

12-2015

"GOD HATES FAGS"—THE USE OF RELIGION AS JUSTIFICATION FOR PREJUDICE TOWARDS HOMOSEXUALS

Michelle S. Fabros
California State University - San Bernardino

Follow this and additional works at: <https://scholarworks.lib.csusb.edu/etd>



Part of the [Experimental Analysis of Behavior Commons](#), and the [Social Psychology Commons](#)

Recommended Citation

Fabros, Michelle S., "'GOD HATES FAGS"—THE USE OF RELIGION AS JUSTIFICATION FOR PREJUDICE TOWARDS HOMOSEXUALS" (2015). *Electronic Theses, Projects, and Dissertations*. 265.
<https://scholarworks.lib.csusb.edu/etd/265>

This Thesis is brought to you for free and open access by the Office of Graduate Studies at CSUSB ScholarWorks. It has been accepted for inclusion in Electronic Theses, Projects, and Dissertations by an authorized administrator of CSUSB ScholarWorks. For more information, please contact scholarworks@csusb.edu.

“GOD HATES FAGS”—THE USE OF RELIGION AS JUSTIFICATION
FOR PREJUDICE TOWARDS HOMOSEXUALS

A Thesis
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
in
Psychology:
General Experimental

by
Michelle Siao Lin Fabros
December 2015

“GOD HATES FAGS”—THE USE OF RELIGION AS JUSTIFICATION
FOR PREJUDICE TOWARDS HOMOSEXUALS

A Thesis
Presented to the
Faculty of
California State University,
San Bernardino

by
Michelle Siao Lin Fabros

December 2015

Approved by:

Donna M. Garcia, Committee Chair, Psychology

Joseph D. Wellman, Committee Member

Cari D. Goetz, Committee Member

© 2015 Michelle Siao Lin Fabros

ABSTRACT

The Westboro Baptist Church and Phelps family are notorious for their signs proclaiming anti-homosexuality epithets such as “God Hates Fag,” and references to Biblical verses to revile homosexuality (e.g., Romans 1:24-27). Although the homonegativity bias that Westboro patrons and many traditional Christians express is often understood as being rooted in religion, I proposed the possibility that religion can be a justification rather than source of homonegativity. That is, although religion typically is seen as the source of prejudice towards LGBT+ people, I argued that this relationship might work in reverse. I examined under which conditions this “reverse” phenomena might occur in both the Pilot Study and follow-up study. My Pilot Study results suggested that there are differences in participants’ level of Religiosity after falsely being told they held LGBT+ prejudices. These differences were moderated by political alignment. Relatively liberal participants were more likely to have higher levels of Religiosity after receiving Biased Feedback compared to those who received Neutral Feedback. In terms of those who were more politically conservative, their level of Religiosity tended to be about the same regardless of which feedback they received. When it came to Biblical Literalism, however, relatively conservative participants had higher levels of literalism when given the Neutral Feedback compared to relatively liberal participants when given the same Feedback. These findings were mostly replicated in the follow-up Main Study. The results from both studies suggest that, under some circumstances, people might use religion to

justify their prejudice towards LGBT+, and the strategy they use is affected by their political alignment (liberal or conservative). There could be differences in motivations between people who are more politically conservative and those who are more politically liberal. These potential differences are addressed in the discussion.

ACKNOWLEDGMENTS

I would like to thank Christopher Emerling, who encouraged me to pursue my passion for social psychology and was my biggest support throughout the Master's program. I would also like to thank my family for their endless support in all my endeavors, but especially this one. Mom and Dad, thank you for all the coffee money!

I would like to acknowledge the research assistants in the Garcia Social Lab for their help with data collection, my lab-mates and cohort-mates for their helpful comments while I worked on this project, and my committee members for their feedback and advice at every stage of this thesis. I would also like to thank Alex McKay for all the stimulating research conversations, letting me pick his brain about statistics, and accompanying me on countless coffee runs to refuel.

Finally, I would like to express my gratitude to Dr. Donna Garcia for her mentorship, patience, and dedication to my success in this program. I have learned so much as both a research assistant and a graduate student. I will never be able to convey how much this experience has meant to me and how much I appreciated having Donna as my advisor. At the very least, I am glad that Alex and I could see her win that front row parking spot for a year.

Dedicated to my beloved grandparents:

Jack B. Wong and Jean C. Wong, and

Alex de Leon Fabros Sr. and Josefina Sandoval Fabros

TABLE OF CONTENTS

ABSTRACT	iii
ACKNOWLEDGMENTS	v
CHAPTER ONE: INTRODUCTION	
Introduction	1
Literature Review	2
The Present Study	11
Hypotheses for Pilot Study and Main Study.....	11
CHAPTER TWO: PILOT STUDY	
Introduction	14
Methods	14
Preliminary Analyses	21
Results.....	22
Post-hoc Analyses	30
Discussion	32
CHAPTER THREE: MAIN STUDY	
Introduction	35
Methods	35
Preliminary Analyses	43
Results.....	45
Post-hoc Analyses	53
Discussion	55

CHAPTER FOUR: GENERAL DISCUSSION	58
Overall Limitations of the Studies	61
Direction of Future Research	64
Conclusion	65
APPENDIX A: INSTITUTIONAL REVIEW BOARD APPROVAL LETTER ...	67
APPENDIX B: PILOT STUDY INFORMED CONSENT	69
APPENDIX C: BOGUS PRIMING TASK PHOTO	72
APPENDIX D: BOGUS PRIMING TASK QUESTIONS	74
APPENDIX E: WORD SEARCHES	76
APPENDIX F: PILOT STUDY FALSE FEEDBACKS	79
APPENDIX G: PILOT STUDY RELIGIOSITY AND POLITICAL MEASURES	82
APPENDIX H: POST-CRITICAL BELIEFS SCALE	85
APPENDIX I: BIBLICAL SCRIPTURES	88
APPENDIX J: PILOT STUDY DEMOGRAPHICS	91
APPENDIX K: PILOT STUDY DEBRIEFING	93
APPENDIX L: MAIN STUDY INFORMED CONSENT	95
APPENDIX M: SEXUALITY IMPLICIT ASSOCIATION TEST	97
APPENDIX N: EGALITARIAN TASK	104
APPENDIX O: MAIN STUDY FALSE FEEDBACKS	107
APPENDIX P: AFFIRMATION TASK	110
APPENDIX Q: MAIN STUDY RELIGIOSITY AND	

POLITICAL MEASURES	113
APPENDIX R: MAIN STUDY DEMOGRAPHICS	116
APPENDIX S: MAIN STUDY DEBRIEFING	118
APPENDIX T: TABLES	120
APPENDIX U: FIGURES	128
REFERENCES	143

CHAPTER ONE

“GOD HATES FAGS”—THE USE OF RELIGION AS JUSTIFICATION FOR PREJUDICE TOWARDS HOMOSEXUALS

Introduction

Currently, the way most information regarding religion and attitudes towards homosexuals (LGBT+) has been presented in the media, and even presumed in the research, suggests that religion and religious beliefs cause prejudice towards LGBT+. One concern about this assumption is the nature of the research testing it. A review of a recent meta-analysis on religiosity and attitudes towards LGBT+ people showed that the majority of studies were conducted using questionnaires and analyzed only as correlations (Whitley, 2009). One limitation with the approach of correlational research is the issue of reverse-causality; rather than the relationship being driven one way (A causes B), it could be that the relationship actually works the other way (B causes A). This alternative, or reverse-causality, explanation would suggest that genuine prejudice towards LGBT+ is what drives people to be religious. In some cases, religion may actually serve as a justification for some people's negative attitudes towards LGBT+ people rather than being the source of it.

Literature Review

Same-sex marriage has been at the social and political forefront in the United States the past several years, with religious groups being some of the biggest adversaries to same-sex marriage (Olson, Cadge, & Harrison, 2006). These religious groups range in the extent of their opposition. Some of the most outspoken organizations in the United States are the Phelps family and their Westboro Baptist Church, with their slogans “God Hates Fags.” During the 2008 presidential election, the topic of same-sex marriage appeared on the ballot for three states, including California (Bowser, 2008). In May 2008, the California Supreme Court overturned 2005’s Proposition 22, which only recognized marriage as being between a man and a woman. Soon after, gay marriage adversaries collected over a million signatures to include Proposition 8 on the State election ballot for November of that year. Proposition 8 was a brief piece of legislation that limited marriage to be only recognized as being between a man and a woman, which was ultimately supported by the majority of the voters (McKinley, 2008). Some of the proposition’s main supporters were Christian fundamentalists, although the majority of financial support came from Mormons (McKinley & Johnson, 2008).

Religious resistance to same-sex marriage could be viewed as a form of homonegativity, or prejudice towards people who identify as lesbian, gay, bisexual, transgender, or other sexual identity (referred to from here on as LGBT+) (Ahmad & Bhugra, 2010). Due to the handful of Biblical scriptures that

denounce homosexual behavior, such as Leviticus 18:22, some Christian denominations maintain that homosexuality is immoral (Burdette, Ellison, & Hill, 2005). These scriptures are often used as explanations or justifications for why same-sex marriage should not be legalized. A review of American polls and political trends regarding same-sex marriage in the United States reported that many people found supporting same-sex marriage to be incompatible with their religious beliefs. In addition to this conflict in ideology, the review also found that many people believed that same-sex marriage would undermine the value of traditional, or nuclear, families (Brewer & Wilcox, 2005). These preferences for traditional family values are associated with religious beliefs, or religiosity.

Religiosity and Attitudes Towards LGBT+

People's level of religiousness or religiosity can be a strong predictor of their beliefs and attitudes towards LGBT+. Researchers usually measure religiosity from either single self-report items ("How religious are you?") or as a composite across multiple dimensions, such as religious affiliation, practices, and beliefs (Cohen et al, 2009; Johnson et al., 2011). Religious beliefs, especially religious fundamentalism, were found to be strong predictors of negative attitudes towards LGBT+ (Altemeyer, 2003; Burdette, Ellison, & Hill, 2005; Hunsberger, 1996). Other measures of religiosity, including church attendance (how frequently one attends religious services) and Biblical literalism (the belief that the Bible is the actual word of God and should be taken word for word), were both found to be associated with negative attitudes towards LGBT+ (Fisher,

Derison, Polley, Cadman, & Johnson, 1994; Ellison & Bradshaw, 2009).

Frequency of church attendance was also associated with less political tolerance towards LGBT+ (Beatty & Walther, 1984). Political tolerance refers to a willingness to extend civil liberties to groups despite disagreeing with certain attributes associated with those groups.

Cognitive Dissonance

Much of the previously described research has shown strong associations between different dimensions of religion (e.g. church attendance, Biblical literalism) and attitudes towards LGBT+. The nature of these studies tends to be correlational; consequently, definitive conclusions about the direction of the relationship between religion and attitudes towards LGBT+ cannot be drawn. The focus on this type of research method raises the issue of reverse-causality, in which the driving force for the observed relationship is prejudice rather than religiosity. One possible explanation for reverse-causality of religion and attitudes towards LGBT+ is cognitive dissonance. Dissonance occurs when there is a discrepancy between people's behavior and the personal standards they hold. When people behave in ways that are in violation of their standards (i.e. their idea of self-consistency is threatened), they will work to resolve the unpleasant feelings of dissonance by either changing their attitudes and beliefs or by changing their behavior (Stone & Cooper, 2003).

In the first demonstration of cognitive dissonance, Festinger and Carlsmith (1959) conducted a study in which they had participants engage in a time-

consuming, tedious task. Next, participants were either paid \$20 or only \$1 to lie to incoming participants and tell them that the task was fun. The researchers found that when the original participants were paid only a dollar to lie, they reported afterwards that they actually found the task enjoyable. The researchers argued that the low-paid original participants changed their attitude about the boring task in order to be consistent with telling the other participant the task was fun. Most people typically view themselves as honest, so having lied to the incoming participants would have challenged that relevant aspect of the participants' self-concept. The researchers argued that because one dollar was not enough money to justify lying, participants changed their beliefs about their behavior to reduce their dissonance of having been dishonest.

Monteith (1993) also found that when some people behave in ways anathematic to their personal standards, they feel guilty or engage in self-criticism. The researcher looked at differences between participants based on their level of prejudice after completing several imagined contact scenarios involving a gay man. Afterwards, participants were asked to review a set of law school applications, with one of the applicants being a gay man. Monteith found that when participants were manipulated into believing they had negatively evaluated a gay law school applicant based on his sexual orientation, participants who were low in prejudice experienced greater negative feelings towards themselves compared to participants who were high in prejudice. This finding shows that people can experience cognitive dissonance when they are

led to believe they have shown prejudice. Other researchers have demonstrated similar findings. Amodio, Devine, and Harmon-Jones (2007) found that when some participants were given false feedback that indicated they held prejudiced attitudes towards a certain group, the participants reported higher levels of guilt than did those in a control or positive false feedback conditions. These researchers also found that participants' guilt from the false feedback was a strong predictor of participants' desire to read magazine articles on how to reduce prejudice. In other words, participants attempted to reduce their dissonance after being told they had shown prejudice by engaging in behaviors that would promote prejudice reduction. This prejudice reduction was needed so that people could restore their sense of being egalitarian, which currently is a strongly held value in the United States (Dovidio & Gaertner, 1998).

Justification-Suppression Model

When it comes to certain biases, however, not everyone might value egalitarianism the same way. Certain biases or prejudices might actually be considered socially acceptable (e.g., disliking pedophiles) and people might feel more inclined to be open about these biases (Crandall, Eshleman, & O'Brien, 2002). In a test of their justification-suppression model (JSM), Crandall and Eshleman (2003) examined the nature of genuine prejudice and the conditions under which it might be expressed. When expression of prejudice would likely be regarded negatively, it will be suppressed. However, when there is a justification for prejudice and no potential for social ramifications, then expression of

prejudice is more likely to occur. Based on previous research, Crandall and Eshleman discussed how religion could serve to either suppress or justify people's expression of prejudice. They argued that depending upon the context, religious beliefs and doctrine can encourage people to be more egalitarian (and suppress any prejudice expression), but when religion could support prejudice and provide a justification for it, then the expression prejudice is likely to occur.

One of the important implications for this argument is that the nature of the association between religion and attitudes towards LGBT+ might not be unidirectional, with religion driving people to be prejudiced. Based upon the JSM, it is plausible that some people already have a genuine prejudice towards LGBT+, but might use religion to justify that prejudice. The difference in acceptability of prejudice might be based on certain contextual factors or qualities of the individual. In terms of the expression of prejudice against one group (e.g., LGBT+), its acceptability might differ based on people's political affiliations or alignment (e.g., liberals versus conservatives). For liberals, part of their collective identity is to be supportive of these groups (e.g., LGBT+). When it comes to conservatives, however, their collective identity is that homonegativity or prejudice towards LGBT+ groups is acceptable, normative, or even expected.

Religion and Political Affiliation

Another factor in the religion-LGBT+ prejudice relationship is the nature of political affiliation or alignment. Using data collected over the years from the General Social Survey (GSS), Burdette and colleagues (2005) and Loftus (2001)

found that, compared to other Christian denominations, conservative Protestants expressed less political tolerance towards LGBT+. Other researchers found that conservatives were more likely (in varying degrees) to restrict civil liberties to LGBT+, such as marriage and adoption rights as well as serving in the military (Yang, 2001; Brewer, 2003).

Adamczyk and Pitt (2003) examined worldwide cultural and societal differences between religious beliefs and attitudes about LGBT+. They found that governmental laws and regulations towards homosexuality were not significantly related to people's attitudes about LGBT+ people. Although there has been an overall decline in willingness to restrict civil liberties to LGBT+ individuals, the majority of those who openly hold negative attitudes towards these groups or oppose same-sex marriage tend to be conservative Protestants. Liberal Protestants, on the other hand, tend to be more openly tolerant and accepting of LGBT+ (Finlay & Walther, 2003; Hicks & Lee, 2006). In other words, religiosity might be positively correlated with homonegativity for one group, but negatively correlated for the other. Consequently, religion as justification for prejudice might operate differently across the political divide.

When people are given information that threatens their personal beliefs or self-concepts, their reactions might differ based on political alignment. Conservatives might actually feel threatened in their collective conservative identity if they are told they are not homonegative. Under these conditions, it could be that religion would be used as a way to self-affirm that conservative

identity. One of the potential consequences of liberals being made aware of having homonegative feelings, however, is that they might be inclined to use religion to justify those feelings in order to restore their self-concept or collective liberal identity. This rationalization process might be unnecessary, however, if people are induced to feel positively about themselves despite showing prejudice.

Self-Affirmation

Related to cognitive dissonance is the idea that people have a self-concept or self-image, which they strive to maintain in a positive light (Liu & Steele, 1986; Harris & Napper, 2005; Tesser et al., 2000). This self-concept can be comprised of different dimensions, such as personally relevant traits or characteristics (e.g. being egalitarian). In the face of a threat to the positivity of their self-concept, people can experience a decrease in self-esteem or overall feelings of self-worth (Liu & Steele, 1986; Crocker & Wolfe, 2001). One way to reestablish self-esteem is through affirmation of the self (Steele & Liu, 1983), in which other positive aspects of the person's identity are affirmed. Being self-affirmed either prior or soon after a threatening event allows people to realize they are valuable in other areas, which helps reestablish their self-esteem (Sherman & Cohen, 2002). In the seminal study by Fein and Spencer (1997), the researchers found that White participants who were self-affirmed after being given negative feedback about themselves (e.g., failed an intelligence test) did not derogate an outgroup member (Jewish target) compared to those who were

not self-affirmed. This finding indicates that self-affirmation can help provide a buffer against negative feedback and break the need to derogate an outgroup member as a means of self-esteem enhancement.

Self-affirmation also removes the need to change one's attitudes in an attempt to reduce dissonance and reestablish self-consistency. Steele and Liu (1983) had college students rate their attitudes towards a university tuition increase, which most participants strongly opposed. The researchers then had college participants write a counter-attitudinal essay supporting an increase in university tuition. Participants in the high-choice condition were manipulated into believing they had the option of whether or not to write the counter-attitudinal essay, whereas participants in the low-choice condition were not given an option and just instructed to write the essay. The researchers found that participants in the high-choice condition showed a change in attitudes towards a tuition increase from a pre-test to the post-test after writing the counter-attitudinal essay. In other words, high choice participants were more likely to support the tuition increase compared to low-choice participants. Participants in the high-choice condition who completed a self-affirmation task after writing the essay, however, were less likely to show a change in attitudes towards tuition increase from the pre-test to the post-test. The researchers suggested that the self-affirmation task helped to alleviate participants' need for dissonance-reducing attitude change after they engaged in a behavior inconsistent with their beliefs.

The Present Study

Given the correlational association between religion and homonegativity established in the previous studies mentioned, it possible that that there exists an alternative explanation to this relationship. Reverse-causality would suggest that the negative attitudes people hold towards LGBT+ is what drives people to be religious. By drawing on their religion, some people could justify their negative attitudes towards LGBT+. Keeping with the psychological phenomena previously discussed and using the justification-suppression model as a guide (Crandall & Eshleman, 2003), I proposed the following set of hypotheses. The first three hypotheses were for the Pilot Study and replicated in the Main Study. The last hypothesis (Hypothesis 4) was for the Main Study.

Hypotheses for Pilot Study and Main Study

I expected the same pattern of response for liberal participants and conservative participants across each of the hypotheses. In general, I expected that relatively liberal participants would have higher levels of the religious dependent measures after receiving the Biased Feedback than after receiving the Neutral Feedback. I expected the opposite pattern for relatively conservative participants, such they should have higher levels of the religious dependent measures after receiving the Neutral Feedback than after receiving the Biased Feedback.

Hypothesis 1. The first hypothesis deals with participants' overall level of Religiosity. Based on the above explanations, I expected that relatively liberal participants would have higher levels of Religiosity when given the Biased Feedback than when given the Neutral Feedback. I expected that relatively conservative participants would have higher levels of Religiosity after being given the Neutral Feedback than when given the Biased Feedback.

Hypothesis 2. Related to Religiosity, I was also interested in participants' level of Biblical Literalism (i.e., the extent to which they agree that the Bible is the literal word of God) after they received the false Feedbacks. Again, I expected that liberal participants should have higher levels of Biblical Literalism when they received the Biased Feedback than when they received the Neutral Feedback. With conservative participants, I expected they would have higher levels of Biblical Literalism after they received the Neutral Feedback than after they received the Biased Feedback.

Hypothesis 3. I was also interested in how participants would endorse Biblical passages that condemned homosexuality after they received either the Neutral or Biased Feedback. I expected liberal participants to be more likely to endorse these scriptures when given the Biased Feedback than when given the Neutral Feedback. I expected conservative participants to be more likely to endorse these scriptures when given the Neutral Feedback than when given the Biased Feedback.

Hypothesis 4. In the Main Study, I expected that the moderating effect of Political Alignment would be reversed among participants who self-affirm. That is, participants who identified themselves more towards the liberal end of the political scale, who are given Biased Feedback, and are self-affirmed will have *lower* levels of Religiosity, Biblical Literalism, and will endorse fewer anti-homosexuality Biblical scriptures relative to 1) those given the same feedback but are not self-affirmed, or 2) conservatives regardless of feedback. I expected that conservatives who are self-affirmed and given the Neutral Feedback should have similar outcomes of Religiosity, Biblical Literalism, and less endorsement of anti-homosexuality Biblical scriptures as conservatives who are not self-affirmed and given the Biased Feedback. According to previous research, self-affirmation procedures typically help buffer the detrimental effects of false Biased Feedback by allowing the participants to feel better about themselves in other domains (Fein & Spencer, 1997). Self-affirmation should reduce participants' need to justify their prejudice (liberals) or non-prejudice (conservatives) against LGBT+ people by increasing their levels of Religiosity, Biblical Literalism, and greater endorsement of the anti-homosexuality Biblical scriptures.

