

CALIFORNIA STATE UNIVERSITY, NORTHRIDGE

A PILOT STUDY ON THE EFFECTS OF AN LGBT-FOCUSED DOCUMENTARY  
ON ATTITUDES, KNOWLEDGE, AND EMPATHY TOWARDS LGBT  
INDIVIDUALS

A thesis submitted in partial fulfillment of the requirements  
For the degree of Master of Arts in  
Psychology, Clinical Psychology

By

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May 2016

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## Acknowledgement

I would like to thank my committee members who supported my efforts in writing this thesis.

I would like to thank Dr. Luciana Lagana` for her dedication, commitment, and passion for social justice. Thank you for giving me the opportunity to work on such a unique project and creating such a wonderful film.

I would like to thank Dr. Scott Plunkett for his support and help setting up the technicalities of my experiment and for his continued support and dedication to his students.

I would like to thank Dr. Andrew Ainsworth for his time and support to help me understand and run all of statistical analyses that I could not have done alone.

I would also like to thank Bruce Carter for his time in helping me prepare my raw data for analyses. I had no idea there was so much work that went into this step, and I truly learned a great deal from the hours we spent figuring out scale measures and inputting everything into SPSS.

I would like to give big thanks to the documentary cast and crew. In particular, I thank (1) Nikki Kahl and Jake Zelinger for editing and filming the LGBT intervention movie; (2) Marcela Fortune, Jacob Santiago, Cayes Jarda, Douglas Arias, and Krystian Hill for sharing their personal and brave stories of coming out, harassment, and resilience; and (3) Dr. Luciana Lagana`, Courtney McNulty, Martin Pousson, and Sabrina Loeb for expressing their expertise in the area of LGBT issues.

## Table Of Contents

Signature Page	ii
Acknowledgement	iii
List of Tables	v
Abstract	vi
Chapter I: Introduction	1
Attitudes Towards LGBT Individuals	1
Religiosity and Attitudes Towards LGT Individuals	2
Knowledge About LGBT Individuals	3
Empathy Towards LGBT Individuals	4
Importance of Allies and Ally Support	5
Film and Documentary Interventions	6
The Purpose of the Present Study	8
Chapter II: Methodology	10
Participants	10
Procedure	11
Materials	12
Chapter III: Results	15
Chapter IV: Discussion	17
Limitations	18
Implications	21
Future Research	23
References	26
Appendix A: Measures Used in the Thesis	30
Appendix B: Human Subjects IRB Form	34

## List Of Tables

Table 1: Demographic Characteristics of the Sample	10
Table 2: Paired Samples T-Test	16

## Abstract

# A PILOT STUDY ON THE EFFECTS OF AN LGBT-FOCUSED DOCUMENTARY ON ATTITUDES, KNOWLEDGE, AND EMPATHY TOWARDS LGBT INDIVIDUALS

By

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LGBT individuals face disproportionate amounts of social stress and discrimination. The purpose of this experimental pilot study was to determine the effects of viewing an LGBT documentary on heterosexual individuals' attitudes, knowledge, and empathy towards LGBT individuals, as well as to examine the effects of this film on those who have a strong religious commitment. Participants/college students were randomly assigned to each condition (i.e., the treatment group or control group). Students in the treatment group viewed a 90-minute LGBT film (on topics such as coming out, family rejection, harassment, microaggression and overt aggression, as well as acceptance and support). Students in the control group viewed a 90-minute documentary on the history and culture of New Zealand. Participants in both groups filled out pre and post surveys regarding their attitudes, empathy and knowledge about LGBT individuals. Results showed that, compared to those with lower levels of religiosity, individuals with high levels of religiosity hold significantly more negative attitudes and have less knowledge about LGBT individuals. As hypothesized, there was a significant change in attitudes pre to post for the treatment group. There were no significant changes for the control group.

## **Chapter I**

### **Introduction**

It has been well documented that individuals identifying themselves as part of the LGBT (Lesbian, Gay, Bisexual, Transgender) community are faced with disproportionate levels of victimization, discrimination, and oppression (Jones, Jones, & Brewster, 2014). According to the Federal Bureau of Investigation, the total amount of hate crimes reported in 2012 consisted of approximately 21% sexual orientation-focused crimes (Jones et al., 2014). Despite the recent victories and visibility gained by the LGBT community, such as the passage of same-sex marriage, LGBT youth still make up 40% of homeless youth, presumably due to rejection by their families (Ray, 2006). LGBT youth and adults are also at an increased risk of psychological disorders including depression and anxiety (Feinstein, Goldfried, & Davila, 2012). According to the Center for Disease Control and Prevention, LGBT individuals in grades 7-12 are more than twice as likely than their heterosexual peers to attempt suicide (Kaysen et al., 2014). Such elevated risks of psychological distress and suicide have been typically hypothesized to be a result of the effects of discrimination and negatively held beliefs about sexual minorities (Kaysen et al., 2014).

#### **Attitudes Towards LGBT Individuals**

Attitudes towards LGBT individuals vary across gender identity, political orientation, years of education, religious affiliation, and national origin (Collier, Horn, Bos, Sandfort, 2015). Those who identify as homosexual, bisexual, or transgender are discriminated against in almost all settings ranging from their homes to school campuses to healthcare settings (Collier et al., 2015). Several studies report that male heterosexuals

hold more negative attitudes about LGBT individuals than female heterosexuals. Research also indicates that heterosexual men tend to have more negative attitudes towards gay men than towards lesbian women (Holland, Matthews, & Schott, 2013). In addition, identifying oneself as a political conservative or as a Republican has been positively correlated with prejudicial and discriminatory attitudes towards gay men. There is research indicating that sexual minority individuals experience biased treatment upon seeking medical care. In a 2008 study, 54% of patients reported discrimination from physicians and 39% reported discrimination from nurses and other hospital staff (Sabin, Riskind, & Nosek, 2015). In the same study, 48% of service providers of assisted reproduction programs said they would decline to serve a gay couple, and 17% reported they would decline to help a lesbian couple. Findings from a 2009 World Values Survey reported that 32.5% of participants surveyed in the United States indicated homosexuality was “never justifiable” (Collier et al., 2015). Also, the United States was below all participating Western European Nations, with the exception of Portugal, in the percentage of individuals who agreed that homosexuality was “never wrong at all.”

