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WITH US OR AGAINST US: USING RELIGIOSITY AND SOCIODEMOGRAPHIC
VARIABLES TO PREDICT HOMOPHOBIC BELIEFS

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ABSTRACT

Affiliation with religious organizations is prevalent in the United States and within some of these organizations negative messages about lesbian, gay, and bisexual individuals are regularly espoused. Exposure to such homophobic sentiment has been found to have a detrimental impact on the mental health of sexual minorities and thereby, makes the exploration of religiosity and homophobia an imperative. This study examined differences in homophobia among the sociodemographic variables of gender, age, education level, religious affiliation, frequency of attendance at religious services, and amount of contact with lesbian, gay, and bisexual people. Additionally, a stepwise multiple regression was conducted to determine which religiosity variables were the best predictors of homophobia. The religiosity variables used in the study were Religious Fundamentalism, Quest, Immanence, as well as Intrinsic and Extrinsic religious orientations. Significant differences in homophobia were found for gender, age, religious affiliation, frequency of attendance at religious services, and number of known lesbian, gay, and bisexual individuals. Religious Fundamentalism and Intrinsic religious orientation were found to be the best predictors of homophobia.

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CHAPTER 1

INTRODUCTION

Within the United States, organized religion has a far-reaching impact. This is most clearly evidenced by the fact that over 80% of Americans report some type of religious affiliation, predominantly with Christian denominations (U.S. Census, 2001). Current research results indicate that there is potential for involvement with organized religion to have a positive impact on the psychological and physical well-being of individuals who are able to incorporate it into their lives (Koenig, 2004; Miller & Thorensen, 2003; Rippentrop, 2005; Steger & Frazier, 2005; Wink & Dillon, 2003). In 2003, Miller and Thorensen attempted to locate empirical studies that indicated any negative effects of religiosity on health and were unsuccessful in doing so. Based on this type of data, mental health clinicians and medical professionals have been strongly encouraged to assess clients' religious beliefs and affiliations as a way of identifying potential sources of support (Miville & Ferguson, 2004).

Prior to the publication of the *Diagnostic and Statistical Manual of Mental Disorders*, fourth edition (American Psychiatric Association, 1994), the topics of religion and spirituality were not addressed within the mainstream in the fields of psychology and medicine (Miller & Thorensen, 2003). In fact, such topics were ardently and intentionally avoided. Involvement with organized religion and spiritual practice has since come to be regarded as an important aspect of human development. An eleven-fold increase in psychological articles related to

religiosity between the years 2000 and 2002 as compared with 1980 to 1982 is indicative of this change (Koenig, 2004).

Despite the potential for religiosity to positively affect well-being and quality of life for many, this has not been the case for a significant number of lesbian, gay, and bisexual (LGB) individuals. In fact, LGB individuals who are exposed to negative messages, such as those espoused by some religious organizations, about homosexuality may later internalize these perceptions (Lease, Horne, & Noffsinger-Frazier, 2005). Barton (2010) conducted a qualitative study with lesbians and gay men residing in the Bible Belt, an area within the United States where religious fundamentalism and deference to church leaders tend to be the norm. She found that there were serious psychological consequences for sexual minorities living in this region as homophobia is not just expressed in religious settings, but also in a multitude of other environments (e.g., school, work, community settings).

Issues and concerns specific to the LGB population have gained increased exposure within Western society as has religion. Weinberg (1972) was one of the first to introduce the plight of LGB individuals and the concept of homophobia by asserting that mental health difficulties experienced by sexual minorities were due to their prejudicial and discriminatory experiences with others rather than being a product of their sexual orientation. Homosexuality was subsequently declassified as a mental disorder in 1973 (American Psychiatric Association, 1973). More recently, there has been an increase in the positive depiction of LGB people on television, in movies, and in popular culture. Despite these changes, the negative reactions and messages from organized religious institutions about homosexuality persist (Ritter & O'Neill, 1989). Morrow (2003) asserted that many religious organizations continue to regard LGB individuals as "immoral and spiritually corrupt" (p. 111) despite the abundance of information

which indicates that homosexuality is not indicative of a disorder, defect, or deviancy (Gonsiorek, 1982; Hooker, 1957).

Similar to their heterosexual counterparts, those in the LGB community may often be inclined to look to religion as a source of support as they age (Morrow, 2003). Many traditional and orthodox religious organizations have come to regard LGB individuals as sinful, immoral, and therefore, unworthy of participation in religious observance (Ritter & O'Neill, 1989). This stance would seem to blatantly contradict messages of love and compassion perpetuated by religious institutions, particularly those affiliated with a Judeo-Christian background (Anderson, 1997; Locke, 2004). It is not surprising then that LGB people frequently elect not to be a part of traditional religious establishments even if their own families are closely affiliated with them. Ellis and Wagemann (1993) found that mothers of gay men and lesbian women were significantly less likely to transmit their traditional religious practices to their offspring as compared with mothers of heterosexual children. As LGB individuals become more aware of their sexual identities, they may find it necessary to abandon or reject traditional religious belief systems and practices. Although some LGB individuals may abandon their religious affiliation, others attempt to reject their LGB identity or learn to compartmentalize these two disparate aspects of themselves. This may come at a cost: LGB individuals who belong to religious organizations that hold negative views of sexual minorities tend to have more internalized heterosexism and subsequently, more psychological distress (Szymanski, Kashubeck-West, & Meyer, 2008). In more extreme situations, when internalized heterosexism is high and an LGB person is affiliated with a more traditional, fundamentalist religious organization, conversion therapy may be sought to cure the individual of his or her homosexuality (Barton, 2010; Morrow, 2003; Szymanski et al., 2008). Newman and Muzzonigro (1993) found that adolescent gay boys

who attempted to integrate their sexual identities with the traditional religious beliefs and practices of their families or communities experienced a significant amount of internal conflict. Such conflict has been shown to negatively impact the coming-out process, which has been found to be vitally important to fully integrate one's LGB identity (Newman & Muzzonigro, 1993).