CHAPTER TWO

PILOT STUDY

Introduction

The purpose of the Pilot Study was to design an experimental study where I could examine under what conditions people might be likely to use religion to justify being told they were prejudiced towards LGBT+. I expected that people who identify as liberal would rely on religion more after being told they held negative attitudes towards LGBT+ (i.e., Biased Feedback) compared to those who were told they held neutral attitudes towards LGBT+ (i.e., Neutral Feedback). I also expected that these people would have higher levels of Biblical Literalism and more likely to endorse anti-homosexuality Biblical when they were given Biased Feedback compared to Neutral Feedback. I expected that conservatives would show the opposite pattern relative to liberals and would be more likely to use religion to self-affirm after receiving Neutral Feedback.

Methods

Participants

Thirty-eight undergraduate students (female = 32, male = 6) participated in the study for extra course credit. Only those self-identified as heterosexual were included in the analyses. Thus, two people were excluded because they identified their sexuality as other than heterosexual (e.g., gay, bisexual). One

participant declined to state his or her sexual orientation; this participant was kept in the sample. Participants were between the ages of 19-43 ($Mdn_{age} = 23$).

Materials and Apparatus

The materials included an informed consent, which explained that the study would be conducted in two separate sessions (Appendix B). A bogus LGBT+-priming task was used, which required participants to spend two minutes studying a photo of gay rights supporters celebrating the Supreme Court overturning the Defense of Marriage Act (Appendix C). The question sheet was described as a cognitive memory task and asked participants to recall several details about the photo, such as the number of pride flags in the photo and how many signs supporters held (Appendix D). The purpose of the bogus priming task was to give participants ostensibly believable, but false, feedback about their performance on the task.

Manipulated Variable. There were two word search puzzles, one of which was loaded to have an unequal balance of negative and positive words. The neutral (control) word search puzzle had an equal amount of both negative words (e.g., “vomit”) and positive words (e.g., “beautiful”). The negative word search puzzle had more negative words than positive words. See Appendix D for the materials.

Two different false feedbacks sheets corresponded to their respective loaded word search puzzles (e.g., participants who had the negative word search received the false Biased Feedback; Appendix F). The first part of the false

feedback was the same for all conditions and informed participants that the photo of gay rights supporters was part of an empirically well-established homosexuality-priming task used to detect unconscious bias towards homosexuals (or LGBT+). The participants were also informed that the number of positive or negative words they found in the word search was a strong indicator of their implicit attitudes towards homosexuals.

The second part of the false feedback varied in the feedback given for the priming task and word search. The Neutral Feedback told participants they showed neither a positive nor negative bias towards either homosexuals or heterosexuals. That is, participants read:

In the word search task, you were asked to circle as many words as you could find. You found approximately an equal amount of both positive and negative words. Your results from the word search task indicate that you have neither a positive nor negative bias towards homosexuals. According to previous studies, because you found an equal amount of positive and negative words, this suggests that you are likely to hold the same attitudes towards homosexuals as you do heterosexuals.

The Biased Feedback told participants that because they found more negative words from the word search rather than positive or neutral words, their results indicated they showed strong negative bias towards homosexuals and demonstrated more positivity towards heterosexuals. These participants read:

In the word search task, you were asked to circle as many words as you could find. The majority of the words you found on the word search task were negative. Your results from the word search task indicate that you have a strong negative bias towards homosexuals. According to previous studies, because you found mostly negative words, you are more likely to feel a strong aversion to homosexuals and engage in avoidance behaviors when the possibility of being within close proximity to homosexuals occurs. This suggests that, conversely, you feel more favorably towards heterosexuals.

Measured Variables. Political Alignment was used as the moderator variable and measured on a 7-point Likert scale (1 = very liberal, 7 = very conservative; $M = 4.06$ $SD = 1.03$). Because most participants identified as being moderate on the Political Alignment scale (4 = moderate; $n = 24$) rather than on either poles of the political spectrum, the subsequent analyses will be comparing participants who are relatively more liberal and relatively more moderate or conservative, rather than as liberal participants versus conservative participants. The Political Alignment scores were mean-centered before any data analyses occurred.

The three dependent variables in the study were related to different dimensions of religiosity: religiosity, Biblical literalism, and endorsement of Biblical scripture commandments that condemned homosexuality. The first dependent variable measured participants' overall level of Religiosity. Although

there are multiple ways to measure religiosity, a single item measure tends to be commonly used. The Religiosity measure consisted of the single question, “How religious are you?” and was measured on a 7-point Likert scale (1 = not at all religious, 7 = very religious; Appendix G).

Another dimension of religiosity is religious fundamentalism, which was measured by participants’ level of Biblical literalism (i.e., extent to which they believed the Bible is the literal word of God). Biblical Literalism consisted of three items and asked participants to what extent did they agree that, “The Bible is the actual word of God?”, “The Bible should be taken literally, word for word”, and “I think that Bible stories should be taken literally, as they are written” (Appendix H). These three items came from the Post-Critical Beliefs Scale (PCBS; Duriez & Soenez, 2006) and were measured on a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree). Because of the small sample size, I was unable to run exploratory factor analyses to determine which items loaded together on the PCBS to form a composite of Biblical Literalism. Instead, for this pilot study, we relied on face validity and selected the three items that appeared related to Biblical Literalism (Cronbach’s $\alpha = .84$).

Extending upon the Biblical Literalism construct, I was interested to see how participants would agree with or endorse a set of Biblical scripture commandments and laws. These were not the Ten Commandments from Moses, but rather other laws and commandments found in the Old Testament of the Bible. I took twenty well-known Christian Biblical scriptures about laws that might

still be considered relevant to Christians in modern society, although not all the scriptures necessarily fit that condition (e.g., Exodus 22:19). The majority of the scriptures were commonly found on various Bible study websites when I did a web search looking for Biblical laws. The scriptures of interest for this study, however, were Leviticus 18:22 and Leviticus 20:13, which both condemn homosexuality (Cronbach's $\alpha = .92$). For example, Leviticus 20:13 reads: "If a man has sexual relations with a man as one does with a woman, both of them have done with is detestable." The scores for these two items were averaged to create a composite score, where higher scores indicate greater participant endorsement of the anti-homosexuality Biblical scriptures (referred to from here on as HSPassages). I was specifically interested in how participants would respond to scriptures that condemned homosexuality after being told they are either prejudiced towards LGBT+ or had neutral attitudes towards LGBT+. Thus, the other eighteen Biblical scripture items were used as filler items. For all scripture items, participants rated the extent to which they agreed that each Biblical scripture should be used to guide public policies (e.g., state and federal legislation; 1 = strongly disagree, 7 = strongly agree). See Appendix I for the complete list of Biblical scriptures.

Demographics and Debriefing. A basic set of demographic questions (Appendix J) asked for participants' Political Alignment (1 = very liberal, 7 = very conservative) and their political affiliation (e.g., Democrat, Republican). A debriefing sheet explained the purpose of the study and that participants were

randomly given one of the loaded word search puzzles and that the feedback they received was false (Appendix K).

Procedure

Participants were tested in two large sessions. In both sessions, participants engaged in the bogus homosexuality-priming task. Next, participants answered several questions about different details from the photo. Afterwards, they completed one of two randomly assigned word search puzzles and then were given false feedback about their word search results. Participants were then given false feedback according to which word search task they had been given. All participants were then given the post-test measures of Religiosity, Biblical Literalism, and endorsement of the anti-homosexuality Biblical scriptures (HSPassages). Finally, all participants were debriefed and thanked for their participation.

Design and Data Analysis

A multiple moderated regression was used to analyze the relationship between the predictor variable and the continuous moderator on the criterion variables. The predictor variable was the false Feedback condition (Neutral and Biased). Political Alignment (1 = very liberal, 7 = very conservative) served as the continuous moderator between Feedback condition and the criterion variables. The criterion variables were Religiosity, Biblical Literalism, and HSPassages.

Preliminary Analyses

Data Screening

Missing Data Analysis. Missing Values Analysis was conducted using SPSS on the independent and dependent variables to test for patterns of missing data. There were no patterns of missing data and any missing values were considered missing completely at random.

Univariate Outliers. To test for univariate outliers, I standardized the continuous variables, Political Alignment, Religiosity, Biblical Literalism, HSPassages and graphed each of the standardized variables in a histogram overlaid with a normal curve. I also checked the frequency tables of standardized values (z-scores) for each continuous variable. I used ± 3.29 *SD* of the mean as the cutoff score for outliers (Tabachnick & Fidell, 2013). All variables fell within ± 3.29 *SD* of the mean; thus, there were no univariate outliers for any of the continuous variables.

Multivariate Outliers. There were no multivariate outliers. All variables fell within ± 3 *SD* of the mean.

Tests of Normality

Skewness and Kurtosis. The continuous predictors were mostly normally distributed, with $z = \pm 3.29$ set as the cutoff criteria for significant kurtosis and skewness. The continuous predictor Political Alignment was reasonably normally distributed but peaked at the mean (kurtosis = 3.04, skewness = -.21).

Religiosity was somewhat peaked and slightly negatively skewed (kurtosis = $-.88$, skewness at $-.33$). Biblical Literalism appeared to have a trimodal distribution (kurtosis = $-.73$, skewness = $.26$). HSPassages was also bimodal and somewhat negatively skewed (kurtosis = $-.12$, skewness = $-.79$).

Linearity and Homoscedasticity. I plotted the standardized predicted values of Religiosity, Biblical Literalism, and HSPassages against their respective standardized errors in a scatterplot. When I reviewed the three scatterplots, it did not appear that any of the criterion variables violated the assumption of homogeneity of variance. The standardized errors for each criterion variable are evenly dispersed amongst the standardized predicted values.

Multicollinearity

Multicollinearity was assessed for all predictors (Feedback condition, Political Alignment). The tolerance was greater than $.40$ for all predictors and multicollinearity was not considered an issue.

Results

Correlations among Continuous Variables

Religiosity was positively correlated with Biblical Literalism, $r(38) = .67$, and HSPassages, $r(38) = .31$, and Biblical Literalism and HSPassages were also positively correlated, $r(38) = .41$. Although the measures were interrelated, they appeared to be unique constructs with the greatest overlap between Religiosity and Biblical Literalism, which shared approximately 45 percent of variance. See

Table 2 for the correlation matrix between the three dependent variables of Religiosity, Biblical Literalism, and HSPassages. Political Alignment was positively correlated with Religiosity, $r(38) = .27$, Biblical Literalism, $r(38) = .35$, and HSPassages, $r(38) = .36$. As participants became politically more conservative, they reported increases in religious endorsement, but Political Alignment only accounted for a maximum of 13 percent of the variance in this endorsement. Scatterplots between Political Alignment and the dependent measures are displayed in Figures 1a, 1b, and 1c.

Regression Tests for Moderation

The main goal of the moderated regressions was to examine whether participants would show an increase in religiosity following false feedback regarding their prejudice towards LGBT+ people, and whether this response would be moderated by Political Alignment. Thus, I subjected all dependent measures to separate moderated regressions with Feedback, Political Alignment, and their interaction simultaneously entered as predictor variables. Following Cohen, Cohen, West, and Aiken (2003), I dummy coded the two-level Feedback condition variable to represent the comparison between the Neutral (0) and Biased (1) Feedback conditions. I centered the continuous Political Alignment moderator variable to increase the interpretability of the unstandardized coefficients. When the dichotomous variable is dummy coded and the continuous variable is centered, the B for the main effects and their interactions are

interpretable (Hayes,¹ 2013). Because β s are not properly standardized in interaction terms, they are not interpretable; whereas, B represents the difference between the unweighted means of the groups involved in the contrast (see Cohen et al., 2003). Thus, I reported unstandardized coefficients (B) rather than standardized coefficients (β). I computed the cross product of Feedback and centered Political Alignment to produce the interaction term required to represent the interaction between the experimental condition and the moderator variable. I then regressed each outcome using hierarchical regression with the main effects (the dummy coded Feedback variable and the continuous Political Alignment) in the first block and the interaction term between the two variables in the second block (Cohen et al., 2003). See Table 1 for the descriptive statistics of the criterion variables and Table 3 for the model summary of the regression analyses.

To test my hypotheses, I computed end-point analyses to compare the expected differences between Feedback conditions and Political Alignment for all the religious outcomes. Because the main purpose of the study was to examine in detail the differences between participants who were relatively liberal or relatively conservative, I computed end-point analyses for Political Alignment at ± 2 SD from the mean, where -2 SD are the relatively liberal participants and +2

¹ Before testing for the moderating effects of political alignment, I ran a one-way ANOVA with Feedback as the independent variable and Political Alignment as the dependent variable. This analysis was not significant, $F(1, 36) = 0.02$, $p = .883$, indicating that Political Alignment was unaffected by the Feedback manipulation.

SD are the relatively conservative participants. This strategy allowed me to examine differences between participants who were somewhat more on the polar ends of the Political Alignment spectrum rather than central (or moderate). Finally, simple slopes analyses were used to test if the slope of each Feedback condition differed from zero.

Religiosity. Following the procedures outlined above, I sequentially regressed religiosity on the contrast and moderator variables, with the interaction between Feedback and Political Alignment entered in the second block. The overall model was marginally significant, $F(3, 34) = 2.52, p = .074$. The addition of the interaction in the second block did not significantly improve the overall model, $R^2 = .18, \Delta R^2 = .06, \Delta F = 2.52, p = .122$. There was no main effect of Feedback on Religiosity, $B = .65, t(34) = 1.24, p = .225$. There was a main effect of Political Alignment on Religiosity, $B = .84, t(34) = 2.48, p = .018$. The interaction between Feedback and Political Alignment was not significant, $B = -.84, t(34) = -1.59, p = .122$. See Table 3 for the model summary for regression analyses for Religiosity and Figure 1 for the scatterplot of Religiosity and Political Alignment.

End-point analyses revealed no differences between Feedback conditions relatively liberal participants, $B = 11.07, t(34) = -.89, p = .382$. Relatively liberal participants had about the levels of Religiosity when given the Biased Feedback as when given the Neutral Feedback. Similarly, there were marginally significant differences between Feedback conditions for relatively conservative participants,

$B = -2.38$, $t(34) = 1.97$, $p = .057$. Relatively conservative participants had somewhat higher levels of Religiosity when given the Neutral Feedback as when given the Biased Feedback.

Simple slopes analyses indicated that the slope for the Neutral condition was significantly different from zero, $t(34) = 2.48$, $p = .018$. The Neutral slope significantly increased as participants became more conservative. The slope for the Biased condition did not significantly differ from zero, $t(34) < .01$, $p > .01$. The Biased slope did not significantly change as participants became more conservative. See Figure 4 for end-points and simple slopes of Religiosity outcomes for relatively liberal and relatively conservative participants.

The results did not support my first hypothesis, where I expected an interaction between Feedback and Political Alignment, such that relatively liberal participants would have higher levels of Religiosity when given Biased Feedback, but not when they received Neutral Feedback, and expected the opposite pattern for relatively conservative participants. From the endpoint analyses, there were no significant differences for relatively liberal participants between Feedback and their level of Religiosity, but I did find marginal differences for relatively conservative participants between Feedback and their level of Religiosity, where they had slightly higher levels of Religiosity when they received the Neutral Feedback compared to when they received the Biased Feedback.

Biblical Literalism. I sequentially regressed Biblical Literalism on the contrast and moderator variables, with the interaction entered in the second

block. The overall model was significant, omnibus $F(3, 34) = 3.86, p = .018$. The interaction of the interaction term significantly improved the overall model, $R^2 = .25, \Delta R^2 = .25, \Delta F(3, 34) = 11.21, p = .002$. There was no main effect of Feedback, $B = .11, t(34) = .21, p = .833$, but there was a significant main effect of Political Alignment, $B = .87, t(34) = 2.57, p = .015$. Of greater interest was the significant interaction between Feedback and Political Alignment, $B = -1.77, t(34) = -3.35, p = .002$. As predicted, whether Biblical Literalism was greater for Biased Feedback or Neutral Feedback depended upon participants' Political Alignment. See Table 3 for the model summary for regression analyses for Biblical Literalism and Figure 2 for the scatterplot of Biblical Literalism and Political Alignment.

End-points analyses revealed that there were significant differences between relatively liberal participants when given the Biased or Neutral Feedback, $t(34) = -2.91, p = .006$. When relatively liberal participants were given Biased Feedback, they tended to have higher levels of Biblical Literalism compared to relatively liberal participants given Neutral Feedback. There were significant differences between relatively conservative participants when given the Neutral or Biased Feedback, $t(34) = 3.11, p = .004$. When more politically conservative participants were given Neutral Feedback, they tended to be more Biblically literal compared to relatively conservative participants given Biased Feedback.

Simple slopes analyses revealed that the slopes were significantly different from zero for both the Neutral Feedback, $t(34) = 2.57, p = .015$, and the

Biased Feedback, $t(34) = -2.21$, $p = .034$. The Neutral slope increased as participants became more conservative. The opposite effect was found for the Biased Feedback. The Biased slope decreased as participants became more conservative. See Figure 5 for end-points and simple slopes for Biblical Literalism outcomes for relatively liberal and relatively conservative participants.

The results supported my second hypothesis, where I found a significant interaction between Feedback and Political Alignment for Biblical Literalism, where relatively liberal participants and relatively conservative participants responded differently to the Biased and Neutral Feedback. Liberals were more likely to have higher levels of Biblical Literalism when they were given the Biased Feedback compared to when given the Neutral Feedback. Relatively conservatives, on the other hand, had higher levels of Biblical Literalism when they received Neutral Feedback rather than when they received Biased Feedback. I also found that the endpoints were significantly different for both relatively liberal participants and relatively conservative participants and their level of Biblical Literalism.

Endorsement of Anti-Homosexuality Biblical Passages (HSPassages). I sequentially regressed HSPassages on the contrast and moderator variables. Again, the interaction between Feedback and Political Alignment entered in the second block. The overall model was not significant, omnibus $F(3, 34) = .38$, $p = .768$. The inclusion of the interaction term did not significantly improve the model, $R^2 = .03$, $\Delta R^2 = .01$, $\Delta F = .24$, $p = .630$. There was no main effect of Feedback, B

= .21, $t(34) = .34$, $p = .735$. There was also no main effect of Political Alignment, $B = -.14$, $t(34) = -.36$, $p = .719$. There was not a significant interaction between Feedback and Political Alignment for HSPassages, $B = -.30$, $t(34) = -.49$, $p = .630$. See Table 3 for the model summary for regression analyses of HSPassages and Figure 3 for the scatterplot of HSPassages and Political Alignment.

End-point analyses revealed that there were no significant differences between conditions and HSPassages for relatively liberal participants, $t(34) = -.40$, $p = .776$, or for relatively conservative participants, $t(34) = .59$, $p = .561$. Relatively liberal participants did not significantly differ in their level of Biblical Literalism when given the Biased Feedback or the Neutral Feedback. Relatively conservative participants also did not significantly differ in their level of Biblical Literalism when they were given the Neutral or the Biased Feedback.

Simple slopes analyses indicated that the slope for the Neutral condition was not significantly difference from zero, $t(34) = -.36$, $p = .719$ or for the Biased condition, $t(34) = -.94$, $p = .36$. In the Neutral slope, there was no change in HSPassages as participants became more conservative. In the Biased slope, there was also no change in HSPassages as participants became more conservative. See Figure 6 for end-points and simple slopes for HSPassages for relatively liberal and relatively conservative participants.

My third hypothesis where I expected an interaction between Feedback and Political Alignment for HSPassages was not supported. Again, I expected

that relatively liberal participants would have higher levels of HSPassages in the Biased Feedback than when given the Neutral Feedback and I expected the opposite effect for relatively conservative participants. The interaction between Feedback and Political Alignment was not significant. Whereas relatively liberal participants had higher HSPassages scores in the Biased Feedback compared to the Neutral Feedback, the endpoint analyses revealed that those scores were not significantly different. Relatively conservative participants had higher HSPassages scores when given the Neutral compared to when given the Biased Feedback, but again, the endpoint analyses revealed that the scores were not significantly different between the two Feedback conditions.

Post-hoc Analyses

I ran post-hoc analyses looking only at female participants in the study because 1) there were more female participants ($n = 32$) than male participants ($n = 6$) in the Pilot Study and 2) because women tend to be more religious than men (Pew Research Center, 2009). I was interested in seeing how their results might differ from the initial analyses of the Pilot Study.

Religiosity

I sequentially regressed Religiosity on Feedback and Political Alignment. I found that the overall model was not significant, omnibus $F(3, 28) = 2.01$, $p = .135$. There was no main effect of Feedback, $B = .28$, $t(28) = .47$, $p = .640$, but there was a main effect of Political Alignment, $B = .86$, $t(28) = 2.40$, $p = .023$. The

interaction between Feedback and Political Alignment was not significant, $B = -.81$, $t(28) = -1.43$, $p = .165$.

Biblical Literalism

I sequentially regressed Biblical Literalism on Feedback and Political Alignment. I found that the overall model was significant, omnibus $F(3, 28) = 3.31$, $p = .035$. There was no main effect of Feedback, $B = .19$, $t(28) = .31$, $p = .757$, but there was a main effect of Political Alignment, $B = .86$, $t(28) = 2.44$, $p = .021$. The interaction between Feedback and Political Alignment was also significant, $B = -1.71$, $t(28) = -3.07$, $p = .005$.