Researchers have consistently reported that one potential explanatory factor underlying these negative attitudes is the belief of the nature of sexuality. Research on adults in the United States has found more positive attitudes among individuals who believe that people are born gay or lesbian, and this belief is a strong predictor of attitudes (Collier et al., 2015).

### **Religiosity and Attitudes Towards LGBT Individuals**

It has been argued by many researchers and scholars that there are a number of religious and political institutions, as well as religious traditions, that support an anti-

homosexual viewpoint (Harbaugh & Lindsey, 2015). According to empirical research, college students and other individuals who report a more salient religious orientation also report more negative attitudes about homosexuals, including stereotypic beliefs and sexual prejudice (Harbaugh & Lindsey, 2015). Another study indicated that homosexuals who identify themselves as having a high level of religiosity experience higher levels of internalized homophobia and religious-sexuality distress, suggesting that there are psychological effects of an LGBT “non-affirming environment” (Sowe, Brown, & Taylor, 2014). Many clergymen and religious people report positive attitudes toward LGBT individuals, yet they report negative attitudes towards same-sex behavior (Veenvliet, 2008). The aforementioned evidence is suggestive of a complex relationship between views regarding homosexual sexual acts, LGBT individuals, and religious commitment, which was innovatively explored in the present study.

### **Knowledge About LGBT Individuals**

Becoming educated and seeking knowledge about issues encountered by LGBT individuals is a crucial step towards accepting them. Not having accurate information and knowledge about the LGBT community may be a direct cause as to why many individuals do not engage in LGBT advocacy (Jones et al., 2014). Studies assessing individuals on their knowledge about and attitudes toward LGBT individuals indicated that those with better knowledge scores have more positive attitudes towards LGBT individuals (Grabovac, Abramovic, Komlenovic, Milosevic, & Mustajbegovic, 2014). According to Jones et al. (2014), knowledge heightens an individual’s ability to engage in supportive behaviors and is associated with lower levels of LGBT hatred. Many individuals gain this knowledge by knowing someone who identifies as a member of the

LGBT community and through education in the college classroom (Jones et al., 2014).

### **Empathy Towards LGBT Individuals**

Empathy is the ability to understand others internal states and have an emotional response to them (Fuchsman, 2015). Empathy has often been linked to helping behaviors and allows people to step into the shoes of another person, resulting in an understanding of this person's experiences (Fuchsman, 2015). Throughout the world and across cultures, humans typically divide themselves into *us* and *them*, and into an *in-group* and an *out-group* (Fuchsman, 2015). Individuals in the out-group are often treated with contempt and treated with discriminatory actions (Fuchsman, 2015). Data obtained through interviews suggested that increased levels of empathy may be associated with a higher rate of out-group alliance (Fingerhut, 2011).

Studies have reliably supported the link between empathy and pro-social, altruistic behaviors (Fingerhut, 2011). In studies of civil rights activism and the rescue of Jewish individuals in Nazi Europe, many activists and rescuers discussed their ability to empathize with the oppressed individuals (Fingerhut, 2011). Because LGBT individuals are a minority population, they may be seen as an out-group to the majority. In order to encourage pro-social behaviors as well as an out-group alliance, developing an empathetic concern and awareness is necessary (Jones et al., 2014). There is a lack of studies reporting on interventions aimed at specifically increasing empathy in regards to LGBT individuals. However, several studies specify this goal for future study. For example, Roe (2015) conducted a study examining bisexual and gay adolescent experiences with peer support in schools and concluded that interventions aimed specifically at improving empathy in the student body should indeed be investigated and

implemented, as done in the present study.

### **Importance of Allies and Ally Support**

The concept of “social stress” suggests that conditions in an individual’s social environment are sources of stress that have the potential to lead to mental and physical illnesses (Meyer, 2013). Because LGBT individuals are targets of discrimination, oppression, and victimization, and experience disproportionate amounts of social stress, it is likely that this is a root cause of the disparate levels of mental illness affecting LGBT individuals (Meyer, 2013). Social support is vital to the happy existence of any individual, as is evidenced by negative outcomes, such as depression, which are experienced when individuals have no perceived social support (Meyers & Duwall, 2014). LGBT individuals can face a range of responses from people who reject their sexual and/or gender identity, including the severing of important social ties (Meyer, 2013). In a country where LGBT individuals make up only 3.8% of the population (Newport, 2014), heterosexual allies are a necessity for achieving equal rights and for ending stigma and discrimination against LGBT individuals. Allies are individuals who advocate for members of an oppressed group of which they are not members (Rostosky, Black, Riggle, & Rosenkrantz, 2015). Ally support can come from a variety of sources including family, friends, corporations, political candidates, and community organizations.

One study of 245 LGBT adolescents in the United States found that family acceptance in adolescence predicted greater self-esteem, lower rates of depression, lower instances of suicide attempts, and higher overall well-being (Ryan, Russell, Huebner, Diaz, & Sanchez, 2010). Similarly, another study demonstrated that support from friends

and peers lead to better overall mental health and self-esteem (Snapp, Watson, Russell, Diaz Ryan 2015). In terms of support from members of an individual's community, one study found that access to sexually related information and supportive community social events is related to the individual's self-esteem and well being (D'Augelli & Hart, 1987). Having interpersonal contact with a member of the LGBT community has potential to moderate negative attitudes that an individual may hold toward this population (Holland et al., 2013).