Alternatively, Sherry, Adelman, Whilde, and Quick (2010) found that LGB individuals were adept at reconciling their religious and sexual identities. The majority of participants in their study questioned their religious identities and/or made changes in their religious affiliations based on the incongruence between their sexual identities and their religious identities. Sherry et al. caution that assumptions should not be made about LGB individuals' abilities to reconcile their sexual and religious identities.

What is clearly needed is continued exploration of the factors which contribute to, perpetuate, and maintain homonegative beliefs in our society. Various components of religiosity have consistently been found to have an impact on or be related to homophobia. Because organized religion is so pervasive, it lends itself well to the study of homophobia. Despite the dearth of research of the relationship between homophobia and religion, analyses should be undertaken from an objective stance such that both the positive and negative aspects of religiosity can be realized. Counseling psychology is a field where such an exploration is possible given that emphasis is placed on both rigorous research methodologies and social justice.

Need

Given the far-reaching impact of organized religion within the U.S. and the current emphasis on the positive benefits of religious observance, it is necessary to present the other side

of the equation: the potential for certain groups of individuals to be negatively impacted by organized religion. Herek (2007) asserts that there are significant power differentials between heterosexuals and sexual minorities and that sexual stigma is perpetuated through social institutions. Conservative Christians are currently very powerful in the U.S. (Jimenez, 2006). The plight and discrimination of LGB individuals in this country has come to the forefront of American culture. The U.S. government, particularly in the most recent presidential elections, was heavily influenced by organized religion (Jimenez, 2006) as have current political debates regarding LGB rights.

Increased understanding of the factors that contribute to and perpetuate homophobic beliefs and attitudes is vitally important. Knowing how differences in the factors of age, gender, education level, frequency of attendance at religious services, the number of known LGB individuals, and religious orientation affect homophobic beliefs may serve to shed more light on the manner in which homonegative beliefs develop and flourish in the U.S.

Coming to understand the factors that lead to the development and perpetuation of homophobia might allow for LGB individuals who are most at risk to be identified by mental health clinicians. This is especially important given that 11% to 17% of all reported bias-related crimes involved sexual minorities (Herek & Sims, 2008) and LGB people who experience violence related to their sexual identities are at greater psychological risk (Herek, 2007). With increased understanding, interventions could be succinctly and efficiently directed to provide assistance to those individuals who are most at risk. Educational initiatives designed to illuminate the experiences of LGB people may also be undertaken in situations identified as being especially prone to homophobia. An attitude of acceptance and increased understanding toward LGB individuals within specific religious organizations may also come to light through

an exploration of religiosity and homophobia such that alternative venues of religious observance for LGB individuals may be identified.

Purpose Statement

Although there has been a fair amount research exploring the relationship between religiosity and homophobia, a study has yet to be completed which includes many of the variables that have been found individually to be significant. The purpose of this study was the replication and extension of previous research to confirm the significance of the variables individually and to understand how the relationships among them impact the connection between religiosity and homophobia. The primary goal of this study was to add a layer of complexity to the analysis of the relationship between religiosity and homophobic beliefs by utilizing a more comprehensive definition of religiosity and by undertaking a more comprehensive approach in the analyses. Sociodemographic variables that have not been included in previous studies, such as age and education level, were included in the current study. Moreover, previous research focused exclusively on Judeo-Christian organized religions, whereas, this study also sought participants who identified their religious orientation as non-affiliated or non-Christian.

Research Questions

1. Are there differences in homophobia between the categories of sociodemographic variables? The sociodemographic variables included in this study are gender, age, education level, frequency of attendance at religious services, number of LGB people known to the participant, and religious affiliation.
2. What religiosity variables are the best predictors of homophobia? The religiosity variables included in this study are religious fundamentalism, quest religious

orientation, immanence religious orientation, intrinsic religious orientation, and extrinsic religious orientation.

Definitions

The following terms were used throughout this study. They have been operationally defined and serve to provide a common language related to the examination of the relationships between organized religion and homophobia.

- *Religion*: Spiritual observance characterized by social institutions comprised of rules, rituals, and belief systems. It is defined by inherent boundaries and primarily concerned with the material world (Miller & Thorensen, 2003). Communal spaces are established for prayer, worship, and social activities and members generally concede to a recognized authority and traditions (Wink & Dillon, 2003).
- *Religiosity*: According to Hackney and Sanders (2003), the definition of religiosity is complex and consists of many aspects of religion. These aspects include personal devotion (religious orientation), institutional devotion (frequency of attendance and religious affiliation), and ideological religion (fundamentalism).
- *Spirituality*: Observance which focuses on that which is immaterial and beyond the human senses and often perceived as unique to each individual (Miller & Thorensen, 2003). It is not defined by an authority figure or by tradition (Wink & Dillon, 2003).
- *Homophobia*: A belief system defined by “a broad range of antigay tendencies including social avoidance, stereotypic beliefs, intolerance toward gay rights, morality concerns” (Wilkinson, 2004, p. 58).

- *Intrinsic Orientation*: A religious orientation synonymous with internalized religiosity such that the practice and observance of religion itself are the primary focus (Allport & Ross, 1967).
- *Extrinsic Orientation*: A religious orientation where belonging to a religious organization fulfills some other purpose such as providing social support (Allport & Ross, 1967).
- *Quest Orientation*: A religious orientation characterized by a willingness to “face existential questions without reducing their complexity” (Batson & Raynor-Prince, 1983, p. 38), regarding religious doubts in a positive manner, and a willingness to change religious views when faced with new information (Batson & Raynor-Prince, 1983).
- *Immanence Orientation*: A religious orientation associated with lower levels of homophobia that tends to be focused more on “peace, tolerance, and compassion” (Wilkinson, 2004, p. 59).
- *Religious Fundamentalism (RF)*: A personal characteristic where one’s religious beliefs are perceived as containing the “basic, intrinsic, essential, inerrant truth about humanity and deity” (Altemeyer, 2003, p. 16).