Endorsement of anti-homosexuality scriptures (HSPassages)

I sequentially regressed HSPassages on Feedback and Political Alignment. I found that the overall model was not significant, omnibus $F(3, 28) = .36$, $p = .784$. There was no main effect of Feedback, $B = .43$, $t(28) = .63$, $p = .534$ and no main effect of Political Alignment, $B = -.23$, $t(28) = -.56$, $p = .577$. The interaction between Feedback and Political Alignment was also not significant, $B = -.08$, $t(28) = -.13$, $p = .902$.

Overall, the regression analyses produced similar effects with only women participants as they did when both genders were included. Because the patterns remained the same and because of the smaller sample size, I did not conduct the endpoint or simple slope analyses.

Discussion

The results based on the Pilot Study suggest that there are differences between how politically liberal and politically conservative participants respond to the different false feedbacks regarding their supposed prejudice towards LGBT+. Consistent with what I hypothesized, participants who were relatively liberal tended to demonstrate higher levels of the religious dependent measures when given Biased Feedback compared to when given the Neutral Feedback. These differences, however, were only significant for the Biblical Literalism. A potential explanation to this observation could be that relatively liberal participants tend to have views and beliefs that are more egalitarian, to which the Biased Feedback greatly threatens. It could be that in this case, these participants used religion as a way to justify the prejudice from their feedback. Their higher levels of the religious dependent measures could be seen as attempt to reduce that dissonance by justifying the prejudice with religion.

The relatively conservative participants, however, tended to have higher levels of the religious dependent measures when they were given the Neutral Feedback compared to when they were given the Biased Feedback. The differences between Feedbacks were only marginally significant for Religiosity, but significantly different for Biblical Literalism. It could be that when relatively conservative participants were told they were *not* biased towards LGBT+ people, that information threatened their collective conservative self-concept and their higher levels of the religious dependent measures might have been an attempt to

self-affirm and reestablish a connection with their collective conservative self-concept. This might be more apparent considering that relatively conservative participants tended to have lower levels of the religious dependent measures when given the Biased Feedback. One possible explanation for this might be that the information they received in the Biased Feedback was consistent with their collective conservative beliefs and therefore, would not have needed religion to self-affirm.

Limitations of the Study

There were a few limitations to the Pilot Study. The first limitation was the small sample size ($N = 38$) and low power of the study. There were not enough participants to be able to draw any definitive conclusions from, but the Pilot Study did provide the framework and preliminary support for conducting the Main Study.

The second limitation of the study was the number of participants who stated they were more politically moderate ($n = 24$; 4 on a 7-point Likert-scale, where 1 = extremely liberal and 7 = extremely conservative) compared to the number of participants who stated they were more politically liberal or politically conservative. The demographics sample made it difficult to fully examine differences between political groups (i.e., liberals versus conservatives) and how participants might react to being told they are prejudiced towards LGBT+ people.

A third limitation might have been the manipulation used to assess and relay the false information about attitudes towards LGBT+ people. Because I

used two different word searches that actually differed in the number of positive and negative words each contained, it is feasible that people in the Biased condition felt there were not many positive words to be found in the word search and doubted the believability of the feedback.

Finally, the inclusion of non-Christian participants in the study was also a limitation of the study. Because there were so few participants in the Pilot Study, I only excluded participants who identified their sexual orientation as being other than heterosexual. One of the potential problems with including non-Christian participants in the study was that the religious measures in the study were about religious beliefs and practices, as well as included scriptures from the Bible, which non-Christian participants presumably either not be able to relate to or have an opinion about. They might simply have responded carelessly or marked the polar extremes (e.g., marking strongly disagree) for all the items as they might have felt the Bible serves no personal relevance to them or lacked opinions or beliefs about the items. This makes it difficult to generalize the results to Christian participants and how they might respond when given prejudice information about themselves.

CHAPTER THREE

MAIN STUDY

Introduction

Elaborating on the findings from the Pilot Study, I used a similar design to conduct the Main Study. Instead of the word search task, I used the Sexuality IAT as a more believable means to provide participants false feedback for their performance. The hypotheses were the same as the Pilot Study, with the addition of H4. I included a self-affirmation task to see whether the negative effects after receiving false Biased Feedback could be alleviated if participants are self-affirmed.

Methods

Participants

One hundred and fifty-nine undergraduates participated in the study for extra course credit. Only those who self-identified as heterosexual and belonging to a Christian denomination were included in the analyses. Based on this inclusion criteria, 29 people were excluded for either identifying as belonging to a non-Christian religion or being agnostic or atheist and 10 people were excluded for identifying their sexuality as other than heterosexual (e.g., gay, bisexual). In addition, there were nine people who failed the manipulation check ("Which feedback did you receive?") and were excluded from the sample. The final

sample consisted of 111 undergraduate students (female = 96, male = 15).

Participants were between the ages of 18-50 ($Mdn_{age} = 22$).

Materials and Apparatus

An informed consent was given to participants, which explained the general procedure for the study (Appendix L).

Sexuality Implicit Association Test (IAT). The Sexuality IAT (*FreeIAT*; Meade, 2009) was used to give believable false feedback to participants. The Sexuality IAT measures test takers' implicit preferences for either heterosexual or homosexual people based on their response latencies, or reaction times, of word-pair associations. I was, however, not interested in participants' actual scores on the Sexuality IAT. Because the scoring for the IAT is not transparent to the test taker, it would be an easy tool to use as a form of manipulation rather than a dependent variable. I used the IAT as a means to convey believable, but false feedback that the participants either do or do not display homonegativity. This procedure allowed me to give participants believable false feedback that could be reflective of their performance on the IAT. The list of words and pictures that were included on the Sexuality IAT can be found in Appendix M.

Manipulated Variables

False Feedback. There were two false feedbacks from the Sexuality IAT based on condition (either Neutral or Biased), similar to the feedback from Main Study (Appendix O). The Biased Feedback told participants that they hold strong negative attitudes towards homosexuals (or LGBT+) and are more likely to feel a

strong aversion towards homosexuals. They might also engage in avoidance behaviors when there is the possibility of being within close proximity to someone gay or lesbian (e.g. moving to a different seat if someone gay sat next to you in class). Participants were also told their results suggested that they greatly favor heterosexuals and feel no discomfort or show the same avoidance behaviors when around people who are straight. The Neutral Feedback told participants their results from the IAT indicated that they hold neutral attitudes towards LGBT+ and feel the same about LGBT+ as they do about heterosexuals. Because of their neutral feelings towards LGBT+, they likely feel equal comfort and show equal approach behaviors with people who are gay as with those who are straight (e.g. not minding sitting next to someone who is gay in their class).

Excerpt from Neutral Feedback: “Your results from the IAT indicate that you hold neutral attitudes towards homosexuals and feel the same about them as you do heterosexuals. Because of your neutral feelings towards homosexuals, you will likely feel equal comfort and show equal approach behaviors with people who are gay as with those who are straight (e.g. not minding sitting next to someone who is gay in your class). In previous research, college students who scored the same as you tended NOT to behave coldly towards gays and, when given the opportunity, did NOT exclude a gay student from a classroom group activity. Most of these students were not aware they showed this unbiased behavior.”

Excerpt from Biased Feedback: “Your results from the IAT indicate that you hold strong negative attitudes towards homosexuals and greatly favor heterosexuals. Because of your strong aversion to homosexuals, you will likely engage in avoidance behaviors when there is the possibility of being within close proximity to someone gay or lesbian (e.g. moving to a different seat if someone gay sat next to you in class). You will feel no similar discomfort or show the same avoidance behaviors when around people who are straight. In previous research, college students who scored the same as you tended to behave more coldly towards gays and, when given the opportunity, excluded a gay student from a classroom group activity. Most of these students were not aware they showed this biased behavior.”

Self-Affirmation Task. Participants either did the self-affirmation task or no-affirmation task (Appendix P). In the self-affirmation task, participants were asked to rank a list of 11 values and qualities traits (e.g., sense of humor, relations with friends/family) in order of personal importance (1 = most important item, 11 = least important item). Next, they were told to think about the trait they ranked as first and write about why that trait was important to them and to describe a time in their life when it proved meaningful.

Participants who did the no-affirmation task were given the same list of traits and quality and asked to rank the items in order of importance to

them. Next, they were told to think about the trait they ranked as ninth and write about why that trait might be important to the typical CSUSB student.

Measured Variables

Political Alignment. Political Alignment was the moderator variable and measured on a 7-point Likert scale (1 = extremely liberal, 7 = extremely conservative; $M = 3.57$, $SD = 1.18$). Similar to the Pilot Study, the majority of participants identified as moderate (4 = moderate; $n = 47$). There were more participants who identified as being relatively liberal (3 or less on Political Alignment scale; $n = 45$) compared to those who identified as relatively conservative (5 or higher on Political Alignment scale; $n = 19$). Because few participants rated themselves as strongly liberal or conservative, the results will be analyzed comparing relatively liberal and relatively conservative participants rather than comparing liberal participants versus conservative participants. The Political Alignment scores were mean-centered before any data analyses occurred (see Appendix R for demographics questionnaire).

The dependent variables in the Main Study measured religiosity along different dimensions. The same three dependent variables from the Pilot Study were measured in the Main Study: Religiosity, Biblical Literalism, and endorsement of anti-homosexuality Biblical scriptures (HSPassages). See Table 5 for the correlation matrix for the dependent variables.

Religiosity. The Religiosity measure consisted of the single question: “How religious are you?” (1 = not at all religious, 7 = very religious).

Biblical Literalism. As in the Pilot Study, the Biblical Literalism measure consisted of the same three items, “To what extent do you believe the Bible is the literal word of God?”, “The Bible should be taken literally”, and “I think that Bible stories should be taken literally, as they are written”. These three items came from the 20-item Post-Critical Beliefs Scale (Duriez & Soenez, 2006). They were selected because they appeared high in face validity in that they all related to the notion the Bible should be taken literally. Further, when the full scale was submitted to exploratory factory analyses (principle axis factoring with direct oblimin rotation), the three items loaded on a common factor (with factor loadings > .50). The three items were then averaged to create a composite score for Biblical Literalism (Cronbach’s $\alpha = .85$).

Endorsement of Anti-Homosexuality Scriptures (HSPassages). The final measure was for participants to rate to what extent they agreed that Biblical scriptures should be used to guide public policies (e.g., state and federal legislation). Again, participants rated the 20 passages used in Study 2, with 18 of the passages serving as filler items. The endorsements of the two Biblical scriptures that condemned homosexuality (e.g., Leviticus 20:13: “If a man has sexual relations with a man as one does with a woman, both of them have done with is detestable”) were averaged to create a composite score for HSPassages (Cronbach’s $\alpha = .95$).

Debriefing. A debriefing sheet explained the purpose of the study and that

the feedback participants received was false and not indicative of their actual performance on the Sexuality IAT (Appendix S).

Procedure

Participants came into the lab to read and sign the informed consent form before participating in the study. The first part of the study involved the Sexuality IAT. After completing the Sexuality IAT, participants were given an egalitarian traits questionnaire (Appendix N) to complete while they waited for their results from the IAT. Participants were randomly assigned to the Biased condition or the neutral condition. After completing the egalitarian traits task, half the participants received false Biased Feedback from the IAT and the other half received false Neutral Feedback. Next, participants completed the self-affirmation task or no self-affirmation task. After this manipulation, participants completed the measures of religious beliefs, a basic demographics survey, and manipulation checks. Finally, participants were debriefed and thanked for their participation.

Design and Data Analysis

A series of multiple moderated regressions were used to analyze the relationship between the feedback variable, the centered continuous moderator, and their interaction on the criterion variables. The Feedback variable was the false Feedback received (Neutral, Biased). Political Alignment served as the continuous moderator between feedback condition and the criterion variables: Religiosity, Biblical Literalism, and endorsement of anti-gay Biblical

scriptures. The Affirmation task was not a significant predictor for the religious dependent measures.

Self-Affirmation. I ran the planned analyses to test Hypothesis 4 and found that the Affirmation tasks failed to produce any meaningful effects on the religious dependent measures. When looking at Affirmation and its interactions with the other predictor variables for Religiosity, Affirmation x Feedback was not significant, $B = .38$, $t(103) = .64$, $p = .521$, but Affirmation x Political Alignment was marginally significant, $B = .95$, $t(103) = 1.89$, $p = .061$. The three-way interaction of Affirmation x Condition x Political Alignment was also not significant, $B = -.49$, $t(103) = -.83$, $p = .410$. There were also no significant interactions of Affirmation with the predictor variables for Biblical Literalism. That is, Affirmation x Condition, $B = .01$, $t(103) = .02$, $p = .986$, Affirmation x Political Alignment, $B = .69$, $t(103) = 1.42$, $p = .16$, and Affirmation x Condition x Political Alignment were all non-significant, $B = -.41$, $t(103) = -.72$, $p = .472$. Finally, Affirmation did not produce any significant interactions for HSPassages. The interaction of Affirmation x Condition was not significant, $B = -.21$, $t(103) = -.28$, $p = .77$, and neither was Affirmation x Political Alignment, $B = .82$, $t(103) = 1.35$, $p = .179$. The three-way interaction of Affirmation x Condition x Political Alignment was not significant, $B = -.39$, $t(103) = -.54$, $p = .591$. See Table 7 for the model summaries of Affirmation (including main effects) for each of the religious dependent measures.

Because the Affirmation conditions (no Affirmation, Affirmation) produced no predicted or consistent effects, I collapsed the Affirmation tasks across the Feedback conditions for all analyses. My justification for doing so was that using only participants who did the no Affirmation task would have dropped my sample size from 111 to 50. One potential explanation for the failure of the Affirmation task could be due to the order of tasks participants were presented in the experiment (e.g., Affirming participants after they already received the Feedbacks, rather than before), which will be addressed in the Discussion.

Preliminary Analyses

Data Screening

Missing Data Analysis. Missing values analysis was conducted using SPSS on the predictor and criterion variables to test for patterns of missing data. There were no patterns of missing data and any missing values were considered missing completely at random.

Univariate Outliers. To test for univariate outliers, I standardized the continuous variables, Political Alignment, Religiosity, Biblical Literalism, and HSPassages and graphed each of the standardized variables in a histogram overlaid with a normal curve. I also checked the frequency tables of standardized values (z-scores) for each continuous variable. I used ± 3.29 *SD* of the mean as the cutoff score for outliers (Tabachnick & Fidell, 2013). All variables fell within

± 3.29 *SD* of the mean, thus there were no univariate outliers for any of the continuous variables.

Multivariate Outliers. There were no multivariate outliers. All variables fell within ± 3 *SD* of the mean.

Tests of Normality

Skewness and Kurtosis. Histograms indicated that the continuous predictors were mostly normally distributed, with $z = 3.29$ set as the cutoff criteria for significant kurtosis and skewness.² The continuous predictor Political Alignment was reasonably normally distributed (kurtosis = $-.51$, skewness = $-.51$). Religiosity was somewhat peaked and positively skewed (kurtosis = -1.57 , skewness = $-.42$). Biblical Literalism was somewhat peaked but not skewed (kurtosis = -1.57 , skewness = $.05$). HSPassages was somewhat peaked and positively skewed (kurtosis = 2.24 , skewness = 1.54).

Linearity and Homoscedasticity. I plotted the standardized predicted values of Religiosity, Biblical Literalism, and HSPassages against their respective standardized errors in a scatterplot. When I reviewed all three scatterplots, it did not appear that any of the criterion variables violate the assumption of homogeneity of variance. The standardized errors for each criterion variable are evenly dispersed amongst the standardized predicted values.

Multicollinearity

² Skewness and Kurtosis were reported for all criterion variables, but it should be noted that scores should only be used for smaller samples (> 30) because the statistics will be biased against larger samples (Tabachnick & Fidell, 2013, p. 80).

Multicollinearity was assessed for all predictors (Feedback condition, Political Alignment). The tolerance was greater than .40 for all predictors and multicollinearity was not considered an issue.

Results

Correlations among Continuous Variables

Religiosity was positively correlated with Biblical Literalism, $r(111) = .50$, and HSPassages, $r(111) = .37$, and Biblical Literalism and HSPassages were also positively correlated, $r(111) = .65$. Although the measures were interrelated, they appeared to be unique constructs with the greatest overlap between HSPassages and Biblical Literalism, which shared just under 43 percent of variance. See Table 5 for the correlation matrix between the three dependent variables of Religiosity, Biblical Literalism, and HSPassages. Political Alignment was positively correlated with Religiosity, $r(111) = .27$, Biblical Literalism, $r(111) = .35$, and HSPassages, $r(111) = .36$. As participants became politically more conservative, they reported increases in religious endorsement, but political alignment only accounted for a maximum of 13 percent of the variance in this endorsement. Scatterplots between Political Alignment and the dependent measures are displayed in Figures 5a, 5b, and 5c.

Regression Tests for Moderation

Using the same analyses as the Pilot Study, the Main Study also used moderated regressions to examine whether participants would show higher

levels of Religiosity following false feedback regarding their prejudice towards LGBT+ people and whether this response would be moderated by Political Alignment.³ Again, I subjected all dependent measures to separate moderated regressions with Feedback, Political Alignment, and their interaction entered as predictor variables. I dummy coded the two-level feedback condition variable to represent the comparison between the neutral (0) and Biased (1) feedback conditions. I centered the continuous Political Alignment moderator variable to increase the interpretability of the unstandardized coefficients. I computed the cross product of Feedback and Political Alignment to produce the interaction term required to represent the interaction between the experimental condition and the moderator variable. I then regressed each outcome using hierarchical regression with the main effects (the dummy coded Feedback variable and the continuous Political Alignment) in the first block and the interaction term between the two variables in the second block (Cohen et al., 2003). See Table 4 for the descriptive statistics for the three criterion variables and Table 6 for the model summary of the regression analyses.

Religiosity. I regressed Religiosity on the contrast and moderator variables. The overall model was significant, omnibus $F(3, 107) = 4.57, p = .005$. The addition of the interaction in the second block did significantly improved the overall model, $R^2 = .114, \Delta R^2 = .04, \Delta F = 4.61, p = .034$. There was no main

³ Before testing for the moderating effects of political alignment, I ran a one-way ANOVA with feedback as the independent variable and political alignment as the dependent variable. This analysis was not significant, $F(1, 118) = 1.05, p = .308$, indicating that political alignment was unaffected by the feedback manipulation.

effect of Feedback for Religiosity, $B = .04$, $t(107) = .13$, $p = .900$, but there was a main effect of Political Alignment, $B = .674$, $t(107) = 3.57$, $p = .001$. Of greater interest was the significant interaction between Feedback and Political Alignment, $B = -.54$, $t(107) = -2.15$, $p = .034$. How participants responded to the Feedback depended on their Political Alignment. See Table 6 for the model summary for the regression analyses of Religiosity.

End-point analyses revealed marginally significant differences between Feedback for relatively liberal participants, $B = 1.32$, $t(107) = 2.02$, $p = .046$. Relatively liberal participants had significantly higher levels of Religiosity when given the Biased Feedback compared to when given Neutral Feedback. There were marginally significant differences between Feedback for relatively conservative participants, $B = -1.22$, $t(107) = -1.84$, $p = .069$. When relatively conservative participants were given Neutral Feedback, they had marginally higher levels of Religiosity than when given Biased Feedback.

Simple slopes analyses indicated that the slope for the Neutral condition was significantly different from zero for Religiosity, $B = .67$, $t(107) = 3.57$, $p = .001$. When given Neutral Feedback, participants' level of Religiosity significantly increased as participants became more conservative. The slope for the Biased condition did not significantly differ from zero for Religiosity, $B = .14$, $t(107) = .84$, $p = .401$. When given Biased Feedback, participants' level of Religiosity did not significantly change as participants became more conservative. See Figure 10

for end-points and simple slopes of Religiosity outcomes for relatively liberal and relatively conservative participants.

The results supported my first hypothesis: The interaction between Feedback and Political Alignment was significant, such that relatively liberal participants had higher levels of Religiosity after being given the Biased Feedback compared to when they are given the Neutral Feedback. I found the opposite pattern for relatively conservative participants. From the endpoint analyses, I found significant differences between Feedbacks for relatively liberal participants and their levels of Religiosity. I also found marginal differences for relatively conservative participants for their differences between Feedback and level of Religiosity.

Biblical Literalism. I regressed Biblical Literalism on the contrast and moderator variables. The overall model was significant, omnibus $F(3, 107) = 6.93, p < .001$, but the addition of the interaction in the second block did not significantly improve the overall model, $R^2 = .163, \Delta R^2 = .01, \Delta F = 1.50, p = .224$. There was a marginally significant main effect of Feedback, $B = .51, t(107) = 1.86, p = .066$. There was a main effect of Political Alignment for Biblical Literalism, $B = .61, t(107) = 3.34, p = .001$. Their interaction, however, did not significantly predict Biblical Literalism, $B = -.29, t(107) = -1.22, p = .224$. See Table 6 for the model summary for the regression analyses of Biblical Literalism.

End-point analyses revealed that there were marginally significant differences between conditions for relatively liberal participants, $B = 1.20, t(107)$

= 1.95, $p = .054$. Relatively liberal participants given Biased Feedback had marginally higher levels of Biblical Literalism compared to those given Neutral Feedback. There were no significant differences between conditions for relatively conservative participants, $B = -.164$, $t(107) = -.26$, $p = .794$. Relatively conservative participants had about the same levels of Biblical Literalism when given Neutral Feedback as when given Biased Feedback.

Simple slopes analyses indicated that the slopes were significantly different from zero for both the Neutral Feedback, $t(107) = 3.39$, $p = .001$ and the Biased Feedback, $t(107) = 2.041$, $p = .044$. Biblical Literalism significantly increased in both the Neutral and Biased slopes as participants became more conservative. See Figure 11 for the graph of the end-points and simple slopes for Biblical Literalism outcome based on Political Alignment.