### **Film and Documentary Interventions**

Film interventions may be an effective strategy to increase positive attitudes and feelings about LGBT individuals. The contact hypothesis, proposed by Gordon W. Allport in 1954, states that "interpersonal contact is one of the most effective ways to reduce prejudice between majority and minority group members" (Schiappa & Hewes, 2006). The theory of parasocial interaction has been described as the media equivalent of social interaction (Schiappa & Hewes, 2006). Parasocial interaction refers to how consumers of media typically form their attitudes about people they do not know through viewing television regardless of whether those individuals are real people or fictional characters (Shiappa & Hewes, 2006). The media, television, and related outlets are in the unique position of being able to communicate ideas and experiences to people who may have never directly encountered or experienced a particular situation or idea, as though they have had interpersonal contact with that person or group (Shiappa & Hewes, 2006).

One form of media outlet is educational entertainment, which has been defined as the "process of purposely designing and implementing a media message to both entertain and educate, in order to increase audience members' knowledge about an educational

issue” (Singhal & Rogers, 2004, p. 5). Educational entertainment designs have been shown to be effective in increasing audiences’ knowledge and intention to act, as well as in facilitating communication (Huebner, Rullo, Thoma, McGarrity, & Mackenzie, 2013). Acquiring both knowledge and an empathetic awareness of LGBT individuals’ experiences is vital to self-identification as an ally or supporter of LGBT rights (Jones et al., 2014). Therefore, communicating knowledge and awareness through a highly effective method such as educational entertainment shows much promise in reaching the goal of obtaining measurable improvement in knowledge, empathy, and attitudes towards LGBT individuals by enhancing parasocial contact.

Only one study could be found that covered the effects of documentary viewing in regards to LGBT individuals (i.e., Huebner et al., 2013), and a second study found significant effects of a documentary in regards to transgender individuals in particular (i.e., Walters & Rehma, 2013). Huebner et al. (2013) created a documentary titled “Lead with Love” targeting parents of LGBT teens. The purpose of Huebner and colleagues’ documentary was to guide parents through their child’s coming out process and to “reduce rejecting behaviors while enhancing positive family interaction” (p. 360). Over 71% of parents responded that the film was either very helpful or extremely helpful. The study also indicated the self-efficacy for parenting increased from pre-film to post-film. The second documentary intervention study was conducted specifically to cover the transgender population (Walters & Rehma, 2013). In this study, researchers divided up a 1-hour news segment on transgender issues. One group of participants viewed 14 minutes of film, and a second group watched 28 minutes of film. The group that viewed 14 minutes of film had higher accuracy in regards to transgender items than the control

group, who watched 0 minutes of the film. The group that viewed 28 minutes of film had higher accuracy than both the 0-minute group and the 14-minute group. Individuals in this study who knew a transgendered person reported significantly higher feelings of empathetic concern.

### **Purpose of the Present Study**

While some research studies have described non-documentary interventions, such as gay-straight alliances, no published literature could be found on the effects of watching a documentary featuring the experiences of lesbian, gay, bisexual, and transgender individuals on college students' empathy, attitudes, and knowledge regarding the LGBT population. Although many researchers have recommended the implementation and creation of an intervention to improve empathy towards LGBT individuals, no such published research could be found. Nor are there any published studies exploring the effects that a documentary on this topic may have on those who express high levels of religiosity and comparatively low levels of positive attitudes towards LGBT individuals. In filling a gap in the available literature, I used an original 90 minute movie, "LGBT United", featuring the stories of five self-identifying LGBT individuals. The goals were to increase: (1) empathetic feelings towards LGBT individuals, (2) knowledge about LGBT individuals, and (3) positive attitudes towards LGBT individuals. The filmmakers on my team structured this film around the theories of parasocial interaction and the contact hypothesis by emphasizing the stories of what makes young LGBT people different from their heterosexual peers (e.g., discrimination, coming out, rejection), and also what makes LGBT individuals the same as their heterosexual peers (e.g., goals, hobbies, ideas, values of love and family). The film was of high production value (i.e.,

created by film professionals) and included visually stimulating info-graphics of relevant statistics and facts to keep attention and interest at optimal levels. The five LGBT individuals featured in the film were of varying gender and racial backgrounds, all nonwhite, aged 24-30. Xxas of now Marcela has not gotten back to me about her ethnic background, I think for the publication maybe spell out each person's ethnic background, but for now maybe stick with "nonwhite" because I do not have enough time to wait for everyone to tell me how they identify. For example I do not believe Cayes identifies as African American as his family is not from Africa, so I would have to reach out to each individually and hope they respond asap etcXXThey were young individuals, as the age similarity could potentially maximize the chances that a typically young audience of college students would better related to these LGBT individuals. I predicted that, after viewing the LGBT film, research participants/college students would (1) score more accurately in regards to their knowledge about LGBT individuals, (2) report more positive attitudes about LGBT individuals, and (3) demonstrate increased empathy towards LGBT individuals. In line with prior research findings, I also predicted there would be a significant higher positive attitudes, empathy, and knowledge for individuals after viewing the experimental documentary who expressed higher levels of religiosity.

## Chapter II Methodology

### Participants

A total of 97 students (22 men and 75 women) - who were enrolled in an introductory psychology course at a comprehensive, public, university in Southern California - participated in this research for course credit. Fifty-two participants, forty-one females and eleven males, viewed the LGBT film (i.e., treatment group), and 45 participants, thirty-four females and eleven males, viewed a documentary about the culture of New Zealand (i.e., control group). The students were ethnically and culturally diverse. Table 1 shows the demographics for the treatment group and control group.