CHAPTER 2

LITERATURE REVIEW

In their seminal study of the relationship between religious practice and prejudice, Allport and Ross (1967) attempted to determine if those who attend church services tend to be more racially prejudiced than those who did not. The authors recognized and included as part of their study the curvilinear relationship that exists between religious practice and prejudice. They asserted that while churchgoers tended to be more prejudiced than those who did not attend religious services, there were some who were actually less prejudiced than non-churchgoers. Allport and Ross believed that this relationship reflected differences between churchgoers with intrinsic religious orientations and those with extrinsic orientations. The researchers developed their Religious Orientation Scale based on similar instruments created by previous researchers. The scale was composed of 20 items with 10 of those designed to measure intrinsic orientation and the other half for measuring extrinsic religious orientation. It was initially hypothesized that individuals with an intrinsic orientation would be less prejudiced than those having a more extrinsic orientation. This hypothesis was found to be supported in the study. However, Allport and Ross also discovered that the participants in their study did not fall neatly into the intrinsic and extrinsic categories. They discovered a third group within their sample which they described as “indiscriminate responders” (p. 438). These participants were found to have positively endorsed any statement regarding religion and were found to be more prejudiced than the other

groups in the study. This surprising finding, as well as the authors' acknowledgement of the non-linear relationship between religiosity and prejudice from the outset of the study, added a level of complexity to the analysis of religiosity and prejudice.

Allport and Ross (1967) brought forth a more discriminating lens through which to examine religiosity and prejudice and also set a precedent for undertaking research within this area. The Allport and Ross study was timely in that it occurred during the height of the Civil Rights Movement. Although racial prejudice and discrimination continues to be a problem in the U.S., the focus has shifted a bit within the formal study of religiosity. Currently, a great deal of attention in popular culture, the political arena, religious organizations, and academia is being paid to the relationship between organized religion and homophobia. Contemporary researchers have developed additional measures and employed more rigorous methodologies for the purpose of assessing the relationship between religiosity and homophobia.

Religious Orientation

Since Allport and Ross's (1967) study, researchers have begun exploring how well their Religious Orientation Scale truly assesses an individual's unique religious perspective. Hunsberger and Jackson (2005) make the point that religious orientation is more complex than what the dichotomous scale can possibly assess. Additionally, it is possible that social desirability may have contaminated Allport and Ross's results. Altemeyer (1996) is especially critical of the Religious Orientation Scale and asserts that the instrument has never measured what it was designed to measure. In an effort to improve upon the original scale, Gorsuch and McPherson (1989) conducted a factor analysis of the items on the original scale. They found two subcategories on the Extrinsic domain. One consisted of items related to social relationships

and the other was related to personal benefits. The result of their analysis was the development of the I/E-R Scale.

Batson and Raynor-Prince (1983) asserted that Allport and Ross's (1967) Religious Orientation Scale failed to accurately assess "mature religion" (p. 38) which they believe includes complexity, openness, and a tentative approach to religious belief. Batson and Ventis (1982) proposed a third religious orientation which they termed Quest. Those who have more of a quest orientation tend to be more tentative about their religious beliefs and possess openness to new information such that they may alter their beliefs based on new information (Batson & Raynor-Prince, 1983). To assess these aspects of religious orientation, Batson and Schoenrade (1991) developed the Quest Scale. The use of this scale, in addition to measures of intrinsic and extrinsic religious orientations, provides a more complete and complex picture of an individual's religious perspective.

Burriss and Tarpley (1998) posited that an immanence orientation to religion also exists and constructed a scale to measure it. The Immanence Scale consists of 15 items and is designed to assess the degree to which an individual embraces peace, tolerance, and compassion in his or her religious orientation. Burriss and Tarpley asserted that keeping boundaries based on religious beliefs, being reactionary when perceiving threats against one's religious values, and maintaining focus on the past and the future rather than the present are aspects of religiosity that are conducive to prejudice. They believe that those who score high on the Immanence Scale hold values that are the opposite of these aspects of religiosity. The addition of immanence in the exploration of religious orientation provides yet another layer of completeness and complexity in understanding the relationship between religiosity and prejudice.

Based upon the research that has been conducted since the Allport and Ross (1967) study, it is apparent that reaching an agreement on a precise definition for religiosity has been and continues to be difficult. There does seem to be a general consensus that religiosity is more complex than a simple intrinsic or extrinsic orientation toward religious observance. Hackney and Sanders (2003) have posited that religiosity consists of factors comprising personal devotion (i.e., religious orientation), institutional devotion (i.e., choice of denomination, frequency of attendance), and ideological religion (i.e., fundamentalism). The authors suggest that to fully understand the religious experience all of these factors should be considered.

Religious Fundamentalism

Altemeyer (2003) has found additional problems with Allport and Ross's (1967) study. He contends that there are significant methodological problems with the curvilinear relationship between church attendance and prejudice that the researchers believed existed. The curvilinear relationship was produced using only two groups of participants, churchgoers and those who do not attend, instead of the three necessary to establish such a relationship. Altemeyer asserts that Allport and Ross actually found a linear relationship in their study: the more frequently a person attends church, the more prejudiced he or she is likely to be.

Altemeyer and Hunsberger (1992) set out to determine what it was about religiosity that led to prejudice. They hypothesized that religious fundamentalism might be a significant factor in the relationship between religiosity and prejudice. The researchers developed a 20-item Religious Fundamentalism Scale to determine if such significant relationships existed. As expected, Altemeyer and Hunsberger have found correlations between religious fundamentalism and prejudice toward LGB individuals and racial/ethnic minority groups. Rowatt et al. (2006) found that as religious fundamentalism increased so did negative attitudes toward LGB

individuals. This finding lends further support to the notion that fundamentalism may be a very important factor in the relationship between religiosity and homophobia.

Altemeyer (2003) examined religious fundamentalism further and found that when religion is emphasized and encouraged during an individual's upbringing, he or she may be more prejudiced later in life. This kind of influence during an individual's upbringing may lead to the development of a cognitive style that is characterized by utilizing all information to support one's belief system even when such information would seem to conflict with that belief system (Hunsberger & Jackson, 2005). This suggests that the mechanism by which fundamentalism comes to inform belief systems is through family processes. Such a finding is particularly important for knowing where to direct LGB education initiatives.