I found partial support for my second hypothesis, where I expected relatively liberals and conservatives to respond differently to the Biased and Neutral Feedback and their level of Biblical Literalism. Although the interaction between Feedback and Political Alignment was not significant, the endpoints analyses revealed marginally significant differences for relatively liberal participants between the Feedback and level of Biblical Literalism. Relatively liberal participants had somewhat higher levels of Biblical Literalism in the Biased Feedback condition and somewhat lower levels of Biblical Literalism in the Neutral Feedback condition. I did not find any differences for relatively conservative participants from the endpoint analyses between Feedbacks,

although the expected pattern was there for higher levels of Biblical Literalism in the Neutral Feedback and lower levels of Biblical Literalism in the Biased Feedback.

Endorsement of Anti-Homosexuality Biblical Passages (HSPassages). I sequentially regressed HSPassages on the contrast and moderator variables, with the interaction of Feedback and Political Alignment entered in the second block. The overall model was marginally significant, omnibus $F(3, 107) = 6.83, p < .001$, but the inclusion of the interaction did not significantly improve the model, $R^2 = .16, \Delta R^2 = .02, \Delta F = 1.87, p = .175$. There was no main effect of Feedback, $B = .49, t(107) = 1.41, p = .162$. There was a main effect of Political Alignment, $B = .81, t(107) = 3.59, p < .001$. There was no significant interaction of Feedback and Political Alignment for HSPassages, $B = -.41, t(107) = -1.37, p = .175$. See Table 6 for the model summary for the regression analyses of HSPassages.

End-point analyses revealed marginally significant differences between conditions for relatively liberal participants, $B = 1.47, t(107) = 1.87, p = .064$. Relatively liberal participants given Biased Feedback had slightly higher levels of HSPassages compared to those given Neutral Feedback. There were no significant differences between Feedback condition and relatively conservative participants, $B = -.47, t(107) = -.59, p = .560$. Relatively conservative participants had about the same levels of HSPassages when given Neutral Feedback as when given Biased Feedback.

Simple slopes analyses indicated that the slope for the Neutral condition was significantly different from zero, $t(107) = 3.60, p < .001$. The slope for the Biased Feedback also significantly differed from zero, $t(107) = 2.06, p = .042$. In both Feedback conditions, the Neutral and Biased slopes increased. This means that participants were more likely to endorse those anti-homosexuality passages as participants became more conservative. See Figure 12 for the graph of the end-points and simple slopes for HSPassages based on Political Alignment.

My third hypothesis pertained to differences in HSPassages based on Feedback was only partially supported. The interaction between Feedback and Political Alignment was not significant. From the endpoints analyses, I found marginal differences for relatively liberal participants between Feedbacks and HSPassages. As expected, relatively liberal participants had higher levels of HSPassages when given Biased Feedback and lower levels of HSPassages when given Neutral Feedback. I did not find any significant differences in the endpoint analyses for relatively conservative participants between Feedback and level of HSPassages. Relatively conservative participants had about the same level of HSPassages when they were given the Neutral Feedback and when they were given the Biased Feedback.

Endorsement of Biblical Passages (HSPassages18). Because I found some effects for HSPassages, I also looked at how participants might endorse the other eighteen Biblical scriptures to see if those passages would produce any of the same effects. I created a composite score (HSPassages18) by summing

the other eighteen scriptures and then calculated the mean of the scriptures ($M = 4.97$, $SD = .83$; Cronbach's $\alpha = .87$). The correlation between the 18 passage composite and the 2 passage composite measures was $r(111) = .59$.

As with the other religious dependent measures analyses, I sequentially regressed HSPassages18 on the contrast and moderator variables, with the interaction of Feedback and Political Alignment entered in the second block. The overall model was not significant, omnibus $F(3, 107) = 1.31$, $p = .268$ and the inclusion of the interaction did not significantly improve the model, $R^2 = .04$, $\Delta R^2 = .002$, $\Delta F = .24$, $p = .623$. There was no main effect of Feedback, $B = .08$, $t(107) = .49$, $p = .622$ and no main effect of Political Alignment, $B = .16$, $t(107) = 1.56$, $p = .122$. There interaction of Feedback and Political Alignment was also not significant, $B = -.07$, $t(107) = -.49$, $p = .623$. See Table 6 for the model summary for the regression analyses of HSPassages18 and Figure 5d for the scatterplot between HSPassages18 and Political Alignment.

End-point analyses revealed no significant differences between Feedbacks for relatively liberal participants, $B = .24$, $t(107) = .67$, $p = .504$. Relatively liberal participants who were given the Biased Feedback had about the same level of HSPassages18 as those given Neutral Feedback. There were also no significant differences between Feedbacks and relatively conservative participants, $B = -.08$, $t(107) = -.22$, $p = .828$. Relatively conservative participants had about the same levels of HSPassages18 when given Neutral Feedback as when given Biased Feedback.

Simple slopes analyses indicated that the slope for the Neutral condition was not significantly different from zero, $t(107) = 1.56$, $p = .122$. The slope for the Biased Feedback was also not significantly differed from zero, $t(107) = 1.05$, $p = .298$. In both Feedback conditions, the Neutral and Biased slopes did not change as participants became more conservative. See Figure 14 for the graph of the end-points and simple slopes for HSPassages18 based on Political Alignment.

The findings from the analyses with the 18 passages irrelevant to homosexuality produced no significant findings. Thus, these irrelevant items did not follow the same pattern when compared to the two passages that did relate to homosexuality. It appears that conservatism was positively related to the two passages condemning homosexuality rather than to all passages. In addition, when given the opportunity to be selective, relatively liberal participants who were told they showed anti-LGBT+ bias showed a marginal tendency to endorse the two anti-homosexual (rather than all) passages.

Post-hoc Analyses

The same as with the Pilot Study, I ran post-hoc analyses looking only at female participants in the study because 1) there were more female participants ($n = 96$) than male participants ($n = 15$) in the Main Study and 2) women tend to be more religious than men (Pew Research Center, 2009). I was interested in seeing how their results might differ from the initial analyses of the Main Study.

Religiosity

I sequentially regressed Religiosity on Feedback and Political Alignment. I found that the overall model was significant, omnibus $F(3, 92) = 4.45, p = .006$. There was no main effect of Feedback, $B = .03, t(92) = .11, p = .909$, but there was a main effect of Political Alignment, $B = .66, t(92) = 3.41, p = .001$. The interaction between Feedback and Political Alignment was marginally significant, $B = -.45, t(92) = -1.72, p = .085$.

Biblical Literalism

I sequentially regressed Biblical Literalism on Feedback and Political Alignment. I found that the overall model was significant, omnibus $F(3, 92) = 6.87, p < .001$. There was a marginal main effect of Feedback, $B = .54, t(92) = 1.87, p = .065$. There was a main effect of Political Alignment, $B = .63, t(92) = 3.35, p = .001$. The interaction between Feedback and Political Alignment, however, was not significant, $B = -.27, t(28) = -1.10, p = .273$.

Endorsement of anti-homosexuality scriptures (HSPassages)

I sequentially regressed HSPassages on Feedback and Political Alignment. I found that the overall model was not significant, omnibus $F(3, 92) = .09, p = .966$. There was no main effect of Feedback, $B = -.18, t(92) = -.15, p = .884$ and no main effect of Political Alignment, $B = .361, t(92) = .46, p = .657$. The interaction between Feedback and Political Alignment was also not significant, $B = -.21, t(92) = -.20, p = .843$.

Overall, the analyses with only women produced similar, but weaker, results than the analyses with both women and men. Because the new analyses did not improve on the primary ones, I did not conduct tests of simple slopes or endpoints.

Discussion

Overall, I partially replicated my findings from the Pilot Study. For each hypothesis, I expected that relatively liberal participants would have higher levels of the religious dependent measures when they were given the Biased Feedback compared to when they were given the Neutral Feedback and I expected the opposite pattern for relatively conservative participants. I found a significant interaction between Feedback and Political Alignment for Religiosity in the Main Study (H1), which was nonsignificant from the Pilot Study. Whereas I found a significant interaction and a full crossover for Biblical Literalism in the Pilot Study, I was not able to replicate that finding in the Main Study (H2). The interaction was also not significant for HSPassages (H3).

In terms of the endpoints analyses, I found significant and marginally significant differences between feedback conditions for relatively liberal participants across all three religious dependent measures in the Main Study. In the Pilot Study, the endpoints analysis for relatively liberal participants was only significantly different between feedback conditions for Biblical Literalism. Concerning the relatively conservative participants, the endpoint analyses only

revealed marginally significant differences between Feedbacks for Religiosity, but not Biblical Literalism or HSPassages. Additionally, the simple slopes analyses demonstrated that the slopes for the Biased and Neutral Feedbacks were all significantly different from zero for all the religious dependent measures, with the exception of the Biased slope for Religiosity.

In general, relatively liberal participants tended to have higher levels of the religious dependent measures after receiving the Biased Feedback compared to after receiving the Neutral Feedback. Because liberals tend to be more egalitarian and embrace that as part of the collective liberal self-concept, the threatening information from the Biased Feedback might have motivated the relatively liberal participants to attempt to use religion to justify that prejudice feedback information.

Relatively conservative participants, however, tended to have higher levels of the religious dependent measures when they were given the Neutral Feedback compared to when they were given the Biased Feedback. Because part of the conservative collective self-concept traditionally includes prejudice towards LGBT+, the Biased Feedback provides no new information for conservatives. It could be that relatively conservatives felt more threatened by the Neutral Feedback and attempted to use religion as a form of self-affirmation.

I did not find any support for my last hypothesis (H4) pertaining to self-affirmation and reducing the effects of the Biased Feedback. A potential reason why the self-affirmation task might not have worked could have been the order in

which participants completed the study tasks. Self-affirmation tasks are traditionally completed after the participant has received some sort of negative feedback on a task (cf. Fein & Spencer, 1997; Sherman & Cohen, 2006), but some studies affirm participants before they receive negative feedback. It could have been that given the nature of my study and being told they are prejudiced towards LGBT+—affirming participants beforehand, rather than afterwards, would have provided for a better buffer against the Biased Feedback.

Limitations of the Study

One limitation with the Main Study (as was with the Pilot Study) was the dispersion of participants along the Political Alignment scale (1 = extremely liberal, 7 = extremely conservative). Overall, most participants aligned themselves either as moderate (score of 4; $n = 47$) or somewhere along the liberal end of the Liberal-Conservative political spectrum (3 or less, $n = 45$). Comparatively, only 19 participants aligned themselves somewhere along the conservative spectrum side of the Liberal-Conservative political scale.

Additionally, four participants identified themselves as being extremely liberal, but no participants identified themselves as being Extremely Conservative. This distribution of political alignment reduced my ability to compare between participants on the more polar ends of the Liberal-Conservative political spectrum. Instead, the results compared relatively more liberal participants to those who were relatively more moderate or conservative.

CHAPTER FOUR

GENERAL DISCUSSION

The purpose of this study was to examine the use of religion that some people might use as justification for prejudice towards gay men and lesbian women. I expected that for some participants, after they were told they held negative attitudes towards LGBT+, their higher levels of Religiosity, Biblical Literalism, and increased endorsement of anti-homosexuality Biblical passages would be indicative of participants' attempts to justify that prejudice. Additionally, I expected participants' Political Alignment to moderate this relationship between Feedback and their subsequent levels of the religious dependent measures.

The Pilot Study was to see if these phenomena could be experimentally tested. The Main Study was intended to improve upon the methods of the Pilot Study, while also including the self-affirmation task. The purpose of the self-affirmation task was to remove the possible alternate explanation that participants' response in the Biased Feedback condition was due to reactance from receiving any form of Biased Feedback and not just because of the content in the Feedback (i.e., being told they were prejudiced towards LGBT+).

Overall, I expected that there would be an interaction between Feedback and Political Alignment. I expected that relatively liberal participants would have higher levels of the religious dependent measures when they were given the Biased Feedback compared to when they were given the Neutral Feedback. I

expected the opposite pattern for relatively conservative participants, such that they should have higher levels of the religious dependent measures after receiving the Neutral Feedback compared to after receiving the Biased Feedback. In general, I found both patterns of results across the Pilot Study and Main Study, to varying degrees of support.

The first hypothesis (H1) pertained to participants' levels of Religiosity after being given the Biased Feedback or the Neutral Feedback. The interaction between Feedback and Political Alignment was not significant in the Pilot Study, but it was significant in the Main Study. In the Pilot Study, I also did not find significant differences from the endpoint analyses between Feedbacks for the relatively liberal participants or relatively conservative participants and Religiosity. In the Main Study, however, there were significant differences between Feedbacks for relatively liberal participants. There were marginally significant differences between Feedbacks for relatively conservative participants.

Related to Religiosity, the second hypothesis (H2) looked at participants' level of Biblical Literalism after receiving the Feedbacks. I expected an interaction between Feedback and Political Alignment. This hypothesis was supported in both the Pilot Study, but not in the Main Study. It is still important to note that the results from the Main Study still followed the same pattern that I would have expected to find, in that Biblical Literalism was higher for relatively liberal participants after they received the Biased Feedback (compared to Neutral

Feedback) and for relatively conservative participants after they received the Neutral Feedback (compared to Biased Feedback).

The third hypothesis (H3) dealt with participants' endorsement of anti-homosexuality Biblical scriptures. I expected that relatively liberal participants given Biased Feedback would be more likely to endorse those Biblical scriptures compared to relatively conservative participants given the same feedback. I expected that conservative participants would be more likely to endorse the scriptures when given the Neutral Feedback. Across both the Pilot Study and the Main Study, I did not find the expected interaction between Feedback and Political Alignment. Again, I found the same pattern of results as Biblical Literalism, just not the statistical support.

The final hypothesis (H4) involved a self-affirmation task in the Main Study where the self-affirmation task was expected to reduce the effect of the Biased Feedback conditions from the first three hypotheses. The self-affirmation task ultimately did not work and the self-affirmation task was collapsed across all conditions. I discuss a potential explanation for this null finding when I address the limitations of my research below.

One explanation for the observed pattern for how relatively liberal participants reacted to the Biased Feedback (compared to the Neutral Feedback) is that being told they have negative attitudes towards LGBT+ might have been a violation of their collective liberal self-concept and egalitarian beliefs (Skitka & Tetlock, 1993). The higher levels of the religiosity dependent measures might

have been a way to reconcile the discrepancy or dissonance between the Feedback and participants' collective liberal self-concept. With conservatives, the Neutral Feedback might have threatened their collective conservative self-concept (having negative attitudes towards LGBT+ is common, if not expected) and religion provided a way to self-affirm that disconnect.

Overall Limitations of the Studies

Low Variance of Political Alignment Amongst Participants

One of the issues I had with both the Pilot Study and the Main Study was that there was a floor effect with Political Alignment amongst the participants. Overwhelmingly, participants identified as being more moderate than liberal or conservative on the Liberal-Conservative spectrum, so there was very little variance within the sample. This was a problem considering that my study focused on the moderating effect of Political Alignment for each of the hypotheses (i.e., comparing liberals to conservatives). At most, I could only compare between participants who were relatively liberal and moderate or relatively conservative. The goal of both studies was to see how participants on the more polar ends of the political Liberal-Conservative scale would have responded when given information regarding their LGBT+ prejudice or lack thereof.

Potential Shift in Political Alignment after Biased Feedback

An alternate explanation of the results is that after participants received the Biased Feedback, they could have shifted their Political Alignment identification rather than their religious identification (as determined by their responses to the religious dependent measures). Because participants were asked for their Political Alignment after they already received the Feedback, it is possible that they shifted their political identification to be more in-line with that Feedback. For example, participants who might otherwise identify themselves as being extremely liberal might have changed their political identification to be slightly more conservative (e.g., 3 instead 1 on Political Alignment scale) after being told they are prejudiced towards LGBT+. Although there was no main effect of Feedback on Political Alignment, I cannot be sure that the Feedback condition and people's pre-feedback Political Alignment did not interactively influence their post-feedback alignment. To eliminate this possibility as an alternative explanation for my findings, future research needs to include Political Alignment as a pretest measure, ideally during a separate data-collection session.

Affirmation Task and Increasing Sexuality Prejudice

The Main Study elaborated on the Pilot Study design by including an affirmation task. During my preliminary analyses, however, it was apparent that the self-affirmation task did not work the way in which I expected. After determining that there were no significant differences on all measures between

those who did the self-affirmation task and those who did the no self-affirmation task, I collapsed the affirmation tasks across conditions and continued with the outlined analyses from the design section.

A possible explanation for why the self-affirmation task did not work was that it might have actually increased participants' endorsement of anti-homosexuality passages and Biblical Literalism. In research by Lehmiller (2010), a self-affirmation increased the likelihood of sexuality prejudice. That is, those who were self-affirmed reported greater anti-homosexual prejudice. This possibility was something that I did not expect when I designed my study procedure. Affirmation tasks typically tend to reduce the negative effects of receiving false Biased Feedback so I did not anticipate that the affirmation task might actually increase participants' prejudice towards LGBT+. Because I used a values affirmation task that included a value of family and friends, I might have inadvertently primed participants to think about values that are more traditional (i.e., between a man and woman). By increasing pro-heterosexual or anti-homosexuality bias, this prime might have then decreased liberal participants' dissonance to receiving Biased Feedback about being prejudiced towards LGBT+ people. If so, participants who identified as relatively liberal would not need to adjust their religiosity as a means to counter the dissonance of the Biased Feedback.

Direction of Future Research

One alternate explanation of these results that my research did not address was whether relatively liberal participants' response was due to the topic content of the Biased Feedback (i.e., LGBT+ prejudice) or just from receiving any kind of negative or Biased Feedback (i.e., being prejudice towards any group). I intend to include an additional target group to see whether the pattern I found from Pilot Study and Main Study were due to relatively liberal participants' attempt to justify their LGBT+ prejudice using religion or whether the effect was due to the sheer nature of receiving any kind of Biased Feedback. I would expect that liberal participants would be likely to use religion to justify their prejudice *more* when that prejudice is not considered socially acceptable (e.g., LGBT+ prejudice) and to use religion *less* to when that prejudice is considered socially acceptable (e.g., prejudice towards pedophiles). It is also possible that other forms of prejudice that are less linked to religious values (e.g., ethnic prejudice) will not show an increase in religious endorsement.

I also intent to include a No Feedback condition in a follow-up study. After taking the Sexuality IAT, participants will be told they will receive their IAT results at the end of the study (but never do). The No Feedback condition would serve as a baseline comparison and allow me to see how participants moved in their responses on the religious dependent measures after receiving the different Feedbacks. For example, I would be able to see if relatively liberal participants

are becoming more or less religious (i.e., higher levels of the religious dependent measures) after receiving the Biased Feedback.

Differing Views of God

Whereas most research regarding political orientation and attitudes towards homosexual people tends to find that conservatives, compared to liberals, have more negative attitudes towards LGBT+, one possible reason for these differences is that different political groups might have differing views of God. The political divide among Protestants in their attitudes toward LGBT+ people might be because conservative Protestants tend to view God as vengeful and exclusive whereas liberal Protestants tend to view God as loving and inclusive (Froese & Bader, 2008). Because of existing differences in tolerance and level of fundamentalism between liberal and conservative political, these two groups might respond differently in terms of shifts in religiosity when they believe they have shown homonegativity. Despite there being so many perceived religious differences between politically liberal Christians compared to politically conservative Christians, these differences could be due to some underlying fundamental difference in how these two groups view God.

Conclusion

My research drew on the theoretical framework of the justification-suppression model of prejudice (Crandall & Eshleman, 2004) in an attempt to determine if some people might use religion as a means to justify their prejudice

towards gay men and women. The tendency to use religion as a justification for prejudice, however, might be limited to those who regard their prejudice as dissonant with their overall political ideals. It appears that liberals might have been more inclined to use religion as a justification for their prejudice because that prejudice may not resonated well with their overall collective egalitarian beliefs, whereas conservatives might have relied on religion to self-affirm their collective conservative self-concept after being told they were not prejudiced towards LGBT+. Although the Pilot Study and the Main Study only found partial support for this notion, it does provide a glimpse into how people might differentially respond when being told they have biases.

APPENDIX A

INSTITUTIONAL REVIEW BOARD APPROVAL LETTER

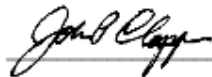
**Human Subjects Review Board
Department of Psychology
California State University,
San Bernardino**

PI: Garcia, Donna; Fabros, Mi chelle
From: John P. Clapper
Project Title: Religious Beliefs and Prejudice Toward Homosexuals
Project ID: H-13SU-03
Date: 5/21/13

Disposition: Revision Request

Your IRB revision request is approved. This approval is valid until 7/18/2014.

Good luck with your research!



John P. Clapper, Co-Chair
Psychology IRB Sub-Committee

APPENDIX B

PILOT STUDY INFORMED CONSENTS

PILOT STUDY INFORMED CONSENTS



College of Social and Behavioral Sciences
Department of Psychology

Informed Consent

Introduction/Purpose: The purpose of this research is to examine people's social and religious beliefs and attitudes.

Procedures: By choosing to participate in this study, you will be asked to answer two short questionnaires about your religious beliefs and practices. Later, in a separate session, you will take a short word-matching test in the lab and answer two more short questionnaires about your beliefs and opinions. Today's portion of the study should take no more than a half-hour to complete; in total, both parts will take no more than one hour to complete.

Confidentiality: The information that you give us is completely anonymous. Your name will not be associated with your data in any way. Your data will be assigned a code number and your name will not appear on any data reports. If you provide your SONA ID to receive credit, this information will be stored in a file separate from your responses in the study.

