbians. Males had a mean score of 2.94 ($SD=0.51$) on the scale of negative attitudes toward gay men and 3.00 ($SD=0.53$) on the scale of negative attitudes toward lesbians. An independent samples t-test was used to compare gender-related differences in attitudes toward gay men ($t[138]=-0.18, p>.05$) and lesbians ($t[138]=-0.22, p>.05$), and no significant difference was found.

Ally Identity and Attitudes

For the second part of this study, it was predicted that that students expressing less

negative attitudes would be more likely to identify as allies of the LGBT community, and it was also predicted that participants with a higher value expressive attitude function would be more likely to identify as allies of the LGBT community. A Spearman's rho correlation was used to test this hypothesis. There was a relatively normal distribution of ally identification, which was measured on a scale of 1 to 5, 1 being *definitely not an ally of the LGBT community* and 5 being *definitely an ally of the LGBT community*. A substantial negative relationship was found between ally identification and negative attitudes toward gay men ($\rho[138]=-0.66, p<.01$) and negative attitudes toward lesbians ($\rho[138]=-0.67, p<.01$), such that those who identified more strongly as LGBT allies had less negative attitudes toward gay men and lesbians. However, no statistically significant relationship was found between ally identification and the value-expressive attitude function ($\rho[138]=-0.05, p>.05$).

Ally Identity, Gender, and Number of Nonheterosexual Family Members and Friends

An independent-samples t-test was used to examine gender differences in ally identity. Levene's Test for Equality of Variances was used to gauge whether or not equal variances should be assumed. Equal variances were not assumed ($t[138]=6.12, p<.05$). Gender differences were found, such that female participants were significantly more likely than male participants to identify as allies ($t[138]=-2.23, p<.03$). A chi-square test was also used to examine gender differences, comparing number of nonheterosexual friends and number of nonheterosexual family members. Female participants had a significantly higher quantity of nonheterosexual friends than male participants ($X^2[2,138]=10.39, p<.05$), but not a significantly higher quantity of nonheterosexual family members ($X^2[2,138]=2.90, p>.05$).

Ally Identity and Other Variables

A Spearman's rho correlation was used to examine the relationship between willingness to identify as an ally of the LGBT community and several other variables, including number of

nonheterosexual friends ($\rho[138]=0.26, p=.02$), quest religiosity ($\rho[138]=0.29, p=.01$), and the experiential-schematic attitude function ($\rho[138]=0.30, p<.01$), such that those who identified more strongly as LGBT allies had more nonheterosexual friends, higher quest religiosity, and a higher experiential-schematic attitude function. Negative correlations were found between willingness to identify as an ally and the defensive function for attitudes ($\rho[138]=-0.47, p<.01$), such that those who identified more strongly as LGBT allies had a lower defensive attitude function.

Discussion

This study sought to examine how in-group social influence could impact attitudes toward gay men and lesbians among college students at a Christian university, as well as to examine how attitudes toward gay men and lesbians related to LGBT ally identification among students at a Christian university, specifically considering the role of attitude functions. Findings from this study provided insight into these research questions and are highly relevant, particularly in Christian college settings, as they add to and validate previous research on attitudes toward gay men and lesbians in religious contexts. Results supported prior studies (e.g., Whitley, 2009), finding intrinsic religious beliefs were related to negative attitudes toward gay men and lesbians. This suggests that those who internalize religious beliefs tend to have more negative attitudes. However, religious convictions for some people have been related to becoming LGBT allies (Russel, 2011). This was consistent with the findings of this study, such that ally identification was positively correlated with quest religiosity, a form of religiosity that has been correlated with open-mindedness and more progressive values (Batson & Schoenrade, 1991).

The positive correlation between negative attitudes and the defensive attitude function suggested that participants with more negative attitudes were more likely to feel threatened by gay men and lesbians and to respond

defensively. This finding was supported by previous research that suggested that people with more negative attitudes toward gay men and lesbians often react in this way (Herek, 1987; Bishop, 2015).

The negative correlation between negative attitudes and the experiential-schematic attitude function suggested that participants who based their attitudes on encounters with gay men and lesbians had positive past experiences with nonheterosexuals. When Herek created this factor in 1987, he noted that more nonheterosexuals were beginning to disclose their sexual identity to family and friends. The positive relationship between this attitude function and attitudes toward gay men and lesbians may reflect the positive societal shift in opinions about sexual minorities that has occurred in recent years (Brewer, 2014), such that being openly gay or lesbian has become more socially acceptable, contributing to more open conversations between heterosexuals and nonheterosexuals.

The lack of relationship between video watched and attitudes could have been due to the weak influence of a brief, one-time exposure. Studies have shown that reducing negative attitudes occurs over time (Festinger, 1957) and is more effective when it occurs outside of a structured context, allowing positive intergroup relationships to develop (Molina & Wittig, 2006). Therefore, the videos may have simply been too brief and too structured to have any effect. However, the negative relationship between number of nonheterosexual friends and negative attitudes toward gay men and lesbians supported the prediction that positive in-group social influence, at least over time, can predict positive attitudes toward gay men and lesbians. This relationship, along with the lack of relationship between attitudes toward gay men and lesbians and number of nonheterosexual family members, reflected the study conducted by Cunningham and Melton (2013) which also found friendships with lesbian and gay peers to be significantly more impactful in shaping attitudes toward lesbian and gay persons than relationships with lesbian and gay family members.