Religious Affiliation

Although many general statements may be made regarding religiosity and prejudice based upon previous research, variability does exist among the various religious denominations. Finlay and Walther (2003) asserted that it is necessary for distinctions to be made between Protestant groups to achieve data that are truly meaningful. Using six categories (Non-Affiliated, Non-Christian, Conservative Protestant, Moderate Protestant, Liberal Protestant, and Catholic) established by Roof and McKinney (1987), Finlay and Walther examined differences in level of homophobia based upon religious affiliation. Roof and McKinney (1987) distinguished between and categorized Conservative, Moderate, and Liberal Protestants by examining both their theological traditions and cultural differences. Conservative Protestants were found to have the highest levels of homophobia and Non-Christians were found to be the least homophobic. While this might merely seem to show support for the notion that those who attend religious services are more homophobic than individuals who do not, other significant

differences were found between the denominations. For example, Liberal Protestants were found to have significantly lower levels of homophobia than Conservative Protestants, Moderate Protestants, and Catholics. Based on this information, one may have a high degree of religiosity, but not necessarily be prejudiced. Resulting prejudice may in fact be the result of the interaction between the stance of one's religious organization and how closely he or she identifies with his or her religious group. According to Hunsberger and Jackson (2005), homophobia may be related to the need to feel as if one is conforming to the stance of his or her religious organization. They suggest that those who identify most strongly with their religious group are more likely to be prejudiced.

In Newman's (2002) study, religious affiliation was found to account for the most variance in assessing negative attitudes toward LGB individuals. Conservative Protestants were found to have the most negative attitudes and those who identified as Atheist, Agnostic, or Jewish were the least negative. Increased levels of homophobia among Conservative Christian denominations may be related to the fact that these organizations tend to emphasize the sexual behavior of LGB people rather than the emotional components of same-sex relationships. It has been found that as individuals' level of religiosity increased, so did their negative attitudes about the sexual behavior of gay men (Wilkinson & Roys, 2005). These findings are of particular concern given that the majority of the U.S. population cites some type of religious affiliation and the vast majority is part of a Christian denomination (U.S. Census, 2001).

Gender

Previous research studies have found that men tend to be more homophobic than women (Herek & Glunt, 1993; Kite & Whitley, 1996). Underscoring these findings is that no studies have been found that show women hold more negative attitudes toward LGB individuals than

men (Finlay & Walther, 2003). However, this finding may be mediated somewhat by whether the person being judged is a lesbian or gay man. Heterosexual men tend to judge gay men much more negatively than they do lesbians. This may be related to the fact that organized religion has been much less concerned with lesbians (Wilkinson & Roys, 2005).

While the reason behind this difference between men and women has not been explained, it is likely that it is related to differences in the ways that men and women are socialized and what they come to value within U.S. culture. Boys may be rewarded for being tough and powerful, while girls are often encouraged to be caring and understanding. Such differences would certainly seem to set the stage for men to be more intolerant of other men who do not fit their conceptualization of what a man is supposed to be and for women to be more open and accepting. Greene (2005) asserted that a focus on power by maintaining traditional gender roles helps to explain why men tend to be more homophobic than women. Aosved and Long (2006) found that there was a significant overlap between sexism and homophobia. Within their study, sexism was found to account for the most variance in rape myth acceptance (placing blame on the victim rather than the perpetrator of a rape). Results like these lend support to the notion that maintaining the status quo, where masculinity is equated with power, plays a part in the expression of homophobia (Aosved & Long, 2006). Therefore, the presence or absence of homophobia may be less about whether one is a woman or a man and more about how that individual regards women and traditional gender roles.

Geographic Location

One of the limitations of the Allport and Ross (1967) study was the potential for the geographic location of the participants to have influenced their responses. The researchers included six denominations in their study and went to different states to obtain their sample, but

they only sampled one denomination per state (except for Massachusetts where both Roman Catholics and Baptists were sampled). It would have been more advantageous for the researchers to have sampled all six denominations in each of the five states so that the influence of geography would have been controlled.

Results from current research studies within the area of religion and prejudice have continued to be limited because of the potential influence of geographic location on participants' responses. The use of samples of convenience, specifically classes of college students, has introduced the potential for skewed results (Finlay & Walther, 2003; Wilkinson, 2004; Wilkinson & Roys, 2005). Such limitations impair the potential for results to be generalized to the population. Overcoming the influence of geography is essential if a more complete understanding of the relationship between religiosity and homophobia is to be achieved.

Education Level

Another limitation of the Allport and Ross (1967) study was their unwillingness to consider level of education within their analysis. They found that the indiscriminate responders in their study tended to have less education and suggested that this factor could have influenced their responses. However, they quickly discounted the influence of education and asserted that it should not be included in the analysis. Allport and Ross provided no explanation for excluding this variable which was surprising given that the differences in level of education were found to be significant when the sample was divided based upon religious orientation.

Contemporary studies have not fared much better when it comes to including the influence of education in their analyses. This is likely due to reliance on samples of convenience, primarily college students (Finlay & Walther, 2003; Wilkinson, 2004; Wilkinson & Roys, 2005). A major limitation of using such samples is that it limits the generalizability of the

results. It is likely that an individual with a college degree will be exposed to more information than someone with a high school diploma. Such exposure may have a significant impact on beliefs and perceptions that one holds. Level of education seems to be an important variable to include in the analysis of religiosity and prejudice.