Risks and Benefits: Participation in this study does not pose any foreseeable risks beyond those of everyday life. If you are doing this research for credit toward a psychology course, you will receive 2 units of extra credit as compensation at the end of the second session, at discretion of the course instructor.

Participant's Rights: We would like to remind you that you do have the right to refuse to participate in this study, answer any questions, or to terminate your participation at any time without penalty (i.e., you will still receive participation credit).

Finally, if you have any complaints or comments regarding this study, you can contact Dr. Donna Garcia at dmgarcia.csusb.edu or 909-537-3893. You can also contact Dr. Garcia for a copy of the study results after December 2014. This study has been approved by the Department of Psychology Institutional Review Board Sub-Committee of the California State University, San Bernardino, and a copy of the official Psychology IRB stamp of approval should appear on this consent form.

Please read the following paragraph:

I understand that any information about me obtained from this research will be held strictly confidential. I acknowledge that I am of at least 18 years old. I understand and agree with the terms described above.

Participant's X _____

Date: _____



The California State University
Bakersfield • Channel Islands • Chico • Dominguez Hills • East Bay • Fresno • Fullerton • Humboldt • Long Beach • Los Angeles • Maritime Academy
Monterey Bay • Northridge • Pomona • Sacramento • San Bernardino • San Diego • San Francisco • San Jose • San Luis Obispo • San Marcos • Sonoma • Stanislaus



College of Social and Behavioral Sciences
Department of Psychology

Informed Consent

Introduction/Purpose: The purpose of this research is to examine people's social and religious beliefs and attitudes. This is a continuation to the first part of the study you completed online.

Procedures: By choosing to participate in this study, you will take a short word-matching test on the computer and receive your test results. Next, you will complete two short questionnaires about your beliefs and opinions. The procedure should take no more than a half-hour to complete.

Compensation: If you are doing this research for credit toward a psychology course, you will receive 2 units of extra credit as compensation at the end of this session, at discretion of the course instructor.

Confidentiality: The information that you give us is completely anonymous. Your name will not be associated with your data in any way. Your data will be assigned a code number and your name will not appear on any data reports. If you provide your SONA ID to receive credit, this information will be stored in a file separate from your responses in the study.

Risks and Benefits: Participation in this study does not pose any foreseeable risks beyond those of daily life, nor any direct benefits for you as an individual other than possible extra credit in one of your Psychology classes. The test you take and surveys you complete could cause minor psychological stress, but it should not be more than what you normally experience in a regular school day. There are no individual benefits other than the possibility of extra credit in one of your Psychology classes.

Participant's Rights: We would like to remind you that you do have the right to refuse to participate in this study, answer any questions, or to terminate your participation at any time without penalty (i.e., you will still receive participation credit).

Finally, if you have any complaints or comments regarding this study, you can contact Dr. Donna Garcia at dmgarcia.csusb.edu or 909-537-3893. You can also contact Dr. Garcia for a copy of the study results after December 2014. This study has been approved by the Department of Psychology Institutional Review Board Sub-Committee of the California State University, San Bernardino, and a copy of the official Psychology IRB stamp of approval should appear on this consent form.

Please read the following paragraph:

I understand that any information about me obtained from this research will be held strictly confidential. I acknowledge that I am of at least 18 years old. I understand and agree with the terms described above.

Participant's X _____

Date: _____

CALIFORNIA STATE UNIVERSITY PSYCHOLOGY INSTITUTIONAL REVIEW BOARD			
APPROVED	NOTED	VOID APPROVAL	DATE
IRB CH	CHIEF OF STUDY	CHIEF	

The California State University
Bakersfield • Channel Islands • Chico • Dominguez Hills • East Bay • Fresno • Fullerton • Humboldt • Long Beach • Los Angeles • Maritime Academy
Monterey Bay • Northridge • Pomona • Sacramento • San Bernardino • San Diego • San Francisco • San Jose • San Luis Obispo • San Marcos • Sonoma • Stanislaus

APPENDIX C
BOGUS PRIMING TASK PHOTO

BOGUS PRIMING TASK PHOTO

7/22/13

Court Overturns DOMA, Sidesteps Broad Gay Marriage Ruling : The Two-Way : NPR



the two-way

america

Court Overturns DOMA, Sidesteps Broad Gay Marriage Ruling

by EYDER PERALTA

June 26, 2013 10:04 AM



1 of 6

Mladen Antonov/AFP/Getty Images

The Supreme Court issued rulings on two highly-anticipated cases on gay marriage today. By 5-4, it ruled the federal Defense of Marriage Act, which defines marriage as a union between one man and one woman, is unconstitutional.

www.npr.org/blogs/thetwo-way/2013/06/26/195857796/supreme-court-strikes-down-defense-of-marriage-act

1/5

Antonov, M., AFP, & Getty Images. Gay marriage supporters [Screenshot of online article]. Retrieved July 22, 2013 from <http://www.npr.org/sections/thetwo-way/2013/06/26/195857796/supreme-court-strikes-down-defense-of-marriage-act>

APPENDIX D
BOGUS PRIMING TASK QUESTIONS

BOGUS PRIMING TASK QUESTIONS

Thinking back to the picture you were asked to look at, please answer the following questions.

How many face(s) are in the picture? _____

How many men are in the picture? _____

How many women are in the picture? _____

How many flag(s) are in the picture? _____

How many signs are people holding in the picture? _____

APPENDIX E
WORD SEARCHES

WORD SEARCHES—NEUTRAL

P E I E K E L G I D L H U M I L I A T E
 E V Y G R U N R E F U E L B A K I L N L
 A O B I F I E T O A F O S I S H K G A I
 C L S N G T E B T I R Q Y W A T N G D T
 E E I A T S S R I L E D N P E I D J E S
 D A G I T C A A X U D G P B N E N Y K O
 P N B A E G E L E R N Y E E J S T S C H
 E O B N I D X P U E O G K N V C E H I T
 W L E C S R Y P S F W C O S E O A A W N
 E T N E L L E C X E I T A N I R Y M Y A
 I N N O C E N T H S R T I R M N O E H S
 E R I M D A K O H U Y C U I L F F U K A
 E P D N I K R L H G E A N A E U M U S E
 U D R A W R B E S U U G N I E L F R L L
 T S U O I C A R G K Q A I N R B D Y A P
 R G Q B F A D A W F U L L B O Y B K O W
 I I L V T A M N D I S G U S T Y R V K J
 V E H A T E N T P O L I T E T A I G Y X
 A E S U A N B E V U L G A R E W H N N J
 H O H I Y K Q Y M S X Q S Y N O G A G A

admire
 beautiful
 charming
 desire
 engaging

excellent
 generous
 gracious
 happy
 innocent

joyful
 kind
 laughter
 likable
 love

nice
 peace
 pleasant
 polite
 respect

sweet
 tolerant
 virtue
 warm
 wonderful

agony
 angry
 annoying
 awful
 bitter

detestable
 disgust
 failure
 hate
 horrible

hostile
 humiliate
 hurt
 Nausea
 Obscene

painful
 profane
 rotten
 scornful
 shame

sickening
 sinful
 tragic
 wicked
 vulgar

WORD SEARCHES—NEGATIVE (BIASED)

R Y D B B L H D C H E B E E W A V Y L A
 H E U R U I U Z Z M L E E B L Q G I R E
 F P P F E L F X G A B A S L S I K O T I
 I A Y U L R X X P F A U H L B A T A N L
 T O I E L B I R R E T T A X B I I S A Y
 J R Y L L S A M A L S I M L B L R U O I
 E Y U E U N I N D T E F E U I P G R N H
 N L U H G R N V N A T U H M T H C G O Y
 E R U R T O E E E E E L U P T R H E P H
 C W Y F Y O C V D Z D H S E A N A S T Y
 S B A I N O L U K M T P R Q T Q R G H V
 B K N R N I R E T S U G S I D C M R I T
 O G E N M Q S P R O F A N E C L I E V C
 G M I R O T T E N A K V L E H U N T U E
 G S I C K E N I N G N U H N I F G T L R
 T C E P S E R I Q Y F T A D D N E I G I
 U P L E A S A N T N A U P E E R T B A S
 D E K C I W H G I O S X P D O O A M R E
 P O L I T E J A L E T N Y A U C H W R D
 L U F W A T P Z A G O O D J S S L I V E

agony	disgust	hostile	obscene	shame
angry	dull	humiliate	painful	sickening
annoying	evil	hurt	profane	sinful
awful	failure	jaded	repulsive	terrible
bitter	hate	loathe	rotten	tragic
cruel	hideous	nasty	rude	vulgar
detestable	horrible	nausea	scornful	wicked
admire	desire	innocent	likable	respect
beautiful	happy	joyful	pleasant	tolerant
charming	good	laughter	polite	warm

APPENDIX F
PILOT STUDY FALSE FEEDBACKS

PILOT STUDY FALSE FEEDBACKS—NEUTRAL

In your psychology courses, you may have learned about the unconscious effects of priming. Priming occurs where some stimulus has been presented to a person and it has the ability to influence behavior or reveal implicit attitudes.

You may or may not have noticed the images of the gay and lesbian couples on the overhead projector. While you were completing the word search task, you had been primed to think about homosexuals. This task has been widely used by researchers to examine implicit attitudes that people hold towards certain groups. What researchers found was that when participants are primed to think about homosexuals, the participants revealed their implicit attitudes towards homosexuals on a neutral word search task. The word search task contained an equal amount of positive and negative words. Findings have shown a high correlation between the types of words found on the word search task and how people actually feel about homosexuals.

In the word search task, you were asked to circle as many words as you could find. You found approximately an equal amount of both positive and negative words. Your results from the word search task indicate that you have neither a positive nor negative bias towards homosexuals. According to previous studies, because you found an equal amount of positive and negative words, this suggests that you are likely to hold the same attitudes towards homosexuals as you do heterosexuals.

PILOT STUDY FALSE FEEDBACKS—BIASED

In your psychology courses, you may have learned about the unconscious effects of priming. Priming occurs where some stimulus has been presented to a person and it has the ability to influence behavior or reveal implicit attitudes.

You may or may not have noticed the images of the gay and lesbian couples on the overhead projector. While you were completing the word search task, you had been primed to think about homosexuals. This task has been widely used by researchers to examine implicit attitudes that people hold towards certain groups. What researchers found was that when participants are primed to think about homosexuals, the participants revealed their implicit attitudes towards homosexuals on a neutral word search task. The word search task contained an equal amount of positive and negative words. Findings have shown a high correlation between the types of words found on the word search task and how people actually feel about homosexuals.

In the word search task, you were asked to circle as many words as you could find. The majority of the words you found on the word search task were negative. Your results from the word search task indicate that you have a strong negative bias towards homosexuals. According to previous studies, because you found mostly negative words, you are more likely to feel a strong aversion to homosexuals and engage in avoidance behaviors when the possibility of being within close proximity to homosexuals occurs. This suggests that, conversely, you feel more favorably towards heterosexuals.

APPENDIX G

PILOT STUDY RELIGIOSITY AND POLITICAL MEASURES

PILOT STUDY RELIGIOSITY AND POLITICAL MEASURES

What is your religious affiliation? (please check one)

<input type="checkbox"/> Catholic	<input type="checkbox"/> Anglican	<input type="checkbox"/> Personal
<input type="checkbox"/> Eastern Orthodox	<input type="checkbox"/> Episcopalian	religion/spiritual
<input type="checkbox"/> Lutheran	<input type="checkbox"/> Methodist	<input type="checkbox"/> Agnostic
<input type="checkbox"/> Presbyterian	<input type="checkbox"/> Baptist	<input type="checkbox"/> Atheist
<input type="checkbox"/> Reformed Church	<input type="checkbox"/> Other (please specify)	

What is your political alignment?

1	2	3	4	5	6	7
Very liberal			Moderate			Very Conservative

How religious are you?

1	2	3	4	5	6	7
Not at all religious						Very religious

How often do you attend church?

1	2	3	4	5	6	7
Never	Yearly	Few times/year	Monthly	Few times/month	Weekly	Multi-weekly

How often do you pray?

1	2	3	4	5	6	7
Never	Monthly	Few times/month	Weekly	Few times/week	Daily	Multi-daily

How important is the Bible to you?

1	2	3	4	5	6	7
Not at all important						Extremely important

How much religion is used in making decisions for yourself in every day life?

1	2	3	4	5	6	7
Not at all						A great deal

Religious and political measures developed by Donna Garcia and Michelle Fabros, based on common methods to measure religiosity and political alignment.

APPENDIX H
POST-CRITICAL BELIEFS SCALE

POST-CRITICAL BELIEFS SCALE

Duriez, B., Soenens, B., & Hutsbaut, D. (2005). Introducing the shortened post-critical beliefs scale. *Personality and Individual Differences*, 38, 851-957.

Please rate the following on how much you agree or disagree with the statements using the scale below:

1	2	3	4	5	6	7
Strongly disagree						Strongly agree

1. The Bible is the actual word of God.
2. The Bible should be taken literally, word for word.
3. The Bible is an ancient book of fables, legends, history, and moral precepts recorded by humans.
4. The Bible holds a deeper truth that is revealed by personal reflection.
5. There is only one correct understanding of God.
6. God is unchanging.
7. Faith is believing in an illusion.
8. The Bible only provides a framework for the search for God.
9. The Bible is not a historical account.
10. Each statement about God is a result of the time in which it was made.
11. Although the Bible was written a long time ago, it retains its basic messages.
12. The manner in which humans experience God will always be colored by society.

13. The world of Bible stories has little relevance to our lives today.
14. Science has made religious understanding of life unnecessary.
15. God changes across time.
16. My ideology is only one possibility among so many others.
17. I think that Bible stories should be taken literally, as they are written.
18. Faith is nothing more than a safety net for human fears.
19. Faith is an expression of a weak personality.
20. Faith in God shows strength of character.

APPENDIX I
BIBLICAL SCRIPTURES

BIBLICAL SCRIPTURES

Please rate to what extent you agree or disagree that the following Biblical scriptures should be used to guide public policies (e.g. laws, state and federal legislation), using the scale below:

1	2	3	4	5	6	7
Strongly disagree						Strongly agree

1. Matthew 7:1 "Do not judge, or you too will be judged."
2. Exodus 22:21 "You must not mistreat or oppress foreigners in any way.
Remember, you yourselves were once foreigners in the land of Egypt."
3. Mark 12:31 "...Love others as well as you love yourself."
4. Ephesians 5:4 "Nor should there be obscenity, foolish talk or coarse joking."
5. Leviticus 20:13 "If a man has sexual relations with a man as one does with a woman, both of them have done what is detestable..."
6. Exodus 20:16 "You shall not give false testimony against your neighbor."
7. Exodus 20:14 "You shall not commit adultery."
8. Luke 12:33 "Be generous. Give to the poor..."
9. Leviticus 18:22 "Do not have sexual relations with a man as one does with a woman; that is detestable."
10. Leviticus 11:10-11 "¹⁰ But all creatures in the seas or streams that do not have fins and scales--whether among all the swarming things or among all the other living creatures in the water--you are to regard as unclean. ¹¹ And

- since you are to regard them as unclean, you must not eat their meat; you must regard their carcasses as unclean." (e.g. you can't eat shrimp)
11. Leviticus 19:11 "Do not steal. Do not lie. Do not deceive one another."
 12. Judges 13:4 "Now see to it that you drink no wine or other fermented drink and that you do not eat anything unclean."
 13. Leviticus 18:20 "Do not have sexual relations with your neighbor's wife and defile yourself with her."
 14. Exodus 22:20 "Anyone who sacrifices to any god other than the LORD must be destroyed."
 15. Leviticus 19:15 "Do not pervert justice; do not show partiality to the poor or favoritism to the great, but judge your neighbor fairly."
 16. Psalm 15:5 "Who[ever] lends money to the poor [does so] without interest."
 17. Exodus 22:19 "Anyone who has sexual relations with an animal is to be put to death."
 18. Exodus 22:16 "If a man seduces a virgin who is not engaged to anyone and has sex with her, he must pay the customary bride price and marry her."
 19. Exodus 20:8 "Remember the Sabbath day by keeping it holy."
 20. Leviticus 19:28 "Do not cut your bodies for the dead or put tattoo marks on yourselves..."

Biblical scriptures chosen by Donna Garcia and Michelle Fabros based on common laws found on Bible study websites.

APPENDIX J
PILOT STUDY DEMOGRAPHICS

PILOT STUDY DEMOGRAPHICS

What is your age? _____

What is your gender? Female _____ Male _____

What is your ethnicity?

- | | |
|--------------------------------------|-------------------------------------|
| _____ American Indian/Alaskan Native | _____ White, not of Hispanic origin |
| _____ Asian | _____ Hispanic |
| _____ Pacific Islander | _____ Multi-racial |
| _____ Black | _____ Other (please specify) |

What is your sexual orientation?

- _____ Heterosexual (Straight)
- _____ LGBTQQI
- _____ Decline to state
- _____ Other (please state below)

Which feedback did you receive after completing the word search task? (Please check one.)

I showed a positive bias towards lesbian and gay people _____

I showed a negative bias towards lesbian and gay people _____

I showed no bias towards lesbian and gay people _____

To what extent do you agree that the feedback was an accurate representation of how you actually feel?

1	2	3	4	5	6	7
Strongly disagree						Strongly agree

What are your thoughts on this study and its purpose?

APPENDIX K
PILOT STUDY DEBRIEFING

PILOT STUDY DEBRIEFING

The study you participated in was designed to understand Christian religious beliefs and attitudes towards homosexuals. We wanted to examine whether, for some individuals, religion may be used as a justification for prejudice towards homosexuals. Specifically, we wanted to see under what conditions this may occur and whether there would be a corresponding change in religiosity after being given false feedback on a word search task.

You were randomly assigned to receive a word search that contained either more negative words, positive words, or an equal amount of negative and positive words. The feedback you received from the word search was false and corresponded to the type of word search you received. The false feedback said you either held negative prejudice, positive predudice, or no prejudice toward homosexuals. The subsequent Biblical scriptures and religious activities questionnaires each participant was asked were consistent across all conditions. We are interested in whether people who receive Negative Feedback (that they showed anti-homosexual prejudice) will show increased support for religious beliefs.

If you have any questions in the future or would like a copy of the results (after December 2013), please contact the researchers below:

Michelle Fabros
California State University, San Bernardino
Department of Psychology
E-mail: fabrosm@coyote.csusb.edu

Donna Garcia
California State University, San Bernardino
Department of Psychology
E-mail: dmgarcia@csusb.edu

APPENDIX L

MAIN STUDY INFORMED CONSENT

MAIN STUDY INFORMED CONSENT

Introduction/Purpose: The purpose of this research is to examine people's social and religious beliefs and attitudes.

Procedures: This is a two-party study, where the second portion will be conducted in the lab. By choosing to participate in this study, you will be asked to answer a few a short questions about your religious beliefs and practices. Afterwards, you will take a short word-matching test in the lab, a short writing task, and answer a two more short questionnaires about your beliefs and opinions. The second part of the study should take no more than a half hour to forty-five minutes to complete.

Confidentiality: The information that you give us is completely anonymous. Your name will not be associated with your data in any way. Your data will be assigned a code number and your name will not appear on any data reports. If you provide your SONA ID to receive credit, this information will be stored in a file separate from your responses in the study.

Risks and Benefits: Participation in this study does not pose any foreseeable risks. If you are doing this research for credit toward a psychology course, you will receive 2 units of extra credit as compensation at the end of the session, at discretion of the course instructor.

Subject's Rights: We would like to remind you that you do have the right to refuse to participate in this study, answer any questions, or to terminate your participation at any time without penalty (i.e., you will still receive participation credit).

Finally, if you have any complaints or comments regarding this study, you can contact Dr. Donna Garcia at dmgarcia.csusb.edu or 909-537-3893. You can also contact Dr. Garcia for a copy of the study results after December 2014.

Please read the following paragraph:

I understand that any information about me obtained from this research will be held strictly confidential. I acknowledge that I am of at least 18 years old. I understand and agree with the terms described above.

APPENDIX M
SEXUALITY IMPLICIT ASSOCIATION TEST

SEXUALITY IMPLICIT ASSOCIATION TEST

Meade, A. W. (2009). *FreeIAT*: An open-source program to administer the implicit association test. *Applied Psychological Measurement*, 33, 643.

Sexuality IAT Instructions (from *FreeIAT*)

You will be presented with a set of words or images to classify into groups. This task requires that you classify items as quickly as you can while making as few mistakes as possible. Going too slowly or making too many mistakes will result in an uninterpretable score. This part of the study will take about 5 minutes. The following list is a category of labels and the items that belong to each of those categories.