Table 1  
*Demographic Characteristics of the Sample*

	Treatment ( <i>n</i> = 52)	Control ( <i>n</i> = 45)
Age		
<i>M</i>	19.84	20.21
<i>SD</i>	3.77	3.28
Gender		
Men	21.2%	24.4%
Women	78.8%	75.6%
Classification		
Freshman	46.2%	40.0%
Sophomore	32.7%	24.4%
Junior	15.4%	22.2%
Senior	5.8%	13.3%
Ethnicity		
White/Caucasian	5.7%	11%
Black/African American	9.6%	2.2%
Hispanic/Latino	64.3%	59.9%
Asian/Pacific Islander	11.5%	13.3%
Mixed or Other	7.6%	11%
Marital Status		
Single	94.2%	88.9%
Living together	3.8%	8.9%
Married	1.9%	2.2%
Religion		
Christianity	82.7%	73.3%
Agnosticism	3.8%	6.7%
Atheism	5.8%	4.4%
Buddhism	1.9%	4.4%
Judaism	0%	2.2%
Hinduism	0%	2.2%
Other	5.8%	6.7%

## **Procedures**

Participants were recruited through the CSUN online SONA system to which they are given access during the semester as a requirement for introductory psychology course credit. Specifically, students have a variety of studies to select from, or they can choose to do an alternative assignment instead of participating in research studies. This investigation was vaguely listed on purpose as a study that was “entertaining and required watching a movie.” In order to isolate the effects that the LGBT film had solely on heterosexual viewers, study participation was restricted to participants who identified themselves on the SONA system’s prescreen questionnaire as “heterosexual.” The investigation’s timeslots and description were not visible to those who identified as lesbian, gay, bisexual, queer, or of uncertain sexual orientation. The study was also unavailable to those who responded to prescreen questions about gender as a transgender man or a transgender woman. This research project was available during six different time slots, during three of which I screened the LGBT movie (i.e., treatment film) while during the other three time slots I screened a documentary on the history and culture of New Zealand (i.e., control film). Once the timeslots were inputted into SONA, I randomly assigned, by flipping a coin, whether each participant would be part of the treatment group or the control group. I allocated the remaining timeslots in this alternating pattern. Prior to completing the surveys and watching the film, students were required to read and sign an informed consent protocol. They then completed seven questionnaires on demographics, LGBT empathy, LGBT acceptance/attitudes (two measures), LGBT knowledge, and religiosity (two measures). Afterwards, they watched either the 90-minute LGBT film or the 90-minute control film. When the film ended,

respondents completed the same questionnaires that they had filled out prior to watching the film, except for the demographics and religiosity measures.

## **Materials**

Each participant filled out the questionnaires on the computer-based platform (i.e., Qualtrics). The first questionnaire was a demographic form including questions about age, income, education, occupation, and religion. With the exception of the single scores on the demographics list, the items in each of the scales were summed in order to create scale scores. A copy of the measures used in this study is included in Appendix 1.

**Attitudes towards LGBT individuals.** To quantify students' attitudes towards those who identify as lesbian, gay, bisexual, and/or transgendered, the 20-item Heterosexual Attitudes Towards Homosexuality Scale (Larsen, 1980) was administered. The response choices ranged from 1 = *Agree Strongly* to 5 = *Strongly Disagree*. Higher scores indicated a less favorable attitude towards LGBT individuals. The pre-test internal consistency for this measure within the current sample was high ( $\alpha = .92$ ).

Students were also given the 25-item Index of Homophobia scale (Hudson & Ricketts, 1980). Response choices ranged from 1 = *Strongly Agree* to 5 = *Strongly Disagree*. Higher scores indicated higher levels of homophobia. The pre-test internal consistency within the sample was high for this measure ( $\alpha = .92$ ).

**Knowledge about LGBT Individuals.** The level of knowledge about LGBT individuals was assessed using 20-item Knowledge About Homosexuality Questionnaire (Harris, 1995). The questionnaire consists of 20 true or false statements about homosexuality. Higher scores indicated more correct responses. Internal reliability was strong for this scale with college students in passed studies ( $\alpha = .74$ ). The pre-test internal

consistency for the current sample was moderate ( $\alpha = .48$ ).

**Empathy.** To quantify empathetic feelings held towards LGBT individuals, participants completed the Empathy Towards Homosexuals Scale (Minett, 2008), which contains 30 statements with response choices ranging from 1 = *Strongly Disagree* to 5 = *Strongly Agree*. Higher scores indicated higher levels of empathy. Using pre-test scores for the data analysis the internal consistency for the current sample was high ( $\alpha = .87$ ).

**Religiosity.** To measure an individual's degree of religiosity, two different questionnaires were administered. The Religious Commitment Inventory 10 (Worthington, 2003) consists of 10 statements with response choices ranging from 1 = *Not at all true of me* to 5 = *Totally true of me*. The RCI 10 measured the extent to which individuals adhered to their religious beliefs and values and whether or not these are utilized in day-to-day life. Six items of the RCI-10 quantify intrapersonal religious commitment, while 4 items measure interpersonal religious commitment. Higher scores indicated higher levels of religious commitment. The internal consistency reliability for this sample was very high ( $\alpha = .97$ ).

In addition, students filled out the 15-item Centrality of Religion Scale (Hubner & Hubner, 2012). This scale measures the importance of religious meanings to an individual. Eight items quantify the frequency of certain religious experiences, and the responses choices range from 1 = *never* and 5 = *very often*. Higher scores indicated more frequency. Seven of the items measure the importance of certain religious experiences, and the response choices range from 1 = *not at all* and 5 = *very much so*. Higher scores indicated higher level of importance attributed to religion. The reliability of the subscales was high for previous studies ( $\alpha = .92$  to  $.96$ , respectively; Hubner & Hubner, 2012). For

the current sample, the internal consistency reliability was also very high ( $\alpha = .97$ ).

**Treatment film.** The intervention film “LGBT United” was created by the team that collaborated with me on this study. It was produced to enhance positive attitudes, feelings of empathy, and LGBT knowledge among film viewers. It featured five LGBT individuals and four experts in this field, i.e., a psychologist, a queer studies professor, a lawyer, and a college campus Pride Center supervisor. The five LGBT individuals shared their stories of coming out, rejection from family and friends, harassment, microaggression and overt aggression, as well as acceptance and support. These stories were interweaved with expert commentary and visual “info graphics.” This LGBT film has won awards at many 2015-2016 film festivals.