Contact With Sexual Minorities

In 1954, Allport described a phenomenon he termed the “contact hypothesis” wherein members of a majority group were found to be less likely to hold prejudicial attitudes toward those from minority groups if they had personal contact with minority group members. Since then, researchers have examined the relationship between contact with lesbian, gay, and bisexual (LGB) people and homophobic attitudes. Results from these studies indicate that individuals report more positive views of LGB individuals when they personally know someone who is a sexual minority. Knowing at least two LGB people was found to be related to significantly less homophobic attitudes (Herek & Capitano, 1996). More specifically, having close contact with LGB individuals, coupled with open communication about sexual identity, significantly increases the likelihood that positive feelings toward individuals will generalize to the LGB community as a whole (Herek, 2007; Pettigrew, 1998). Some studies have begun exploring utilizing interventions based on the contact hypothesis and its variants to aid in decreasing prejudice and specifically, homophobia (Crisp & Turner, 2009; Schiappa, Gregg, & Hewes, 2005; Schiappa, Gregg, & Hewes, 2006).

Summary

Aspects of religiosity (religious orientation, religious fundamentalism, and religious affiliation) and sociodemographic variables, especially gender and contact with sexual minorities, have been examined in many studies of homophobia. Recently, researchers have

undertaken the exploration of these variables collectively in an effort to better understand the manner in which homophobia occurs and persists in real-life situations. Such an approach in the research of homophobia is likely to produce results that are both meaningful and pragmatic as it can be readily utilized to inform interventions at the micro (individual) and macro (organizational) levels.

CHAPTER 3

METHODOLOGY

Participants

One hundred fifty-five individuals initiated participation in this study, but 30 of this original number were found to have left at least half of the survey items blank and were excluded from further analysis. After additional data screening, 10 more surveys were excluded due to at least three items being left blank. No consistent pattern was apparent in the items that were left unanswered, nor was there a consistent point at which some participants chose to stop their participation in the study. A total of 115 participants were included in the final analyses in this study. There were nearly twice as many women ($n = 73$) as men ($n = 42$) who participated in this study. The majority of the people who completed this study were between the ages of 25 and 65; had at least a bachelor's degree; either did not attend religious services at all or attended only a few times a year; personally knew several LGB individuals; resided in the East North Central New England, and Pacific regions; and were either not affiliated with any religious organization or reported a Non-Christian affiliation (Table 1).

Procedures

Participants for this study were recruited through online websites, message boards, and e-lists that had been designed for the purpose of addressing various aspects of organized religion.

Table 1

Frequencies of Sociodemographic Variables

	Frequency (<i>n</i>)	Percent (%)
Gender		
Female	73	63.5
Male	42	36.5
Age		
18-24	6	5.2
25-40	58	50.4
41-65	45	39.1
65+	6	5.2
Education		
Less Than High School	2	1.7
High School Graduate	6	5.2
Some College	19	16.5
Associate's Degree	10	8.7
Bachelor's Degree	31	27.0
Some Graduate School	11	9.6
Completion of Graduate Degree	36	31.3
Religious Service Attendance		
No Response	2	1.7
Never	57	49.6
Few Times a Year	23	20.0
Every Month or Two	6	5.2
2 or 3 Times a Month	13	11.3
Once a Week	7	6.1
More than Once a Week	7	6.1
Number of LGB Individuals Known		
No Response	1	0.9
0	4	3.5
1-2	11	9.6
3-5	25	21.7

(continued)

Table 1 (continues)

Frequencies of Sociodemographic Variables

	Frequency (<i>n</i>)	Percent (%)
Number of LGB Individuals Known		
6-11	16	13.9
11+	58	50.4
Religious Affiliation		
No Response	1	0.9
Non-Affiliated	50	43.5
Conservative Protestant	14	12.2
Moderate Protestant	2	1.7
Liberal Protestant	11	9.6
Catholic	18	15.7
Non-Christian	19	16.5
Geographic Location		
No Response	2	1.7
New England	17	14.8
Mid-Atlantic	13	11.3
East North Central	24	20.9
West North Central	4	3.5
South Atlantic	14	12.2
East South Central	4	3.5
West South Central	3	2.6
Mountain	7	6.1
Pacific	16	13.9
International	11	9.6

N = 115

The purpose in using a web-based survey format was to increase the likelihood that a sample representative of the U.S. population would be obtained and to help control for the influence of participants' geographic location on their responses.

An attempt to identify the person responsible for maintaining each website, message board, or e-list was made for the purpose of requesting permission to advertise the study. If there

was no identified webmaster, the request was made to the group at large via the electronic forum. Several of the webmasters for Conservative Protestant online groups either would not grant permission for the researcher to post a link advertising the study on their forum or did not respond to the researcher's request. In one instance, a webmaster would not allow the researcher to post the link and advised that advertising the study would disrupt the focus of the group. When permission was granted, a message was posted on the forum requesting that members participate in the study. An electronic link to the web-based survey was provided so that participants were able to easily access the survey.

Once participants accessed the website of the survey, they were instructed to read and electronically "sign" an informed consent form (see Appendix A). This process involved checking a box next to a statement which indicated that the participant understood the terms and conditions for participating in the study. Participants were not able to access the survey unless they had checked this box. Information regarding participants' confidentiality was addressed in the informed consent, in addition to the contact information for the researcher, the faculty chairperson, and the Institutional Review Board (IRB).

After completing the informed consent form, participants were prompted to complete a demographic questionnaire (see Appendix B). Respondents were able to enter their exact geographic location, but the rest of the questions involved making a selection from a series of drop-down boxes.

Following the demographic questionnaire, participants were prompted to respond to survey items. The survey was composed of Finlay and Walther's (2003) H-Scale designed to measure homophobic beliefs, Altemeyer and Hunsberger's (1992) Religious Fundamentalism (RF) scale, Gorsuch and McPherson's (1989) I/E-R Scale, Batson and Schoenrade's (1991)

Quest Orientation Scale, and Burris and Tarpley's (1998) Immanence Orientation Scale. Each scale utilized in this study was presented intact on the computer screen. The names of the scales were not presented to help decrease the likelihood of participants guessing the purpose of the study, thus limiting the probability of response bias.

The entire survey should have taken no longer than 15 minutes for participants to complete. After each screen of items, participants were prompted to click a dialogue box that took them to the next screen of items. Once a respondent had proceeded to the next screen, she or he was not able to click back to the previous screen to change responses to items. This feature was added to help decrease the possibility of response bias. After responding to the last item, participants were presented with a screen thanking them for their participation. The researcher's contact information and a reminder that participants may contact the researcher with any questions or concerns were also included.