Keep in mind:

- Keep your index fingers on the 'e' and 'i' keys to enable rapid response
- Two labels at the top will tell you which words or images go with each key
- Each word or image has a correct classification. Most of these are easy
- The test gives no results if you go slow— Please try to go as fast as possible
- Expect to make a few mistakes because of going fast. That's OK
- For best results, avoid distractions and stay focused

Sexuality IAT Categories and Items

Category	Items
Pleasant words	Joyful, Beautiful, Wonderful, Pleasure, Lovely, Happy
Unpleasant words	Agony, Terrible, Horrible, Painful, Tragic, Humiliate
LGBT+ related words	Gay, Lesbian, Homosexual, Queer, LGBT, Pride Parade
Heterosexual related words	Straight, Heterosexual, Male, Female, Traditional Marriage, Church
LGBT+ images	(see below)
Heterosexual images	(see below)

LGBT+ images



1



2



3



4



5



6



7

Heterosexuality images



8



9



10



11



12



13



14

Citations for IAT Images

1. Barnard, N., & Getty Images. (2012). Adam Lambert attends 103.5 KTU's KTUphoria in Holmdel City, New Jersey [Online image]. Retrieved October 23, 2013 from <http://www.rollingstone.com/music/news/on-the-charts-adam-lambert-makes-history-20120523>
2. Gay couple wedding cake topper [Online image]. Retrieved October 23, 2013 from <http://fablog.ehrensteinland.com/2014/07/27/someone-left-the-wedding-cake-out-in-the-rain/>
3. JLC-Lara Porzak Photography. (2008). Ellen and Portia's wedding album [Online image]. Retrieved October 23, 2013 from http://www.people.com/people/gallery/0,,20220768_20499587,00.html#20499587
4. Still of Ellen Degeneres in American Idol [Online image]. (2010). Retrieved October 23, 2013 from http://www.imdb.com/media/rm689802752/nm0001122?ref_=nm_ov_ph
5. My big gay Italian wedding [Online image]. Retrieved October 23, 2013 from <http://www.fanpop.com/clubs/theater/images/11798554/title/big-gay-italian-wedding-photo>
6. Bertron, L. (2008). Rainbow flag and blue skies [Online image]. Retrieved October 23, 2013 from [https://en.wikipedia.org/wiki/Rainbow_flag_\(LGBT_movement\)#/media/File:Rainbow_flag_and_blue_skies.jpg](https://en.wikipedia.org/wiki/Rainbow_flag_(LGBT_movement)#/media/File:Rainbow_flag_and_blue_skies.jpg)
7. Anderson, S. (2013). Gay pride parade [Online image]. Retrieved October 23, 2013 from <http://www.wingerjock.com/category/travel-2/>
8. Pavel L Photo and Video. (2013). Stock vector illustration: Family silhouette [Online image]. Retrieved October 23, 2013 from <http://www.shutterstock.com/pic-13193548/stock-vector-family-silhouette.html>

9. Church wedding [Online image]. Retrieved October 23, 2013 from
<https://opentabernacle.wordpress.com/2010/03/16/procreation-as-pro-creation-towards-a-generativity-centered-ethic-of-sex-and-marriage/>
10. Yes on 8: Protect marriage [Online image]. (2009). Retrieved October 23, 2013 from
<https://unitedfamiliesinternational.wordpress.com/2009/11/19/lgbt-activists-begin-effort-to-overturn-prop-8/>
11. The Inviting Pear. (2012). Wedding prop signs [Online image]. Retrieved October 23, 2013 from <https://www.etsy.com/listing/85714845/instant-download-wedding-prop-signs>
12. Holter, C. K. (2013). Stock photo: Will you marry me? [Online image]. Retrieved October 23, 2013 from <http://www.shutterstock.com/pic-1115488/stock-photo-will-you-marry-me.html>
13. Royal Doulton. (2006). Our wedding day cake topper [Online image]. Retrieved October 23, 2013 from
<http://www.tias.com/43/PictPage/1923129277.html>
14. [Untitled online image of marriage definition for a man and a woman]. Retrieved October 23, 2013 from origin unknown.*

*Similar image can be found without background text from
<http://www.clker.com/clipart-man-and-woman-heterosexual-icon-17.html>

APPENDIX N
EGALITARIAN TASK

EGALITARIAN TASK

The following has a list of opposite traits. The closer you choose a number to a trait, the more you agree that the trait is most like you.

Please rate to what extent the following traits best describe you.

1	2	3	4	5	6	7
Not Egalitarian						Egalitarian

1	2	3	4	5	6	7
Not Fair-minded						Fair-minded

1	2	3	4	5	6	7
Dishonest						Honest

1	2	3	4	5	6	7
Biased						Unbiased

1	2	3	4	5	6	7
Selfish						Unselfish

1	2	3	4	5	6	7
Untruthful						Truthful

1	2	3	4	5	6	7
Not generous						Generous

1	2	3	4	5	6	7
Unkind			Kind			

1	2	3	4	5	6	7
Unjust			Just			

1	2	3	4	5	6	7
Unequal			Equal			

Egalitarian task developed by Donna Garcia and Michelle Fabros for the intended purpose of increasing participants' dissonance after they received the false Biased Feedback.

APPENDIX O

MAIN STUDY FALSE FEEDBACKS

MAIN STUDY FALSE FEEDBACK—NEUTRAL

In your psychology courses, you may have learned about the Implicit Associations Test (IAT) created by Greenwald & Banaji (1995). This test measures people's implicit attitudes towards a particular concept or group of people based on their response times of how long it takes someone to associate (or match) a pair of words. Supported by over fifteen years of research, the IAT is the primary method used by researchers for measuring people's implicit attitudes. Because the test is a measure of *implicit* attitudes, people may not even realize they hold these beliefs.

Your results from the IAT indicate that you hold neutral attitudes towards homosexuals and feel the same about them as you do heterosexuals. Because of your neutral feelings towards homosexuals, you will likely feel equal comfort and show equal approach behaviors with people who are gay as with those who are straight (e.g. not minding sitting next to someone who is gay in your class). In previous research, college students who scored the same as you tended NOT to behave coldly towards gays and when given the opportunity, did NOT exclude a gay student from a classroom group activity. Most of these students were not aware they showed this unbiased behavior.

MAIN STUDY FALSE FEEDBACK—BIASED

In your psychology courses, you may have learned about the Implicit Associations Test (IAT) created by Greenwald & Banaji (1995). This test measures people's implicit attitudes towards a particular concept or group of people based on their response times of how long it takes someone to associate (or match) a pair of words. Supported by over fifteen years of research, the IAT is the primary method used by researchers for measuring people's implicit attitudes. Because the test is a measure of *implicit* attitudes, people may not even realize they hold these beliefs.

Your results from the IAT indicate that you hold strong negative attitudes towards homosexuals and greatly favor heterosexuals. Because of your strong aversion to homosexuals, you will likely engage in avoidance behaviors when there is the possibility of being within close proximity to someone gay or lesbian (e.g. moving to a different seat if someone gay sat next to you in class). You will feel no similar discomfort or show the same avoidance behaviors when around people who are straight. In previous research, college students who scored the same as you tended to behave more coldly towards gays and, when given the opportunity, excluded a gay student from a classroom group activity. Most of these students were not aware they showed this biased behavior.

APPENDIX P
AFFIRMATION TASK

AFFIRMATION TASK

Cohen, G. L., Aronson, J., & Steele, C. M. (2000). When belief yield to evidence:

Reducing biased evaluation by affirming the self. *Personality and Social Psychology Bulletin*, 26, 1151-1164.

Instructions

Below is a list of characteristics and values, some of which may be important to you, some of which may be unimportant. Please rank these values and qualities in order of their importance to you, from 1 to 11 (1 = *most important item*, 11 = *least important item*).

- Artistic skills/ aesthetic appreciation
- Sense of humor
- Relations with friends/ family
- Spontaneity/ living life in the moment
- Social skills
- Athletics
- Musical ability/ appreciation
- Physical attractiveness
- Creativity
- Business/ managerial skills
- Romantic values

Self-affirmation task

Please rank order the characteristics and values by how important they are to you. To rank the traits, click and drag the trait to the order you want (the numbers will appear on the side after you click and drag any of the characteristics).

Think about the value or characteristic you ranked as first (#1) and why it is important to you. Please write about why it is important to you and describe a time in your life when it proved meaningful.

No self-affirmation task

Please rank order the characteristics and values by how important they are to you. To rank the traits, click and drag the trait to the order you want (the numbers will appear on the side after you click and drag any of the characteristics).

Think about the value or characteristic you ranked as ninth (#9), please write about why this characteristic or value may be important to the typical CSUSB student.

APPENDIX Q

MAIN STUDY RELIGIOSITY AND POLITICAL MEASURES

MAIN STUDY RELIGIOSITY AND POLITICAL MEASURES

What is your religious affiliation?

<input type="checkbox"/> Catholic <input type="checkbox"/> Christian <input type="checkbox"/> Protestant <input type="checkbox"/> Reformed Church	<input type="checkbox"/> Lutheran <input type="checkbox"/> Eastern Orthodox <input type="checkbox"/> Episcopalian <input type="checkbox"/> Other Christian-based (please specify)	<input type="checkbox"/> Methodist <input type="checkbox"/> Presbyterian <input type="checkbox"/> Baptist <input type="checkbox"/> Other (please specify)
--	--	--

How religious are you?

1	2	3	4	5	6	7
Not at all religious			Moderately religious			Very religious

How often do you attend church?

1	2	3	4	5	6	7
Never	Less than once a month	Once a month	2-3 times a month	Once a week	2-3 times a week	Daily

How often do you pray?

1	2	3	4	5	6	7
Never	Less than once a month	Once a month	2-3 times a month	Once a week	2-3 times a week	Daily

How important is the Bible to you?

1	2	3	4	5	6	7
Not at all important	Very unimportant	Somewhat unimportant	Neither important nor unimportant	Somewhat important	Very important	Extremely important

How much religion is used in making decisions for yourself in every day life?

1	2	3	4	5
Never	Rarely	Sometimes	Often	All of the time

What is your political alignment?

1	2	3	4	5	6	7
Extremely liberal	Very liberal	Somewhat liberal	Moderate	Somewhat conservative	Very conservative	Extremely Conservative

What is your political affiliation?

_____ Democrat _____ Republican _____ Other (please state)

How did you vote overall in the last Federal (e.g., presidential, senate) election?

_____ Democrat _____ Republican
_____ Other (please state) _____ Did not vote

Religious and political measures developed by Donna Garcia and Michelle Fabros, based on common methods to measure religiosity and political alignment.

APPENDIX R
MAIN STUDY DEMOGRAPHICS

MAIN STUDY DEMOGRAPHICS

What is your age? _____

What is your gender? Female _____ Male _____

What is your ethnicity?

- | | |
|---|--|
| <input type="checkbox"/> American Indian/Alaskan Native | <input type="checkbox"/> White, not of Hispanic origin |
| <input type="checkbox"/> Asian | <input type="checkbox"/> Hispanic |
| <input type="checkbox"/> Pacific Islander | <input type="checkbox"/> Multi-racial |
| <input type="checkbox"/> Black | <input type="checkbox"/> Other |

What is your sexual orientation?

- | | |
|---------------------------------------|---|
| <input type="checkbox"/> Heterosexual | <input type="checkbox"/> Other (please state below) |
| <input type="checkbox"/> Homosexual | |
| <input type="checkbox"/> Bisexual | <input type="checkbox"/> Decline to state |

Which feedback did you receive after completing the word search task? (Please check one.)

- ☐ Positive bias
☐ Negative bias
☐ No bias

To what extent do you agree that the feedback was an accurate representation of how you actually feel?

1	2	3	4	5	6	7
Strongly disagree						Strongly agree

To help us improve the quality of our study, do you have any thoughts regarding this study and/or its purpose?

APPENDIX S
MAIN STUDY DEBRIEFING

MAIN STUDY DEBRIEFING

The study you participated in was designed to understand how Christian religious beliefs relate to attitudes towards homosexuals. We wanted to examine whether, for some individuals, religion may be used as a justification for prejudice towards homosexuals. Specifically, we wanted to see under what conditions this may occur and whether there would be a corresponding change in religiosity after being given false feedback on a word search task.

You were randomly assigned to take the Implicit Associations Test (IAT) relating to homosexuals or adulterers. The feedback you received from the IAT was false and corresponded to which IAT you took. The false feedback said you either held negative attitudes and prejudice toward homosexuals or adulterers, or said you had neutral attitudes towards homosexuals or adulterers. The subsequent Biblical scriptures and religious activities questionnaires each participant was asked were consistent across all conditions. We are interested in whether people who receive Negative Feedback (that they showed homosexual prejudice) will show increased support for religious beliefs.

If you have any questions in the future or would like a copy of the results (after June 2014), please contact the researchers below:

Michelle Fabros
California State University, San Bernardino
Department of Psychology
E-mail: fabrosm@coyote.csusb.edu

Donna Garcia
California State University, San Bernardino
Department of Psychology
E-mail: dmgarcia@csusb.edu

APPENDIX T

TABLES

Table 1

Pilot Study: Descriptive Statistics of Dependent Variables

	<i>M</i>	<i>SD</i>	Minimum	Maximum
Religiosity	4.00	1.72	1	7
Biblical Literalism	3.42	1.80	1	7
HSPassages	3.35	1.82	1	7

Table 2

Pilot Study: Correlation Matrix of Dependent Variables

	Religiosity	Biblical Literalism
Biblical Literalism	0.67**	
HSPassages	0.31	0.41*

Note. * $p < .05$; ** $p < .01$

Table 3

Pilot Study: Model Summary of Hierarchical Regression Analysis

Dependent variable	Religiosity		Biblical Literalism		HSPassages	
	<i>B</i>	ΔR^2	<i>B</i>	ΔR^2	<i>B</i>	ΔR^2
Step 1						
Feedback	0.66		0.12		0.32	
Political Alignment	0.50		0.15		-0.16	
Step 2		0.06		.25**		0.008
Feedback x Polit	-0.84		-1.77**		-0.34	

Note. * $p < .05$; ** $p < .01$

Table 4

Main Study: Descriptive Statistics of Dependent Variables

	<i>M</i>	<i>SD</i>	Minimum	Maximum
Religiosity	4.04	1.60	1	7
Biblical Literalism	3.71	1.56	1	7
HSPassages	3.44	1.97	1	7

Table 5

Main Study: Correlation Matrix of Dependent Variables

	Religiosity	Biblical Literalism
Biblical Literalism	0.42**	
HSPassages	0.33**	0.67**

Note. * $p < .05$; ** $p < .01$

Table 6

Main Study: Model Summary of Hierarchical Regression Analysis

Dependent variable	Religiosity		Biblical Literalism		HSPassages		HSPassages18	
	<i>B</i>	ΔR^2	<i>B</i>	ΔR^2	<i>B</i>	ΔR^2	<i>B</i>	ΔR^2
Step 1								
Feedback	0.06		0.52		0.51		0.08	
Political Alignment	0.37		0.44**		0.58**		.12	
Step 2		.04**		.01		0.02		0.002
Feedback x Polit	-.53**		-.29		-0.41		-.07	

Note. * $p < .05$; ** $p < .01$

Table 7

Self-Affirmation Task: Model Summary of Hierarchical Regression Analysis

		Religiosity		Biblical Literalism		HSPassages	
Dependent variable		<i>B</i>	ΔR^2	<i>B</i>	ΔR^2	<i>B</i>	ΔR^2
Step 1							
	Condition	.06		.56		.57	
	Political Alignment	.37**		.44		.57	
	Affirmation (0 = no affirm; 1 = affirm)	-.04		.25		.45	
Step 2			.09*		.03		.04
	Condition x Political	.02		.15		.06	
	Condition x Affirmation	.38		.01		-.21	
	Political x Affirmation	.95		.69		.82	
	Condition x Political x Affirmation	-.49		-.41		-.39	

Note. * $p < .05$; ** $p < .01$

APPENDIX U

FIGURES

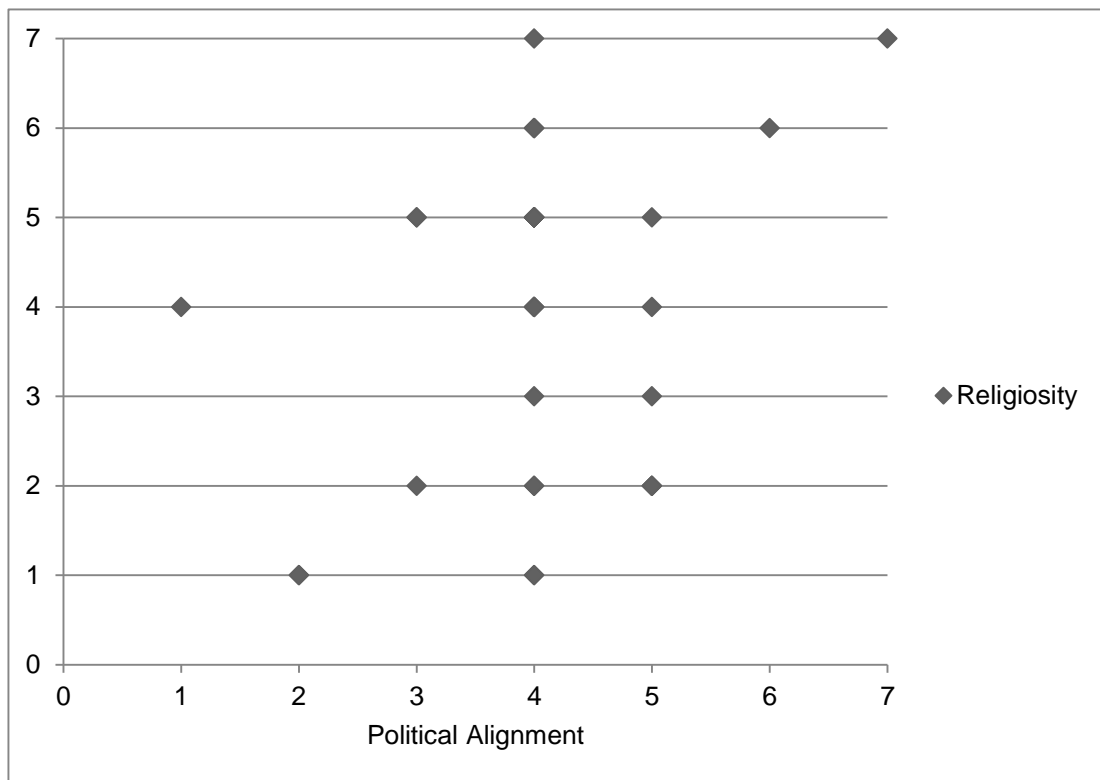


Figure 1a. Scatter plot for Political Alignment (1 = very liberal, 7 = very conservative) and Religiosity.

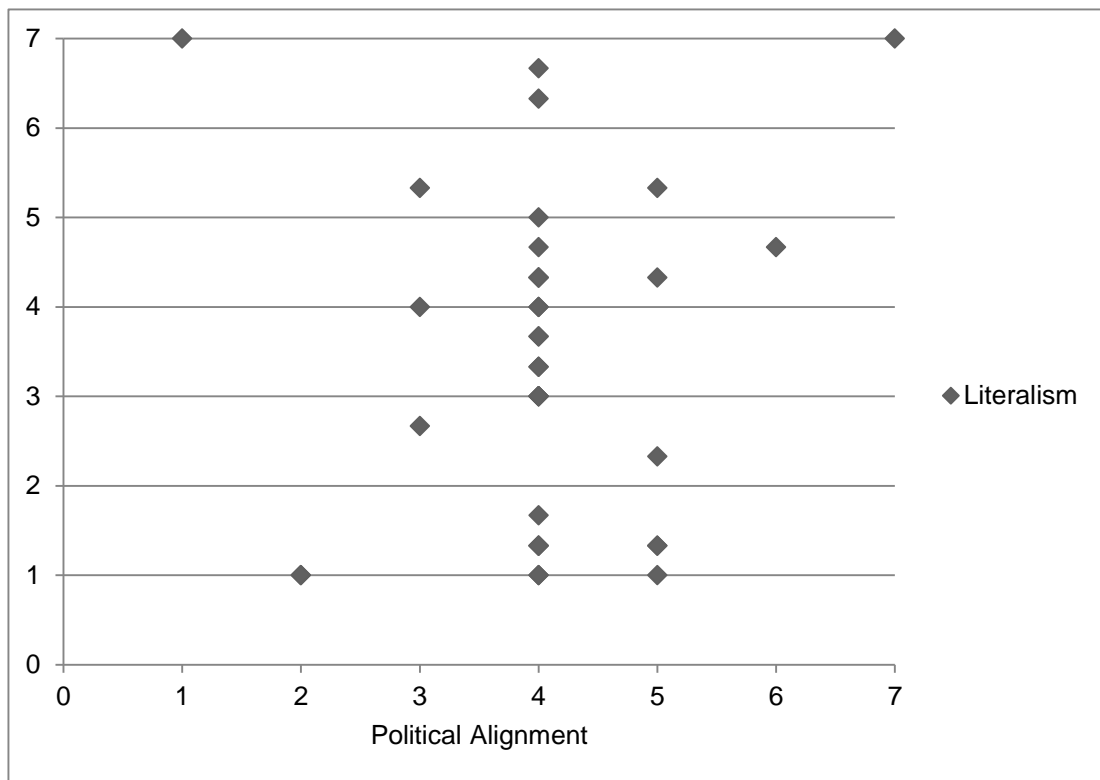


Figure 1b. Scatter plot for Political Alignment (1 = very liberal, 7 = very conservative) and Biblical Literalism.