**Control film.** A film of 90 minutes was utilized for the control group. It features the history and culture of New Zealand. Similarly to the LGBT film, which included a legal “expert” and a few comments from three other experts, there was an expert featured in the control film who discussed and participated in New Zealand culture and activities. The control film did not include any discussion of LGBT or transgendered individuals. Like the LGBT film, it is an award-winning documentary.

## Chapter III

### Results

The scores on post test homophobia index, attitudes, knowledge, and empathy measures were analyzed using a 2x2x2 mixed ANOVA with the within subjects factor of time (pretest to posttest), the between groups factor of religiosity (high or low), and the between groups factor of condition (control or treatment). In order to get a more holistic perspective of students' level of religiosity and in view of the fact that the modest sample size did not allow for more sophisticated analyses, I combined the totals of the scales of centrality (importance of religion) and commitment (commitment to religion) and then dichotomized this religiosity variable into high and low groups based on a median split to create more equally distributed groups.

I did not achieve significance on the empathy variable. However, for the Index of Homophobia, there was a between subjects main effect of religiosity regardless of condition or time  $F(1, 93) = 6.09, p = .015$ , partial eta-squared = .061, indicating that those with higher religiosity ( $M = 65.32, SD = 17.23$ ) held more negative attitudes towards LGBT individuals compared to those with lower religiosity ( $M = 56.648, SD = 17.31$ ). Furthermore, in regards to the index of homophobia attitudes scale there was a significant interaction for time (pretest to posttest) and condition (control or treatment),  $F(1, 93) = 8.33, p = .005$ , partial eta-squared = .082. Paired samples t-tests (see Table 2) indicated that participants' index of homophobia attitude scores in the treatment group became significantly more positive from pretest ( $M = 62.75, SD = 18.27$ ) to posttest ( $M = 59.67, SD = 19.59$ ),  $t(51) = 3.01, p < .004$  while there was no significant difference for control group participants from pretest ( $M = 59.80, SD = 16.00$ ) to posttest ( $M = 60.60,$

$SD = 18.04$ ),  $t(44) = -.92$ ,  $p > .364$ . Additionally, paired – samples t-tests, as seen in table 2, indicate there was no change from pre-test to post-test within the treatment group or control group on the heterosexual attitudes towards homosexuality scale, the empathy scale, or the knowledge scale.

There was a significant between subjects main effect for religiosity,  $F(1, 93) = 4.61$ ,  $p = .034$ , partial eta-squared = .047 indicating that students with higher levels of religiosity ( $M = 13.77$ ,  $SD = 2.32$ ) had less knowledge of LGBT issues compared to those who endorsed having lower religiosity ( $M = 14.78$ ,  $SD = 2.33$ ).

Table 2  
*Paired Sample T-test results for all scales*

Outcome	Pretest		Posttest		<i>n</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Control					
Attitudes	40.04	11.67	40.34	12.64	45
Index	59.80	16.00	60.60	18.04	45
Empathy	113.60	12.69	112.67	14.81	45
Knowledge	14.42	2.43	14.31	2.58	45
Treatment					
Attitudes	40.42	13.84	40.50	13.25	52
Index*	62.75	18.27	59.67	19.59	52
Empathy	113.33	15.20	114.73	15.85	52
Knowledge	14.04	2.50	14.42	2.56	52

\* $p < .05$

## **Chapter IV**

### **Discussion**

First, it should be noted that about 60 percent of my sample was Latino/Latina (to be expected, given that my University is a Latino-serving institution), similarly to the fact that 40 percent of the LGBT identifying individuals depicted in the film identify as Latino. In this sample 11.8% of individuals identified as black, while 40% of the LGBT individuals in the film identified as black. This provided a nearly ideal situation concerning ethnicity matching and the related potential for students to identify with the LGBT interviewees. As expected, the results of this research showed potential in decreasing negative attitudes towards LGBT individuals.

At the preliminary stages of this intervention study – which I implemented on a pilot sample to test the preliminary feasibility of conducting this intervention, I did not find an interaction of time and condition for the measures of empathy and knowledge, perhaps due mainly to the very modest sample size. The results also did not show an interaction of condition, religiosity, and time, as hypothesized. The well-known and highly validated LGBT knowledge scale utilized may have been outdated; perhaps the relatively low reliability that this scale obtained for the present sample is due to this issue – although many LGBT themes covered in this measure are still very relevant nowadays. Future studies should ideally utilize a more reliable measure of knowledge to determine if this LGBT film is able to educate heterosexual individuals on LGBT issues. It would have been ideal to have used a new measure of LGBT knowledge that was based on the specific content of the intervention film, although this was beyond the scope of my pilot investigation.

As hypothesized, when comparing homophobia index scores related to the pre film viewing to the post index scores, the findings showed a significant drop in negative attitudes, indicating that I achieved the desired effect of my intervention. Interestingly, these results were only seen on one of the two attitudes scales administered. This indicates that perhaps the LGBT film better captured statements presented on the Index of Homophobia scale as opposed to the Attitudes towards LGBT. Conversely, maybe the items of the index of homophobia are more closely related to the specific facets of LGBT attitudes that change *first* as people watch an anti-bias movie – as I re-assessed students immediately after film viewing; future research should investigate this issue.

The results also indicated that, regardless of condition or time, participants with higher religiosity held more negative attitudes than those with lower levels of religiosity. The same was true for students in terms of knowledge. Those with higher levels of religion had less knowledge about LGBT issues than those with lower levels of religion.

### **Limitations**

Due to the preliminary nature of this experiment, the magnitude of the impact of the LGBT intervention film was limited by a small sample size. The partial eta squared achieved in this study were generally high, suggesting strong effect sizes especially in view of the sample size limitation. In order to confirm the results that have been found, it is necessary to conduct further research on larger samples. Moreover, some students told me after the study ended that some of the scales contain questions that sounded similar to one another, and participants may have rushed the responses. However, this might have been due to the fact that prejudice could make distinct issues similar from the point of view of negatively biased research participants. Ideally, implementing periodical “check”

questions during assessment, in order to determine whether participants were actively reading and accurately responding to questions, could be an option, but this would require more time, and this study already asks participants for a significant amount of their time.