Measures

Demographic Questionnaire

The demographic questionnaire used in this study was developed by the researcher and was comprised of the closed-item responses which assessed the sociodemographic variables of gender, age, geographic location, education level, religious affiliation, and number of known LGB individuals (Appendix B). Many of these have been used in previous studies. The one exception to this was the inclusion of geographic location on the questionnaire. One of the goals of this study was to control for regional differences by using a web-based survey format. Participants were asked to list their geographic location so that the researcher could determine the degree of geographical representation in the sample.

Religious Fundamentalism Scale

The Religious Fundamentalism Scale (RF) was originally designed in 1992 (Altemeyer & Hunsberger) as a 20-item instrument designed to measure the degree of belief one has that there is a singular way of understanding human nature, as well as the spiritual realm. Altemeyer and Hunsberger (2004) revised the original scale due to concerns about construct validity; specifically, they addressed the singular focus of RF in measuring belief in “one special group” (p. 50). The authors were also concerned that only a portion of the scale was being used by other researchers.

The original RF scale was reduced from 20 items to 12 items. Each item is measured on a 9-point scale ranging from *Strongly Disagree* to *Strongly Agree* with higher scores indicating a greater degree of religious fundamentalism. The internal consistency of the revised scale was found to be quite good with a Cronbach’s alpha of .91. The original RF scale and the most current version have been found to be positively correlated with the Right Wing Authoritarianism Scale (RWA) also developed by Altemeyer and Hunsberger (2004) with correlations for the original ranging from .62 to .82 and .79 for the current version. In fact, Altemeyer has stated that RF is the “religious manifestation of RWA” (1996, p. 161). Because of the strong correlation between the RF and RWA scales, only the RF scale was utilized in this study. Using data obtained in the current study, a Cronbach’s alpha of .95 was found for the RF scale.

Quest Scale

The most recent version of the Quest Scale (Batson & Schoenrade, 1991) is a 12-item instrument that uses a 9-point scale ranging from *Strongly Disagree* to *Strongly Agree* with higher scores indicating more of a quest religious orientation. Quest has been conceptualized to

encompass three dimensions of religious orientation. First, it involves a willingness to embrace existential questions without attempting to reduce them into smaller components. Second, a quest orientation involves viewing doubt about religion and critique of oneself as positive. Finally, a willingness to change is indicative of a quest religious orientation (Batson & Schoenrade, 1991).

The original 6-item scale was developed in 1982 (Batson & Ventis, 1982) for the purpose of adding an additional domain to Allport and Ross's (1967) intrinsic/extrinsic conceptualization of religious orientation. There had been significant concern about the internal consistency of the original Quest scale with Cronbach's alphas ranging from .45 to .50. This was attributed to the low number of items, in addition to the fact that it was designed to measure three dimensions of religious orientation. Gorsuch and McPherson (1989) sought to improve the internal consistency of the scale without altering what the original scale was designed to measure. Six items were added to the scale bringing the total to 12 items (two reverse-scored). The revised scale yielded a Cronbach's alpha of .78 and correlated .86 with the original scale. Using data obtained in the current study, a Cronbach's alpha of .78 was found for the Quest scale.

Immanence Scale

The Immanence Scale (Burriss & Tarpley, 1998) is a 15-item instrument measured on a 9-point scale ranging from *Strongly Disagree* to *Strongly Agree* with higher scores indicating more of an immanence religious orientation. Immanence has been conceptualized as an orientation toward religion that emphasizes three aspects of religion: (a) boundary transcendence, (b) awareness/acceptance, and (c) a focus on the present.

Burriss and Tarpley (1998) found good internal consistency for the Immanence Scale with a Cronbach's alpha of .79 and split-half reliability of .59. A principal components analysis

yielded support for the 15 items included in the scale. The researchers also mixed items from the Immanence Scale with items from the Intrinsic/Extrinsic Religious Orientation Scale (Allport & Ross, 1967) and the Quest Scale (Batson & Schoenrade, 1991). They found a negative correlation between Immanence and Intrinsic religious orientations which was expected and attributed to the fact that Immanence does not emphasize orthodox aspects of religion. Positive correlations were found with both Extrinsic and Quest orientations. Using data obtained from the current study, a Cronbach's alpha of .85 was found for the Immanence scale.

Intrinsic/Extrinsic Religious Orientation Scale-Revised

The Intrinsic/Extrinsic Religious Orientation Scale-Revised (I/E-ROS) was developed by Gorsuch and McPherson (1989) in response to reliability and validity concerns about the original measure developed by Allport and Ross in 1967. Kirkpatrick (1993) found that the items comprising the extrinsic portion of the scale divided into two subdimensions of extrinsic religious orientation: those that indicate a personal orientation (Ep) and those which are socially oriented (Es). In addition, questions were raised regarding problems with response bias in the original I/E-ROS and questions were raised as to whether religious observation (attendance of religious services) was an accurate measure of intrinsic religious orientation (Gorsuch & McPherson, 1989).

In developing the revised version of the I/E-ROS, Gorsuch and McPherson (1989) conducted factor analyses and found that items loaded on the three subdimensions posited by Kirkpatrick (1993): intrinsic religious orientation (I), extrinsic-personal religious orientation, and extrinsic-social religious orientation. Reliability scores for each of these orientations were found to be in the high to moderate ranges with Cronbach alpha coefficients of .83 for I, .57 for Ep, and .58 for Es. An alpha of .65 was found for the combined extrinsic orientation (Ep/Es) dimension.

Using data obtained from the current study, Cronbach's alphas of .75 for I and .68 for combined E (Ep/Es) were found.