The gender differences found supported previous studies (e.g., Russel, 2011; Kite, 1984), such that females were more likely to identify as allies and more likely to have a greater number of nonheterosexual friends. Interestingly, no significant gender difference was found in attitudes, which suggests that a fundamental difference may exist between positive attitudes and ally identity. It follows, therefore, that females may be more willing to maintain an external identity of support for LGBTQ communities than males, but that females and males may hold similar internal attitudes toward gay men and lesbians. The possibility of this gender difference should be further explored in future studies.

The relatively negative attitudes toward gay men and lesbians that were found in this study suggest that sexual prejudice continues to be a pertinent issue in the Christian college setting. On a macro-level, policy-makers at Christian universities in the United States continue to enforce regulations that restrict the rights of nonheterosexual students (e.g., Azusa Pacific University, 2014; Biola University, 2014; Wheaton College, 2014). The concept of “love the sinner, hate the sin” has been widely used within conservative Christian contexts, though this has been shown to be related to increased self-stigma of and decreased psychological wellbeing of nonheterosexuals (Horne, Lease, & Noffsinger-Frazier, 2005).

The homonegativity among university students at Christian colleges reflects the need for attitude change. The ineffectiveness of the videos as a means to influence attitudes suggests that a more concrete, long-term form of education is necessary. This education could be presented to students in a variety of formats: e.g. campus-sponsored religious services that advocate for LGBT inclusivity, courses on the LGBT experience and how to be an ally, and campus life events that encourage dialogue amongst people of varying sexual orientations. Because quest religiosity was related to less negative attitudes, whereas intrinsic religiosity was related to more negative attitudes, religious leaders and professors should facilitate the growth of quest religiosity, which has been

shown to reflect open-minded kindness toward others (Batson & Schoenrade, 1991). This could create a more accepting campus environment for LGBT-identifying students. Also, fostering quest religiosity could be beneficial in religious community gatherings since LGB-affirming religious services have been shown to increase psychological wellbeing of LGB individuals through the mediation of spirituality and lowering internalized homonegativity (Horne, Lease, & Noffsinger-Frazier, 2005).

The attitude function results suggested that education aimed at decreasing negative attitudes should focus on increasing positive encounters with gay men and lesbians (addressing the experiential-schematic function) and, through educational programming and experiential learning, decreasing the perception among Christian college students that nonheterosexuals are threatening (addressing the defensive function).

There were several limitations to this study. First, the videos did not have an effect on attitudes. This may have been due to the videos being too weak of stimuli because of their brevity, participants' lack of personal connection to actors they did not personally know, or the verbal and nonverbal ways in which the actors conveyed opinions in the videos. Also, while the Attitude Function Inventory is a valuable tool to examine attitudes toward gay men and lesbians, the subscales in the inventory with only two items have a low reliability, and therefore must be interpreted with caution. Another limitation was that participants who signed up to participate in the research study knew that the study was about homosexuality. This may have drawn a biased pool of participants, and therefore may not be an accurate representation of Christian college students. Another limitation of this study was that LGBTQ and straight/cisgender participants were not separated for data analysis, so potential differences between these groups were not explored. Also, although the number of nonheterosexual friends was treated as an ordinal variable (0, 1, 2, 3, 4 or more), the quantity "4 or more" may have included participants with a wide range of numbers of

nonheterosexual friends, thereby creating a bias in the data analyses with that variable. Finally, the university where this study took place has been considered one of the more progressive Christian universities in the United States. This may indicate that results would differ at other Christian universities.

Future research should further examine the relationship between attitudes toward gay men and lesbians and more nuanced forms of religiosity, as intrinsic, extrinsic, and quest religiosities have been criticized of being too simplistic (Kirkpatrick & Hood, 1990; Leak, 2011). I suggest that future studies utilize intrinsic, extrinsic, and quest religiosities, along with Wulff's (1997) cognitive-social approach to religion and the self-determination theory (Deci & Ryan, 1985), as recommended by Neyrinck, Lens, Vansteenkiste, and Soenens (2010). To expand on ally identification, future studies should utilize the LGBT Ally Identity Measure (AIM), which assesses the factors of knowledge and skills, openness and support, and oppression awareness (Jones, Brewster, & Jones, 2014). Finally, educational programs that are meant to teach heterosexuals about LGBT issues and how to be an ally should be created (e.g., Ji, Du Bois, & Finnessy, 2009), specifically for students, faculty, and staff at Christian universities. These programs should be tested for effectiveness using the AIM and other psychometric methods of program evaluation.

Conclusion

This study examined how the functions of attitudes and ally identification related to university student's attitudes toward gay men and lesbians in a Christian college setting. Results demonstrated that negative attitudes continue to exist but that having exposure to nonheterosexuals and adopting a quest religiosity may be able to reduce negative attitudes. Although attitudes revealed in this study suggested that Christian college campuses are not positive atmospheres for gay men and lesbians, there is hope that through educational programming, further research, and societal progress, this could change in the future.

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