In addition, the study may have been administered to a majority of students who already had positive attitudes and empathy to begin with, leaving little room for change, especially on some of the measures. As students become integrated into a college campus, they often experience high levels of interpersonal contact with those who identify as LGBT, helping reshape and reform several core beliefs and values individuals may hold about the LGBT community (Holland et al., 2013). In this study, I attempted to control for participant bias by excluding those who identified as lesbian, gay, bisexual, or transgender in a pre-screen survey. However, I did not control for whether students may have already been affected in the real world by the contact hypothesis, which states that interpersonal contact with the member of a certain group reduces prejudices. A more detailed pre-assessment of the individual's familiarity and contact with LGBT individuals and LGBT issues may produce a better understanding of how the previously mentioned contact hypothesis could have confounded the results, although this is time consuming. In the future, it may be beneficial to include a restriction question that would eliminate those with positive views of LGBT individuals, testing the intervention only on those who hold high levels of negative attitudes, low levels of knowledge, and low levels of empathy at pretest – although this could limit sample size, thus this is an ideal situation in case ample time is available for data collection (which is not always the case).

Furthermore, the fact that participants were given the questionnaires immediately

after watching the film makes it difficult to know whether the changes in attitudes reported in this study will persist over time. Future studies should conduct post-test sessions after a specified period of time has elapsed from viewing the documentary. Also, it should be noted that the religiosity scale was dichotomized into high and low at the median for the purpose of this study. Dichotomizing this variable at the median, although convenient considering the small sample size, limited the scope of my discussion regarding this factor; more research in this area, ideally utilizing different methods of religiosity quantification, is needed.

Additionally, students were predominately women, with a mean age of 20 – as it is often the case in University classes covering psychological topics. This narrow gender variation in my sample further decreased the generalizability of my findings. The sample was also predominately Hispanic/Latino and mainly of Christian faith, in line with the typical religious beliefs of this ethnic group. Again, the relative narrowness of variation in this sample concerning ethnicity is not representative of the general public. To increase the generalizability and external validity of the results of the present study, it is important to obtain a more diverse and, as previously mentioned, larger sample. Collaborating with universities in other states in order to recruit a larger and more diverse sample, although labor and time intensive and not typically done in studies of this kind, would ideally diversify ethnic and religious backgrounds. Moreover, students were administered the experiment at differing times of the day. The time of day may have impacted energy levels and willingness to respond with effort; this is a shortcoming of virtually all prior studies of this kind. In regards to environment, the participants all received the treatment in the same room with approximately the same number of participants present; I did so in

order to keep the environment as homogeneous as possible.

Taken together, the limitations of this study are shared by most of the studies that are considered pilot investigations – and many of them are shared by many investigations that utilized larger samples. Several prior studies did not include a control group like the current study, and some of them only had a passive control group, which further limits the statistical strength of the results. Conversely, I gave a very similar task to my control participants as I did for my experimental respondents, i.e., to watch a 90 minute film.

### **Implications**

The initial results of this pilot study indicate solid potential to impact the lives of individuals who hold negative attitudes towards LGBT individuals, possibly impacting the lives of LGBT individuals themselves in a positive way (although it would be very challenging to implement an investigation to test such impact). LGBT individuals typically face high levels of prejudice from family members as well as from friends, acquaintances, and unknown community members. Therefore, creating effective and relatively easy-to-administer documentary interventions of this kind is of extreme importance. Utilizing a documentary to reach large numbers of non-LGBT individuals has the potential to improve acceptance and support quickly, as suggested by my findings. Hopefully these will be long-lasting changes, and this should be tested by interested researchers. Once this LGBT film is made available to the public, it has potential to impact LGBT attitudes.

Indeed, confirming previous research findings on religion and LGBT individuals, the results of this study demonstrated that those with higher levels of religiosity have more negative attitudes and lower levels of knowledge in regards to LGBT individuals

before watching a movie of this kind. To reduce the negative effect of a homonegative environment on LGBT individuals' internalized homophobia – which unfortunately, as the literature indicates, can lead to LGBT suicide, it is critical for researchers to focus on the creation and implementation of strategies targeting the general public in order for individuals especially from strict religious community to become more empathetic towards LGBT individuals. Because of the impact that the LGBT movie made on LGBT-related attitudes, it is possible that viewing a movie of this kind could positively impact the lives of individuals who are rejected by highly religious family members, friends and community members by reducing their own internalized homophobia as well as by reducing prejudice among the people who matter to LGBT individuals.

As previously mentioned, research has shown that an empathetic awareness is vital to the self-identification of an individual as an ally (Jones et al., 2014). However, there are extremely few studies that seek to increase empathy. Unfortunately, at the preliminary stages this study did not show the intended effect of the LGBT movie concerning increased empathy, thus this research gap is still vitally important to fill somehow; this is a challenging task for interested researchers. Hopefully, increasing subject size and diversifying the subjects will demonstrate the desired results of this anti-bias film. However, it is reasonable to speculate that perhaps attitudes are easier to change than empathy, which – especially for a very highly discriminated minority such as the LGBT population - could necessitate stronger and multidimensional anti-bias approaches over a long period of time.