The I/E-ROS (Gorsuch & McPherson, 1989) is designed to measure an individual's behaviors and values related to her or his religious beliefs. A distinction is made between an intrinsic orientation which consists of behaviors and attitudes indicative of an internal commitment to one's faith and an extrinsic orientation marked by motivation to engage in religious practices in order to obtain additional benefits such as social interaction or networking with others. The scale consists of 14 items measured on a 5-point scale ranging from *Strongly Agree* to *Strongly Disagree*. Three items of the scale are reverse-scored. Lower scores on the scale indicate a more intrinsic religious orientation, while higher scores suggest an extrinsic orientation toward religious practice.

Homophobia Scale

The Homophobia Scale (H-Scale) developed by Finlay and Walther (2003) is a 6-item instrument that utilizes a 5-point scale ranging from *Strongly Agree* to *Strongly Disagree*. High scores indicate negative attitudes toward LGB individuals; while low scores indicate more accepting attitudes toward LGB people. An alpha level of .84 was achieved after two items were removed from the original 8-item scale yielding its most recent composition. A Cronbach's alpha of .92 was obtained utilizing data from the current study.

In developing the H-Scale, Finlay and Walther (2003) found that a low percentage of their sample indicated that they believed homosexuality was a mental disorder or should serve as a basis for discrimination in employment. However, a significantly higher percentage indicated a belief that same-sex relationships are immoral and threaten the status of the traditional family. Based on this, the authors assert that same-sex relationships may be conceptualized as a "moral

disorder” (p. 378), lending support to the impetus for exploring the relationship between religiosity and homophobia.

Variables

A total of 10 variables were included in this study to address the criterion variable of homophobia. The variables were divided into two categories; sociodemographic variables and religiosity variables. Each of these variables and the criterion variable is listed and discussed below.

Sociodemographic Variables

Gender. Gender was assessed through the demographic questionnaire and served as an independent variable in determining differences in homophobia. In previous studies, men have been found to be more homophobic than women (Finlay & Walther, 2003; Wilkinson, 2004). This variable was included to determine if such differences between men and women persist.

Age. Age was assessed through the demographic questionnaire and served as an independent variable to determine whether there were differences in homophobia based on age. Previous studies have utilized samples of convenience in university settings, thereby limiting the generalizability of their findings. The majority of participants in the current study were between the ages of 25 and 65 while far fewer respondents reported being between the ages of 18 and 24 or over the age of 65. By seeking a more representative sample, differences in homophobia were assessed among individuals in various age groups and can be compared and contrasted with results from previous studies to determine if using college students in studies like these is an appropriate sampling technique.

Education Level. Participants’ level of education was assessed through the use of the demographic questionnaire and served as an independent variable to determine if there were

differences in homophobia based on education. Participants were instructed to select one of seven possible options related to their level of education: (a) less than high school graduate, (b) high school graduate, (c) some college, (d) associate's degree (2-year), (e) bachelor's degree (4-year), (f) some graduate school, and (g) completion of graduate degree. University students have comprised the majority of samples used in previous studies which limited the generalizability of results. Because the use of personal computers has become widespread in the United States, the web-based survey format of this study was utilized to obtain a sample more representative of the national population.

Religious Service Attendance. The frequency which one attends religious services was assessed through the demographic questionnaire and served as an independent variable to determine if there were differences in homophobia based upon how frequently participants attended religious services. Participants were instructed to select one of six possible options related to the frequency with which they attend religious services: (a) never, (b) a few times a year, (c) every month or two, (d) two or three times per month, (e) about once a week, and (f) more than once a week. The variable of religious observance frequency was assessed in the Allport and Ross study (1967) and its inclusion in subsequent studies concerning religiosity has been controversial. It was included in this study to determine whether it is a useful variable in the study of religiosity.

Number of LGB Individuals Known. The number of LGB individuals known by participants was assessed through the demographic questionnaire and served as an independent variable in this study to determine if the number of LGB individuals known was indicative of significant differences in homophobic attitudes. Participants were presented with five categories and asked to indicate which best represented the number of people they know who identify as

lesbian, gay, or bisexual. The categories for this variable were: (a) 0, (b) 1-2, (c) 3-5, (d) 6-11, and (e) 11+. The inclusion of this variable was for replication purposes as it had been assessed in previous studies (Gentry, 1987; Herek, 1988; Herek & Capitano, 1996; Herek & Glunt, 1993; Pettigrew & Tropp, 2006).

Religious Affiliation. Participants' religious affiliation was assessed through the demographic questionnaire and served as an independent variable in this study to determine if there were differences in homophobia among different affiliations. Participants were able to select their denomination or affiliation from a drop-down text box and each selection was categorized based upon distinctions made in previous research. The categories used for this study were: (a) non-affiliated, (b) Conservative Protestant, (c) Moderate Protestant, (d) Liberal Protestant, (e) Catholic, and (f) Non-Christian. A list of the denominations and affiliations from which participants were able to choose and the categories to which each belongs can be found in Appendix C. The inclusion of the variable of religious affiliation was for replication purposes as it had been assessed in previous studies (Finlay & Walther, 2003).

Religiosity Variables

Religious Fundamentalism. Religious fundamentalism served as a predictor variable in this study and was assessed through the use of Altemeyer and Hunsberger's (2004) Religious Fundamentalism Scale (RF). One's degree of fundamentalism has been conceptualized as another aspect of the multidimensional definition of religiosity being utilized in this study (Hackney & Sanders, 2003).

Religious Orientation. Religious orientation comprised three predictor variables in this study. Participants' attitudes and behaviors with respect to religion were assessed through the use of the Intrinsic/Extrinsic Religious Orientation Scale-Revised (Gorsuch & McPherson,

1989), the Quest Scale (Batson & Schoenrade, 1991), and the Immanence Scale (Burris & Tarpley, 1998). Religious orientation was included as it has been conceptualized as one of the components outlined in the definition of religiosity for this study (Hackney & Sanders, 2003).

Homophobia. Homophobia was assessed through the use of Finlay and Walther's (2003) Homophobia Scale (H-Scale) and served as the criterion variable for this study.