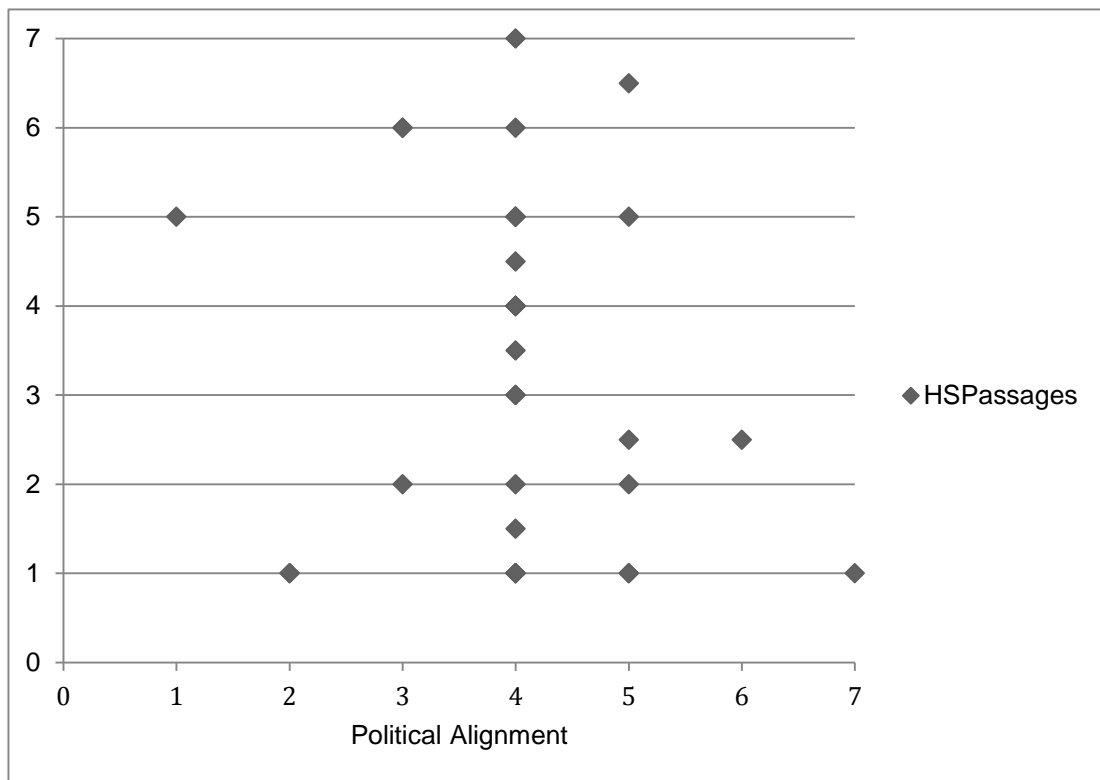


Figure 1c. Scatter plot for Political Alignment (1 = very liberal, 7 = very conservative) and endorsement of anti-homosexuality Biblical Scriptures.

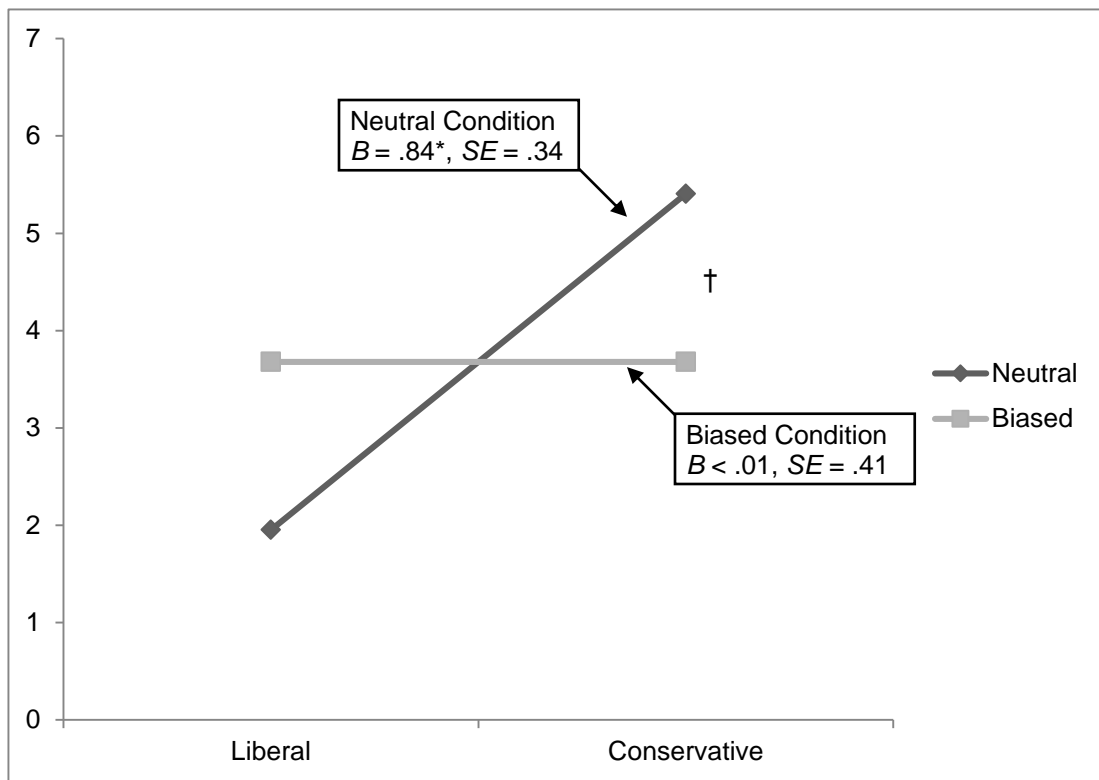


Figure 2. Pilot Study endpoints and simple slopes plotted for Religiosity for Neutral and Biased Feedback conditions for participants who were relatively more liberal and relatively more conservative.

* $p < .05$, ** $p < .01$

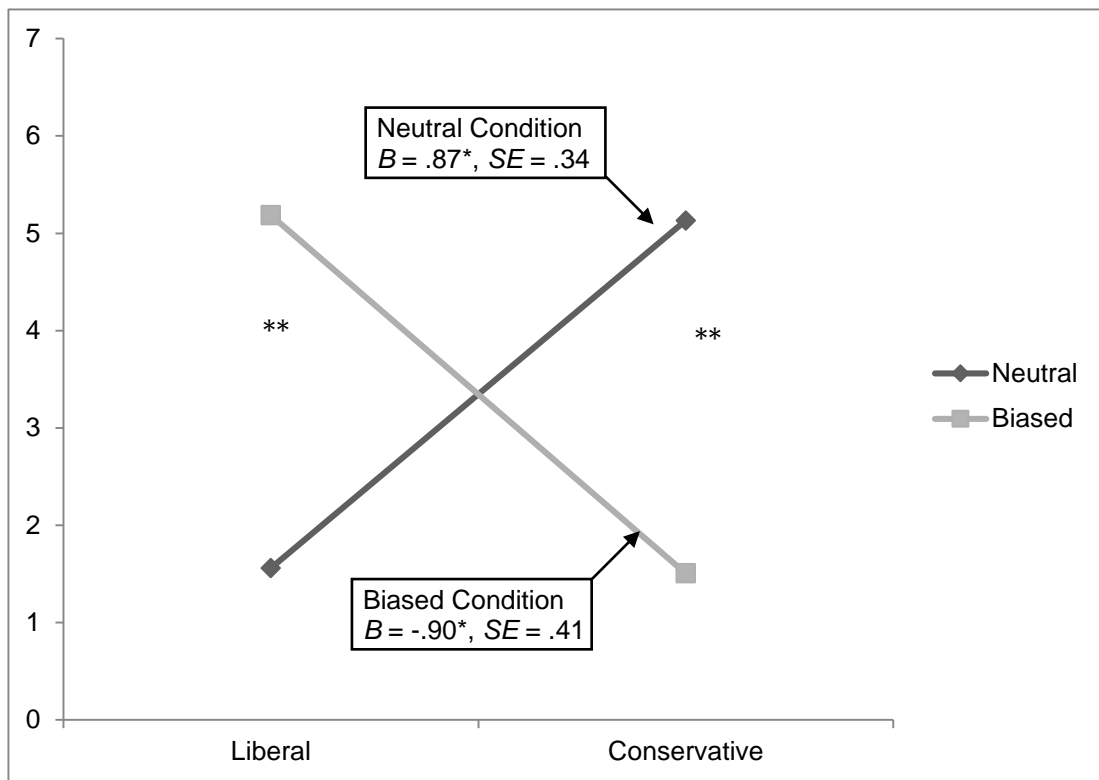


Figure 3. Pilot Study endpoints and simple slopes plotted for Biblical Literalism for Neutral and Biased Feedback conditions for participants who were relatively more liberal and relatively more conservative.

* $p < .05$, ** $p < .01$

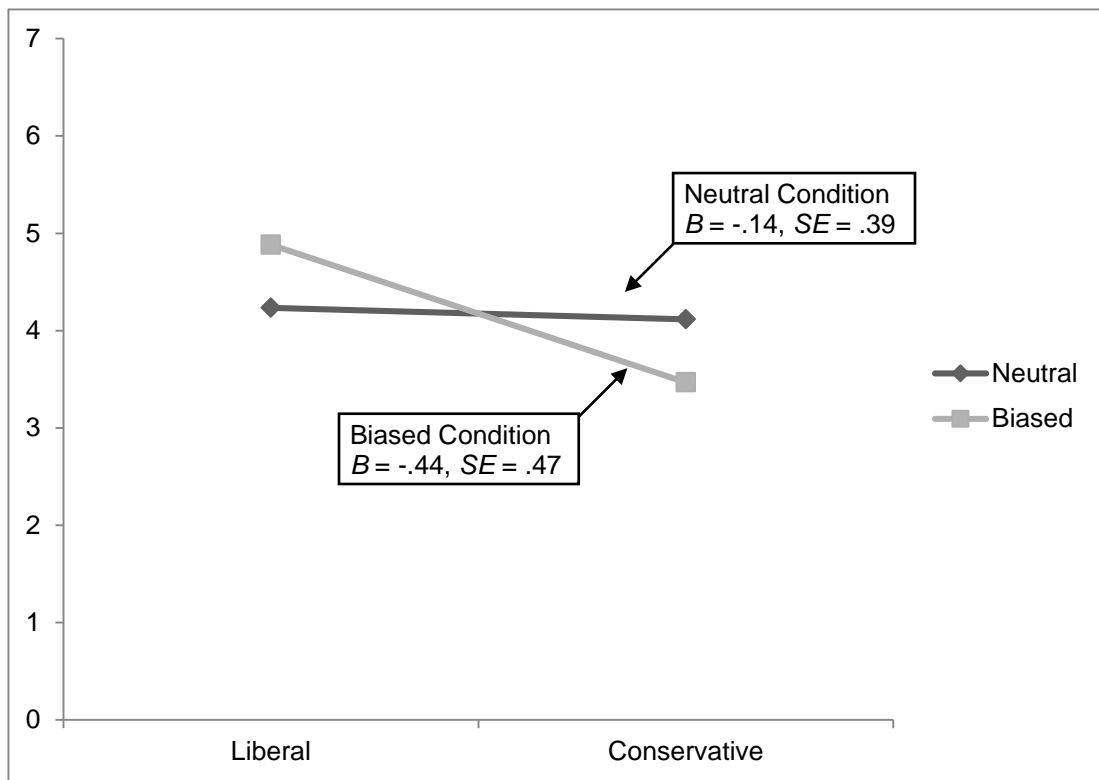


Figure 4. Pilot Study endpoints and simple slopes plotted for endorsement of anti-homosexuality Biblical scriptures (HSPassages) for Neutral and Biased Feedback conditions for participants who were relatively more liberal and relatively more conservative.

* $p < .05$, ** $p < .01$

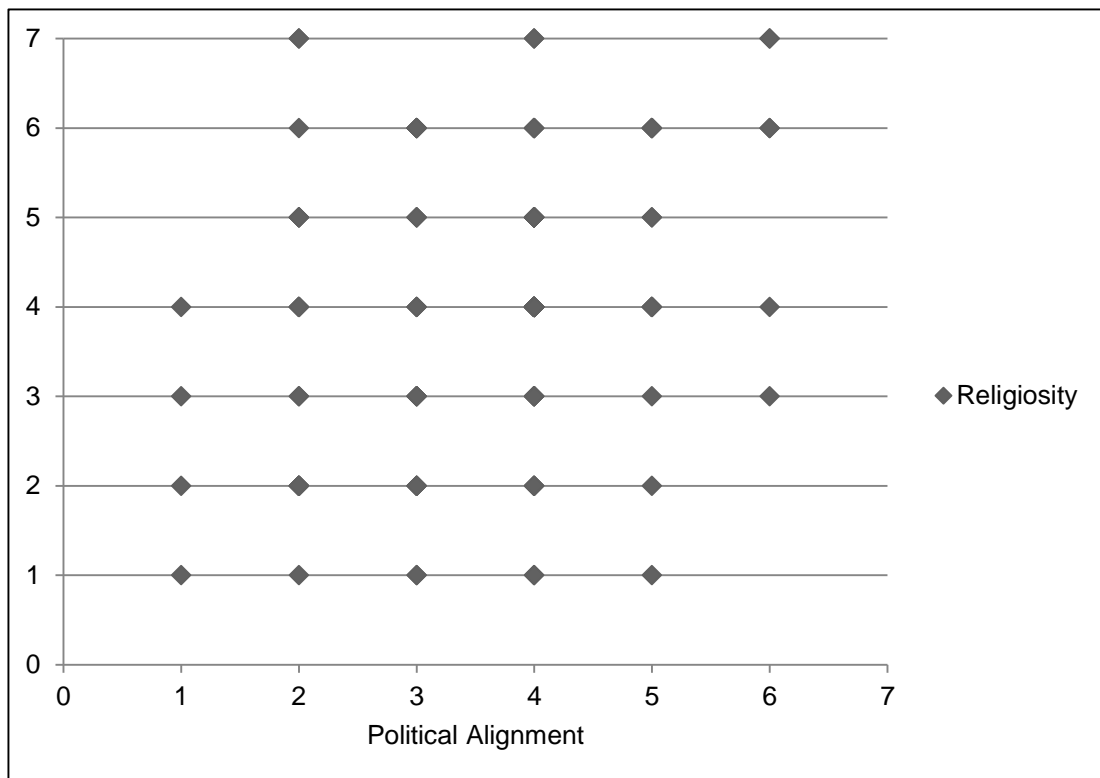


Figure 5a. Scatter plot for Political Alignment (1 = very liberal, 7 = very conservative) and Religiosity.

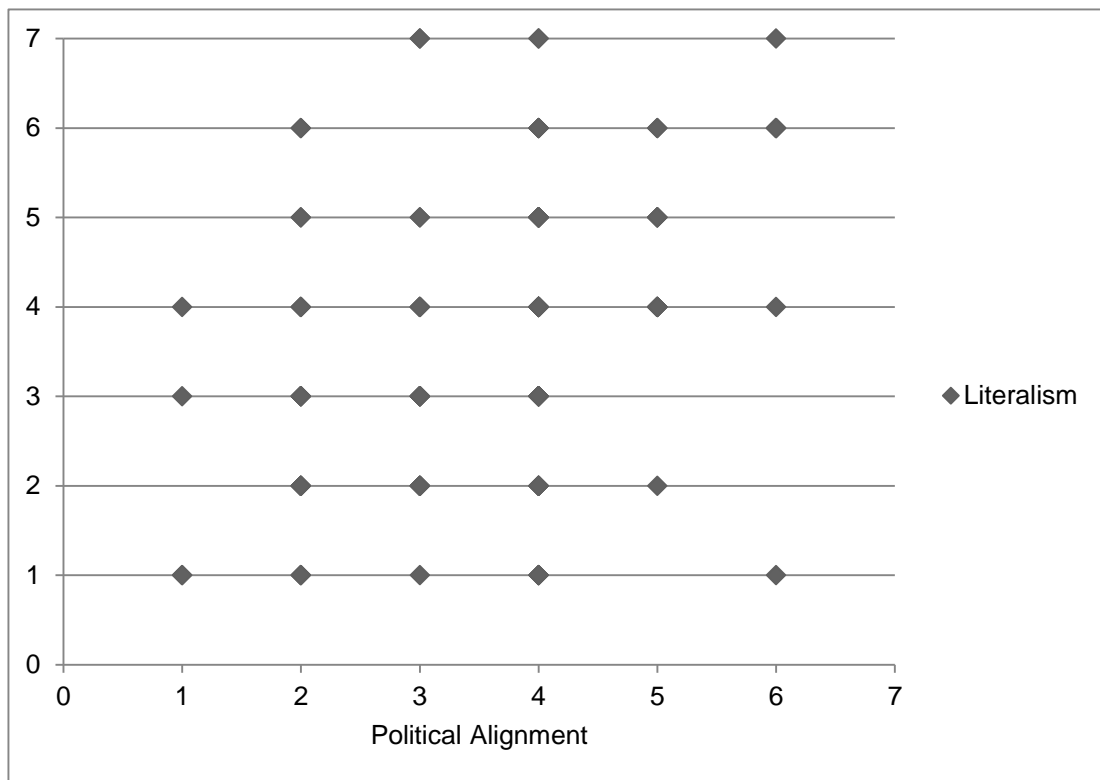


Figure 5b. Scatter plot for Political Alignment (1 = very liberal, 7 = very conservative) and Biblical Literalism.

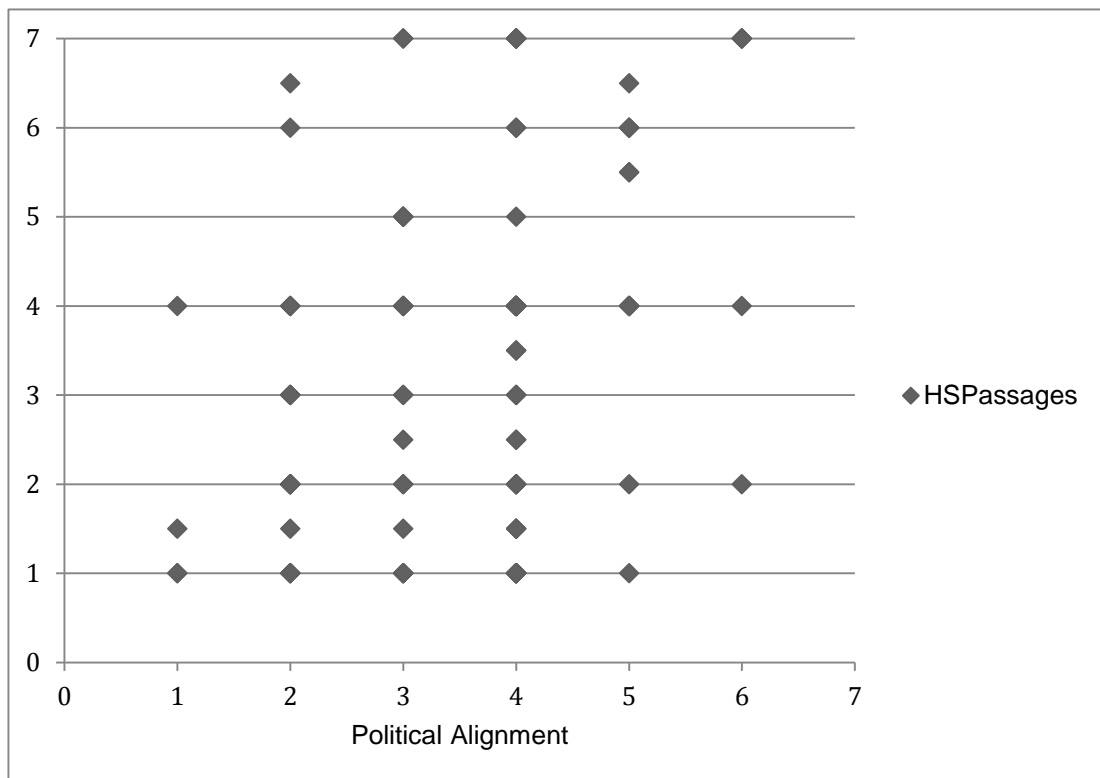


Figure 5c. Scatter plot for Political Alignment (1 = very liberal, 7 = very conservative) and endorsement of anti-homosexuality Biblical Scriptures (HSPassages).

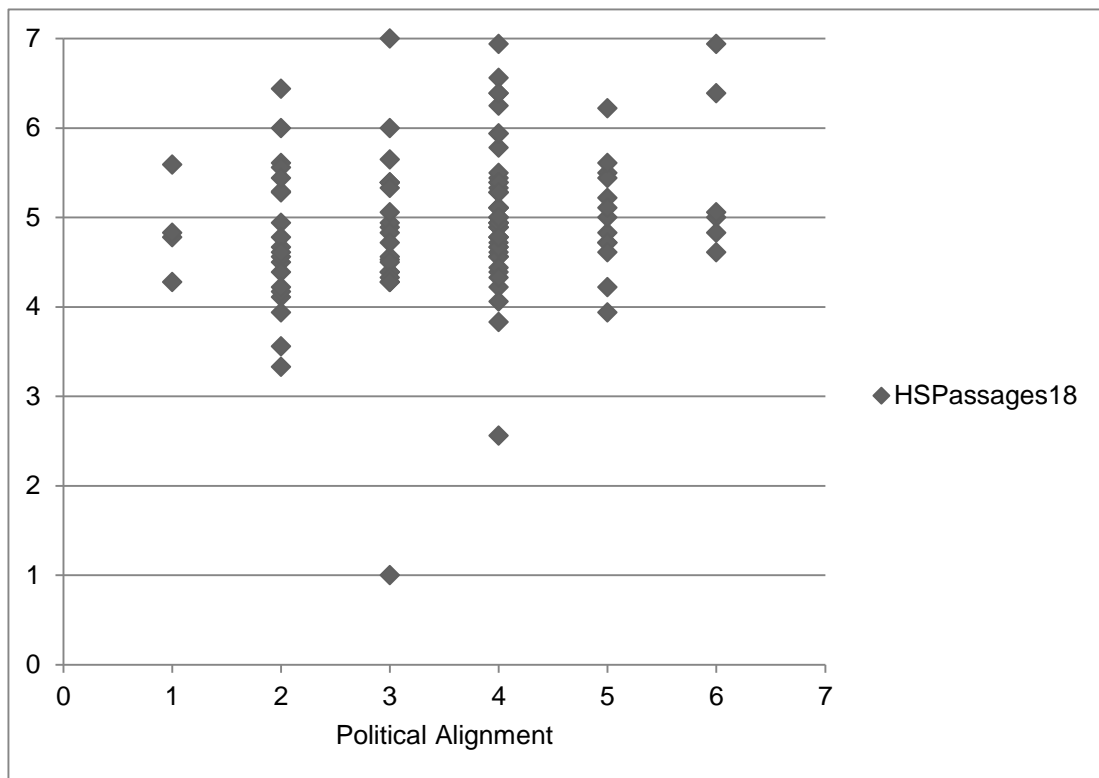


Figure 5d. Scatter plot for Political Alignment (1 = very liberal, 7 = very conservative) and endorsement of Biblical Scriptures (HSPassages18).