Furthermore, conducting this study added to research supporting the effectiveness of educational entertainment as a method to impact attitudes and feelings of marginalized

and stigmatized communities. In addition to adding to the support of the effectiveness of this kind of entertainment, my results also lend support to the theory of parasocial contact as the media equivalent of interpersonal contact. Educational entertainment has the potential to reach a large mass of consumers, given that a film can be shown to large audiences in several areas across the nation simultaneously. Therefore, simulating interpersonal contact through educational entertainment could allow the positive outcomes of interpersonal contact to reach high numbers of people. This could be particularly needed in the case of many individuals who reside in highly homogeneous towns or places and that do not offer exposure to issues such as LGBT advocacy. In these cases, the opportunity to foster interpersonal connection with someone from a minority group – and the consequent increased likelihood of holding positive attitudes - is smaller. For these people, my results suggest that educational entertainment films applying, like the present research, the parasocial contact hypothesis in order to decrease bias, have potential to impact other social justice causes.

### **Future Research**

I have already pointed out several ways in which researchers could further contribute to filling the gaps in the literature regarding the extremely neglected anti-bias area of LGBT advocacy research. Should the line of LGBT research covered herein obtain further significant findings upon making changes to sample limitations and other issues discussed above, the present study could be expanded beyond college students. LGBT individuals are discriminated against in several settings, therefore the LGBT documentary intervention could be further tested for its impact on educators as well as grade, middle, and high school students, police officers, health care workers, and

religious officials. This intervention study could also be conducted with populations of LGBT individuals who hold high levels of internalized homophobia and therefore are likely to be at higher risk for reduced mental well-being. Interested researchers could study the effects that this film has on changing attitudes towards the self among LGBT individuals. In case the results of this pilot study will be further confirmed and extended in the positive direction – showing improvements on all outcome variables and in a variety of typically biased viewer populations, this film could be used as a teaching aid in schools and other institutions as well as business and health care settings in which sensitivity training is to be implemented.

In conclusion, this study's findings are encouraging. However, because there were no significant changes on empathy for the sample as a whole, this suggests that there are further improvements to be made in best targeting this variable. There is also a need to create interventions specifically aimed at changing attitudes and empathy within the religious community. There was no significant interaction between religiosity and condition; however, the change from pre to post for the homophobia index overall, within the treatment condition, indicated that the parasocial contact hypothesis has potential for explaining how beliefs are impacted. Perhaps, if wanting to target typically highly biased groups, utilizing this concept in a documentary intervention that is aimed specifically at those of high religious affiliation may be more appropriate than featuring general, non-religion-focused personal stories. To provide an example, future research films of this kind could include footage of experts from LGBT-affirming churches and religious institutions as well as LGBT individuals who identify as highly religious. Taken together, the findings of this innovative experimental research - although limited by a variety of

factors that are common in most pilot research of this kind - are promising and provide ample opportunities for interested researchers to further examine this challenging anti-bias area of research.

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## **Appendix A: Measures Used in this Thesis**

### **Heterosexual Attitudes Toward Homosexuality Scale**

1. I enjoy the company of homosexuals
2. It would be beneficial to society to recognize homosexuality as normal
3. Homosexuals should not be allowed to work with children
4. Homosexuality is immoral
5. Homosexuality is a mental disorder
6. All homosexual bars should be closed down
7. Homosexuals are mistreated in our society
8. Homosexuals should be given social equality
9. Homosexuals are a viable part of our society
10. Homosexuals should have equal opportunity employment
11. There is no reason to restrict the places where homosexuals work
12. Homosexuals should be free to date whomever they want
13. Homosexuality is a sin
14. Homosexuals do need psychological treatment
15. Homosexuality endangers the institution of family
16. Homosexuals should be accepted completely in our society
17. Homosexuals should be barred from the teaching profession
18. Those in favor of homosexuality tend to be homosexuals themselves
19. There should be no restrictions on homosexuality
20. I avoid homosexuals whenever possible

### **Index of Homophobia (Index of Attitudes Toward Homosexuals)**

1. I would feel comfortable working closely with a male homosexual
2. I would enjoy attending social functions at which homosexuals were present
3. I would feel uncomfortable if I learned that my neighbor was homosexual
4. If a member of my sex made a sexual advance toward me I would get angry
5. I would feel comfortable knowing that I was attractive to members of my sex
6. I would feel uncomfortable being seen in a gay bar
7. I would feel comfortable if a member of my sex made an advance toward me
8. I would feel comfortable if I found myself attracted to a member of my sex
9. I would feel disappointed if I learned that my child was homosexual
10. I would feel nervous being in a group of homosexuals
11. I would feel comfortable knowing that my clergyman was homosexual
12. I would be upset if I learned that my brother or sister were homosexual
13. I would feel that I had failed as a parent if I learned my child was gay
14. If I saw two men holding hands in public I would feel disgusted
15. If a member of my sex made an advance toward me I would feel offended
16. I would feel comfortable if I learned that my daughters teacher was a lesbian
17. I would feel uncomfortable if I learned my spouse or partner was attracted to members of his or her sex
18. I would feel at ease talking with a homosexual person at a party
19. I would feel uncomfortable if I learned that my boss was homosexual
20. It would not bother me to walk through predominately gay section of town

21. It would disturb me to find out that my doctor was homosexual
22. I would feel comfortable if I learned that my best friend of my sex was homosexual
23. If a member of my sex made an advance toward me I would feel flattered
24. I would feel uncomfortable knowing that my son's male teacher was homosexual
25. I would feel comfortable working closely with a female homosexual

### **Modified CAMI-Empathy Towards Homosexuals Scale**

1. I get very angry when I see a GLBT individual being ill-treated.
2. I rarely let the feelings of others affect me.
3. There is something about homosexuals that makes it easy to tell them from normal people.
4. GLBT individuals deserve our sympathy
5. There is no reason for GLBT people to be mistrusted.
6. People make too much of the feelings and sensitivity of gays and lesbians.
7. Seeing people in distress doesn't bother me.
8. The misfortunes of the GLBT community don't bother me.
9. In most ways, GLBT people are just like the rest of us.
10. I am annoyed by GLBT people who are just sorry for themselves.
11. One of the main causes of homosexuality is a lack of self-discipline and will power.
12. Gays and lesbians have for too long been the subject of ridicule.
13. The best way to handle GLBT individuals is to keep them away from everyone else.
14. The best way for homosexuals to be normalized is to be a part of our communities.
15. We need to adopt a more tolerant attitude towards homosexuals in our society.
16. As soon as a person shows signs of homosexual inclinations, it should be counter-acted.
17. I would not want to live next door to someone who was homosexual.
18. Homosexuals need the same kind of control and discipline as a young child would.
19. We have a responsibility to provide the best possible care for homosexuals.
20. Anyone with a history of homosexuality should be excluded from public office.
21. Homosexuality is a mental illness like any other.
22. Homosexuals don't deserve our sympathy.
23. Homosexuals should not be denied their individual rights.
24. Homosexuals should not be treated as outcasts of society.
25. Homosexuals are a burden on society.
26. Homosexuals should be encouraged to assume the same responsibilities as any other person.
27. Less emphasis should be placed on protecting society from homosexuals.
28. No one has the right to exclude homosexuals from their neighborhood.
29. It is frightening to think of people with homosexual orientations living in residential neighborhoods.
30. Orientation-altering therapy is an outdated means of treating homosexuals.

### **Knowledge About Homosexuality Questionnaire**

1. Homosexuality is a phase which children outgrow.....
2. There is a good chance of changing homosexual persons into heterosexual men and women.....

3. Most homosexuals want to be members of the opposite sex.....
4. Some church denominations have condemned legal and social discrimination against homosexuals.....
5. Sexual orientation is established at an early age.....
6. According to the American Psychological Association, homosexuality is an illness.....
7. Homosexual males are more likely to seduce young boys than heterosexual males are to seduce young girls.....
8. Gay men are more likely to be victims of violent crime than the general public.....
9. A majority of homosexuals were seduced in adolescence by a person of the same sex, usually several years older.....
10. A person becomes a homosexual because he/she chooses to do so.....
11. Homosexual activity occurs in many animals.....
12. Kinsey and many other researchers consider sexual behavior as a continuum from exclusively homosexual to exclusively heterosexual.....
13. A homosexual person's gender identity does not agree with his/her biological sex.....
14. Historically, almost every culture has evidenced widespread intolerance toward homosexuals, viewing them as "sick" or as "sinners" .....
15. Heterosexual men tend to express more hostile attitudes toward homosexuals than do heterosexual women.....
16. "Coming out" is a term that homosexuals use for publicly acknowledging their sexuality.....
17. One difference between homosexual men and women is that lesbians tend to have more partners over their lifetime.....
18. The National Gay and Lesbian Task Force is an agency founded to work with homosexual men and women to help achieve legal rights.....
19. Bisexuality can be characterized by overt behaviors and/or erotic responses to both males and females.....
20. Recent research has shown that homosexuality is caused by a chromosomal abnormality.....

**The Religious Commitment Inventory 10 (RCI-10)**

1. I often read books and magazines about my faith.
2. I make financial contributions to my religious organization.
3. I spend time trying to grow in understanding of my faith.
4. Religion is especially important to me because it answers many questions about the meaning of life.
5. My religious beliefs lie behind my whole approach to life.
6. I enjoy spending time with others of my religious affiliation.
7. Religious beliefs influence all of my dealings in life.
8. It is important to me to spend periods of time in private religious thought and reflection.
9. I enjoy working in the activities of my religious organization.
10. I keep well informed about my local religious group and have some influence in its decisions.

### **The Centrality of Religiosity Scale – 15 item Version**

1. How often do you think about religious issues?
2. To what extent do you believe that God or something Divine exists?
3. How often do you take part in religious services? 4. How often do you pray?
4. How often do you experience situations in which you have the feeling that God or something Divine intervenes in your life?
5. How interested are you in learning more about religious topics?
6. To what extent do you believe in an afterlife-e.g. immortality of the soul, resurrection of the dead or reincarnation
7. How important is it to take part in religious services?
8. How important is personal prayer for you?
9. How often do you have the feeling that God or something Divine wants to communicate or to reveal something to you?
10. How often do you keep yourself informed about religious questions through the radio, television, internet, newspapers, or books?
11. In your opinion, how probable is it that a higher power really exists?
12. How important is it for you to be connected to a religious community?
13. How often do you pray spontaneously when inspired by daily situations?
14. How often do you experience situations in which you have the feeling that God or something Divine is present?

November 19, 2015

The Committee for the Protection of Human Subjects has approved the research referenced below. Please retain and use the IRB number on any correspondence related to the project.

Date of Approval: 11/19/15  
 Expiration Date: 8/5/16  
 IRB Number: 1516-013  
 Project Title: Testing the use of documentaries in Research  
 Principal Investigator: Luciana Lagana  
 Department: Psychology

Please retain this letter and information for your records. Please be aware that you must immediately report any change in research activity or amendments to any protocol associated with this study. You must also report any adverse events or unanticipated problems involving risks to subjects or others. Please submit these reports to the Office of Research and Sponsored Projects at mail code 8232 or kat.sohn@csun.edu.

Continuation of the study past the expiration date requires IRB review and approval. Please note that even though subject enrollment or involvement may be complete, *if you are analyzing data with identifiable information, or the link to identifiable information still exists, you must renew your protocol.* In order to receive approval by the expiration date, please submit your renewal request at least 30 days prior to the expiration.

Enclosed you will find your Protocol Approval Form and approved Informed Consent Form. Consent forms given to subjects participating in the research must bear the approval stamp of the IRB. If you require changes to the consent form, please contact the Office of Research and Sponsored Projects.

**Important note:** Please be aware that this approval means that you have met the requirements of federal regulations and CSUN policies governing human subjects research. Approval from other entities may also be needed. For example, access to data from private records (e.g. student, medical, or employment records, etc.) that are protected by FERPA, HIPAA, or other confidentiality policies requires permission from the holders of those records.

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Review Type: Expedited Category #7  
 Funding: N/A

IRB Registration: IRB00001788  
 Assurance Number: FWA00001335