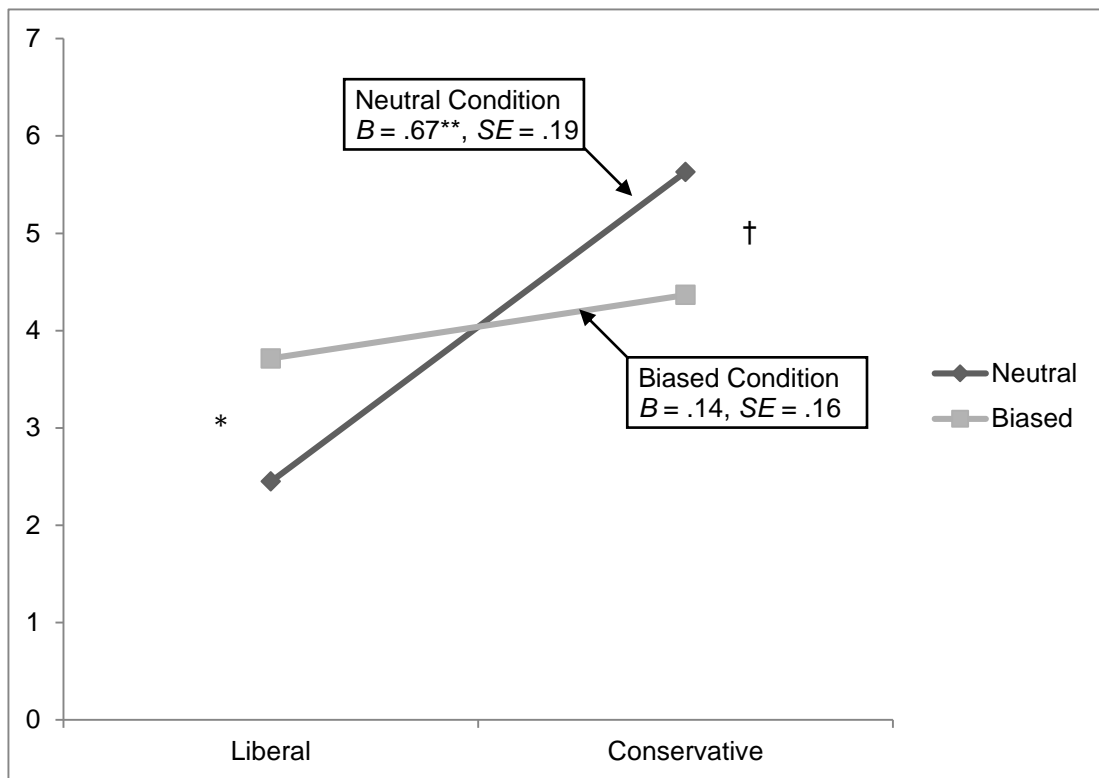


Figure 6. Main Study endpoints and simple slopes plotted for Religiosity for Neutral and Biased Feedback conditions for participants who were relatively more liberal and relatively more conservative.

* $p < .05$, ** $p < .01$

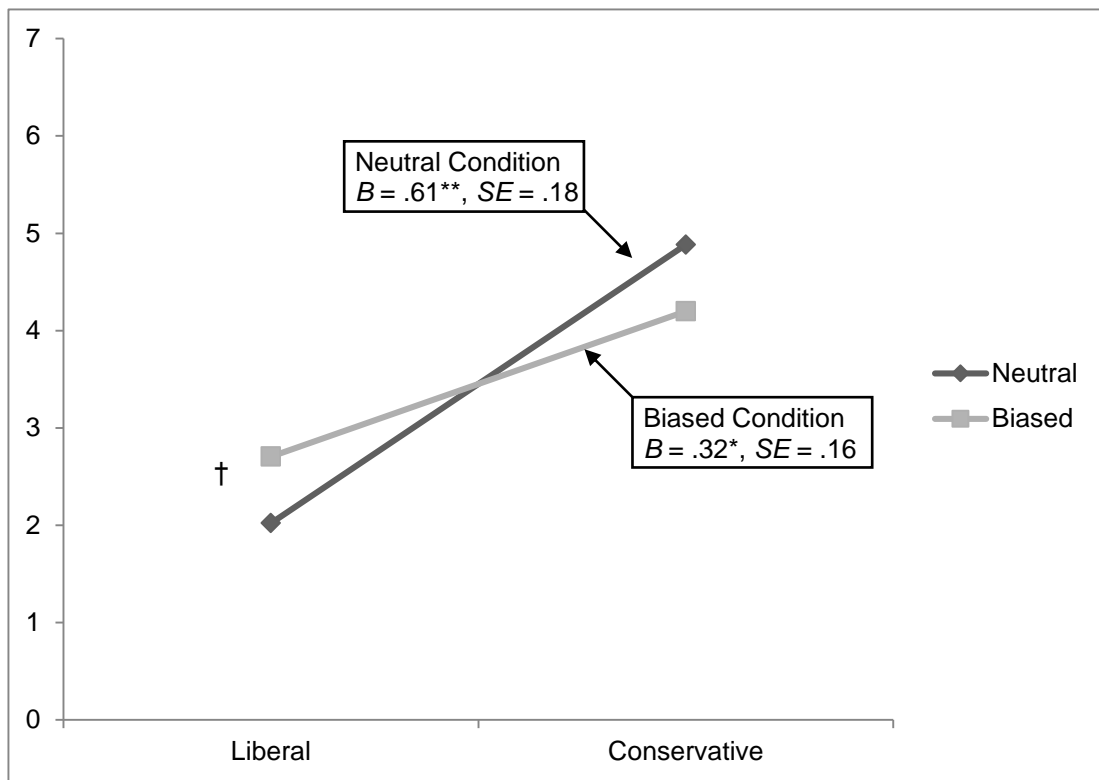


Figure 7. Main Study endpoints and simple slopes plotted for Biblical Literalism for Neutral and Biased Feedback conditions for participants who were relatively more liberal and relatively more conservative.

* $p < .05$, ** $p < .01$

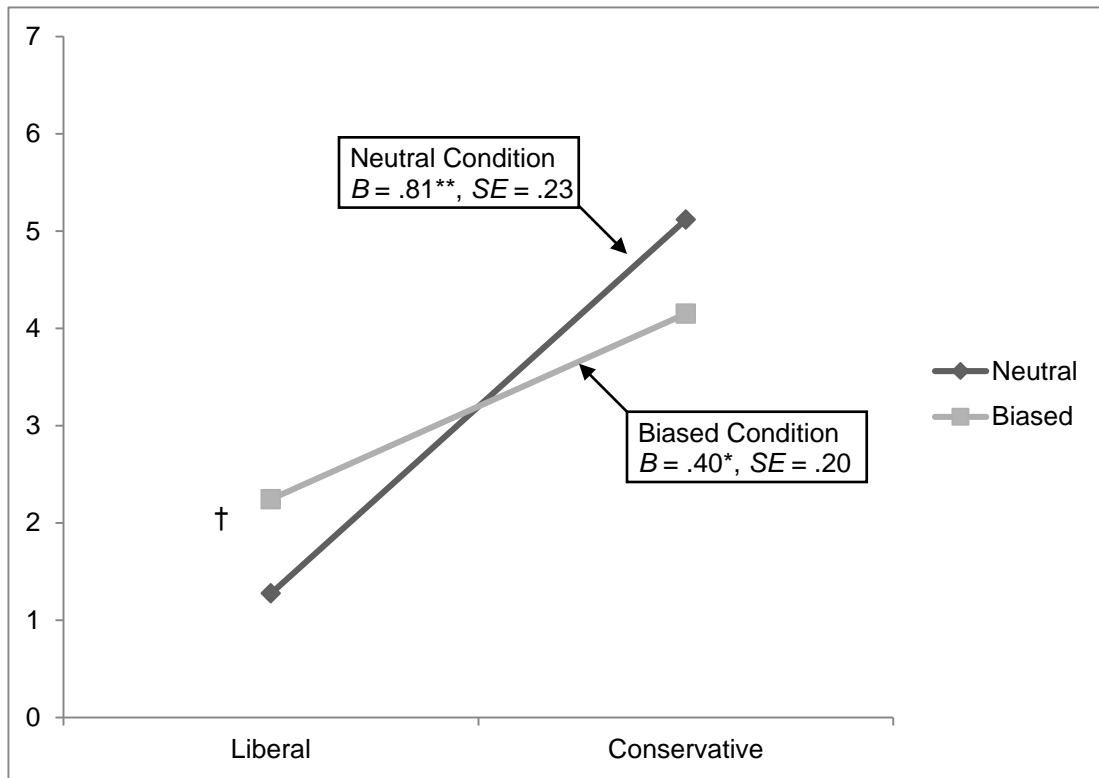


Figure 8. Main Study endpoints and simple slopes plotted for endorsement of anti-homosexuality Biblical Scriptures (HSPassages) for Neutral and Biased Feedback conditions for participants who were relatively more liberal and relatively more conservative.

* $p < .05$, ** $p < .01$

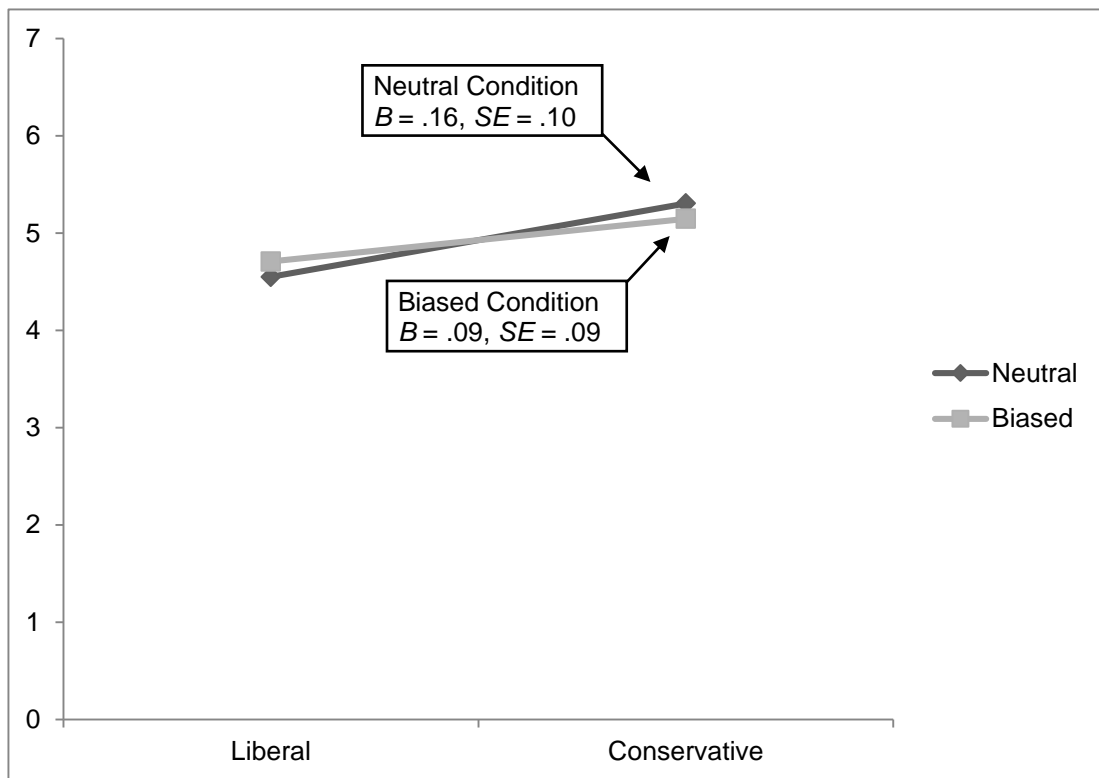


Figure 9. Main Study endpoints and simple slopes plotted for endorsement of Biblical Scriptures (HSPassages18) for Neutral and Biased Feedback conditions for participants who were relatively more liberal and relatively more conservative.

REFERENCES

- Adamczyk, A., & Pitt, C. (2005). Shaping attitudes about homosexuality: The role of religion and cultural context. *Social Science Research*, 38, 338-351.
- Ahmad, S., & Bhugra, D. (2010). Homophobia: An updated review of the literature. *Sexual and Relationship Therapy*, 25, 447-455.
- Amodio, D. M., Devine, P. G., & Harmon-Jones, E. (2007). A dynamic model of guilt implications for motivation and self-regulation in the context of prejudice. *Psychological Science*, 18, 524-530.
- Altemeyer, B. (2003). Why do religious fundamentalists tend to be prejudiced? *The International Journal for the Psychology of Religion*, 13, 17-28.
- Beatty, K. M., & Walther, O. (1984). Religious preference and practice: Reevaluating their impact on political tolerance. *The Public Opinion Quarterly*, 48, 318-329.
- Bowser, J. D. (2008, November 6). Same-Sex Marriage on the 2008 Ballot. *National Conference of State Legislature*. Retrieved from <http://www.ncsl.org/legislatures-elections/elections/same-sex-marriage-on-the-2008-ballot.aspx>
- Brewer, P. R. (2003). The shifting foundations of public opinion about gay rights. *The Journal of Politics*, 65, 1208-1220.
- Brewer, P. R., & Wilcox, C. (2005). Same-sex marriage and civil unions. *Public Opinion Quarterly*, 69, 599-616.

- Brown, S. L., Nesse, R. M., House, J. M., & Utz, R. L. (2004). Religion and emotional compensation: Results from a prospective study on widowhood. *Personality and Social Psychology Bulletin*, 30, 1165-1174.
- Burdette, A. M., Ellison, C. G., & Hill, T. D. (2005). Conservative Protestantism and tolerance toward homosexuals: An examination of potential mechanisms. *Social Inquiry*, 75, 177-196.
- Cohen, A. B., Malka, A., Hill, E. D., Thoemmes, F., Hill, P. C., Sundie, J. M. (2009). Race as a moderator of the relationship between religiosity and political alignment. *Personality and Social Psychology Bulletin*, 35, 271-282.
- Cohen, G. L., Aronson, J., & Steele, C. M. (2000). When belief yield to evidence: Reducing biased evaluation by affirming the self. *Personality and Social Psychology Bulletin*, 26, 1151-1164.
- Cohen, J., Cohen P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis in the behavioral sciences* (3rd ed.). Mahwah, NJ: Erlbaum.
- Crandall, C. S., & Eshleman, A. (2003). A justification-suppression model of the expression and experience of prejudice. *Psychological Bulletin*, 129, 414-446.
- Crandall, C. S., Eshleman, A., & O'Brien, L. (2002). Social norms and the expression and suppression of prejudice: The struggle for internalization. *Journal of personality and social psychology*, 82(3), 359-378.

- Crocker, J., & Wolfe, C. T. (2001). Contingencies of self-worth. *Psychological Review*, 108, 593-623.
- Dovidio, J. F., & Gaertner, S. L. (1999). Reducing prejudice: Combating intergroup biases. *Current Directions in Psychological Science*, 101-105.
- Duriez, B., Soenens, B., & Hutsbaut, D. (2005). Introducing the shortened post-critical beliefs scale. *Personality and Individual Differences*, 38, 851-957.
- Ellison, C. G., & Bradshaw, M. (2009). Religious beliefs, sociopolitical ideology, and attitudes towards corporal punishment. *Journal of Family Issues*, 30, 320-340.
- Fein, S. & Spencer, S. J. (1997). Prejudice as self-image maintenance: Affirming the self through derogating others. *Journal of Personality and Social Psychology*, 73, 31-44.
- Festinger, L., & Carlsmith (1959). Cognitive consequences of forced compliance.
- Finlay, B., & Walther, C. S. (2003). The relation of religious affiliation, service attendance, and other factors to homophobic attitudes among university students. *Review of Religious Research*, 44, 370-393.
- Fisher, R. D., Derison, D., Polley, C. F. III, Cadman, J., and Johnston, D. (1994). Religiousness, religious orientation, and attitudes towards gays and lesbians. *Journal of Applied Social Psychology*, 24, 614-630.
- Froese, P., & Bader, C. (2008). Unraveling religious worldviews: The relationship between images of god and political ideology in a cross-cultural analysis. *The Sociological Quarterly*, 49, 689-718.

- Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Journal of Personality and Social Psychology*, 102, 4-27.
- Harris, P. R., & Napper, L. (2000). Self-affirmation and the biased processing of threatening health-risk information. *Personality and Social Psychology Bulletin*, 31, 1250-1263.
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Press.
- Herek, G. M., & Capitanio, J. P. (1996). "Some of my best friends": Intergroup contact, concealable stigma, and heterosexuals' attitudes toward gay men and lesbians. *Personality and Social Psychology Bulletin*, 22, 412-426.
- Hicks, G. R., & Lee, T. (2006). Public attitudes towards gays and lesbians. *Journal of Homosexuality*, 51, 57-77.
- Hunsberger, B. (1996). Religious fundamentalism, right-wing authoritarianism, and hostility toward homosexuals in non-christian religious groups. *The International journal for the Psychology of Religion*, 6, 39-49.
- Johnson, M. K., Rowatt, W. C., Barnard-Brak, L. M., Patock-Pechham, J. A., LaBouff, J. P., & Carlisle, R. D. (2011). A mediational analysis of the role of right-wing authoritarianism and religious fundamentalism in the religiosity-prejudice link. *Personality and Individual Differences*, 50, 851-856.

- Lehmiller, J.L., Law, A. T., & Tormala, T. T. (2010). The effect of self-affirmation on sexual prejudice. *Journal of Experimental Social Psychology*, 276-285.
- Liu, T. J., & Steele, C. M. (1986). Attributional analysis as self-affirmation. *Journal of Personality and Social Psychology*, 51, 531-540.
- Loftus, J. (2001). America's liberalization in attitudes towards homosexuality, 1973-1998. *American Sociological Review*, 66, 762-82.
- McFarland, S. G. (1989). Religious orientation and the targets of discrimination. *Journal for the Scientific Study of Religion*, 28, 324-336.
- McKinley, J. (2008, May 16). Gay Couples Rejoice At Ruling. *The New York Times*. Retrieved from <http://www.nytimes.com/2008/05/16/us/15cnd-scene.html>
- McKinley, J. (2008, November 5). Bans in 3 States on Gary Marriage. *The New York Times*. Retrieved from <http://www.nytimes.com/2008/11/06/us/politics/06marriage.html>
- McKinley, J. & Johnson, K. (2008, November 14). Mormons Tipped Scale in Ban on Gay Marriage. *The New York Times*. Retrieved from <http://www.nytimes.com/2008/11/15/us/politics/15marriage.html?pagewanted=all>
- Meade, A. W. (2009). *FreelAT*: An open-source program to administer the implicit association test. *Applied Psychological Measurement*, 33, 643.

- Monteith, M. J. (1993). Self-regulation of prejudiced responses: Implications for progress in prejudice-reduction efforts. *Journal of Personality and Social Psychology*, 65, 469-485.
- Olson, L. R., Cadge, W., & Harrison, J. T. (2006). Religion and public opinion about same-sex marriage. *Social Science Quarterly*, 87, 340-360.
- Pew Research Center. (2009, February 26). The stronger sex—Spiritually speaking. *Pew Research Center: Religion and Public Life*. Retrieved from <http://www.pewforum.org/2009/02/26/the-stronger-sex-spiritually-speaking/>.
- Rowatt, W. C., Tsang, J., Kelly, J., LaMartina, B., McCullers, M., & McKinley, A. (2006). Associations between religious personality dimensions and implicit homosexual prejudice. *Journal for the Scientific Study of Religion*, 45, 397-406.
- Sherman, D. K., & Cohen, G. L. (2002). Accepting threatening information: Self-affirmation and the reduction of defensive biases. *Current Directions in Psychological Science*, 11, 119-123.
- Skitka, L. J., & Tetlock, P. E. (1993). Providing public assistance: Cognitive and motivational processes underlying liberal and conservative policy preferences. *Journal of Personality and Social Psychology*, 1205-1223.
- Steele, C. M., & Liu, T. J. (1983). Dissonance processes as self-affirmation. *Journal of Personality and Social Psychology*, 45, 5-19.

Stone, J., & Cooper, J. (2003). A self-standards model of cognitive dissonance.

Journal of Experimental Social Psychology, 37, 228-243.

Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (6th ed.).

Pearson.

Tesser, A., Crepaz, N., Collins, J. C., Cornell, D., & Beach, S. R. H. (2000).

Confluence of self-esteem regulation mechanisms: On integrating the self-zoo. *Personality and Social Psychology Bulletin*, 26, 1476-1489.

Whitley, B. E. (2009). Religiosity and attitudes towards lesbians and gay men: A

meta-analysis. *The International Journal for the Psychology of Religion*, 19, 21-38.

Yang, A. S. (2001). The 2000 national elections study and gay and lesbian rights:

Support for equality grows. *Washington, DC: Policy Institute of the National Gay and Lesbian Task Force. Participant Letter Sexual Prejudice and Intolerance*, 60, 17057-4898.