Data Management and Analyses

Completed surveys were electronically stored and password protected through Survey Monkey™. Additionally, all participants' IP addresses remained confidential and were not made available to the researcher through an additional service provided by Survey Monkey™. The researcher was the only individual with the password and was solely responsible for retrieving the completed surveys. Although no data transmission via the internet is completely confidential, no identifying information was requested on the surveys for the purpose of increased confidentiality. Surveys that were printed for data entry purposes were kept in a locked filing cabinet in the researcher's office. All materials will be kept by the researcher for a period of at least three years. As this was a nationwide, web-based survey, identification of participants based upon the demographic questionnaire will be nearly impossible.

All data were entered into the statistical software package, SPSS, by the researcher for analysis. Due to discrepancies in the distribution of participants across categories of the sociodemographic variables, some categories were dropped, some were combined and random samples were taken from others. The variables of Gender (Table 2), Age (Table 3), Level of Education (Table 4), Religious Service Attendance (Table 5), Number of LGB Individuals Known (Table 6), and Religious Affiliation (Table 7) reflect these statistical data adjustments.

Analyses of variance (ANOVAs) were run using each adjusted sociodemographic variable to determine if significant differences existed in participants' homophobia based upon their answer for each sociodemographic variable. Alpha levels for each one-way ANOVA were set at the $p = .05$. A step-wise multiple regression analysis was then conducted with the religiosity variables to determine the best predictors of homophobic beliefs, $p = .05$. Additionally, Cronbach's alphas were calculated for each of the religiosity instruments using data from the current study and were reported with descriptors of each scale in the Measures section.

CHAPTER 4

RESULTS

Gender

An ANOVA was conducted to examine differences in homophobia between women and men as measured by the H-Scale. As there were more women in the sample ($n = 73$) than men ($n = 42$), a random sample of women was taken equal in size to that of the male group. Upon examining the assumptions underlying ANOVA, Levene's test of equality of variances was found to be significant indicating that variances between the groups were not equal. Specifically, the variances in H-Scale scores for men were larger than they were for women. According to Stevens (1999), ANOVA is robust to the violation of the homogeneity of variance assumption when sample sizes are approximately equal ($n_{largest}/n_{smallest} < 1.5$). For this ANOVA, the ratio of group sizes met this requirement; hence the ANOVA should be robust to violations of this assumption. The ANOVA was found to be statistically significant, $F(1, 82) = 9.60, p = .010$, partial eta squared = .10. H-Scale scores were found to be higher for male participants than for female participants (Table 2). The partial eta squared statistic of .10 indicates that gender accounted for only 10% of the overall variance in this analysis.

Age

An ANOVA was conducted with ages of the participants to examine differences in homophobia as measured by the H-Scale. The age categories of 18-24 ($n = 6$) and 65+ ($n = 6$)

had few participants. Hence, the 18-24 category was combined with the 25-40 group ($n = 58$) to form a new age category of 18-40 ($n = 64$). Participants in the 65+ group were combined with participants in the 41-65 group ($n = 45$) forming a new group titled 41+ ($n = 51$). When examining the ANOVA assumptions, Levene's test of equality of variances was found to be significant indicating that variances between the groups were not equal. Specifically, the variances in H-Scale scores for participants in the 41+ group were larger than they were for those in the 18-40 category. According to Stevens (1999), ANOVA is robust to the violation of the homogeneity of variance assumption when sample sizes are approximately equal ($n_{largest}/n_{smallest} < 1.5$). The sample sizes of the two groups were nearly equal. For this ANOVA, the ratio of group sizes met this requirement; hence the ANOVA should be robust to violations of this assumption. The ANOVA was found to be statistically significant, $F(1, 113) = 4.54, p = .035$, partial eta squared = .04. Participants in the 18-40 age category had lower H-Scale scores than those in the 41+ group (Table 3). However, based on the resulting partial eta squared of .04, only 4% of the overall variance was accounted for by age in this analysis.

Table 2

Descriptive Statistics: Homophobia for Adjusted Gender

	<i>N</i>	<i>M</i>	<i>SD</i>
Female	42	8.67	4.37
Male	42	12.40	6.49

Table 3

Descriptive Statistics: Homophobia for Adjusted Age

	<i>N</i>	<i>M</i>	<i>SD</i>
18-40	64	8.91	3.96
41+	51	11.06	6.76

Level of Education

An ANOVA was conducted with level of education to examine differences in homophobia as measured by the H-Scale. The category Less Than High School Graduate ($n = 2$) was dropped because there were so few participants in this category. Because of discrepancies in sample sizes, the categories of High School Graduate ($n = 6$), Associate's Degree ($n = 10$), and Some College ($n = 19$) were combined into a new group titled High School and Some College. The groups Bachelor's Degree ($n = 31$) and Some Graduate School ($n = 11$) were also combined into a new group titled Bachelor's Degree. The assumptions underlying ANOVA were met. The ANOVA was not statistically significant indicating that there were no differences in H-Scale scores among participants based on level of education, $F(2, 110) = .46, p = .634$ (Table 4).

Table 4

Descriptive Statistics: Homophobia for Adjusted Level of Education

	<i>N</i>	<i>M</i>	<i>SD</i>
High School and Some College	35	9.98	4.95
Bachelor's Degree	42	10.31	5.98
Graduate Degree	36	9.14	5.37

Religious Service Attendance

An ANOVA was conducted with frequency of attendance at religious services to examine differences in homophobia as measured by the H-Scale. The category of Every Month or Two was dropped because there were only 6 participants in this group. The categories of Once a Week ($n = 7$) and More Than Once a Week ($n = 7$) also had few participants, but were combined into a new group titled At Least Once a Week. Given the large sample size discrepancies among

the categories, random samples were taken from the Never and Few Times a Year categories such that they were nearly equal in size to the other two groups. Upon examining the assumptions for ANOVA, Levene's test of equality of variances was found to be significant indicating that variances among the groups were not equal. Specifically, the variances in H-Scale scores for participants in the 2 or 3 Times a Month and At Least Once a Week groups were much larger than the variances for those in the Never and Few Times a Year categories. According to Stevens (1999), ANOVA is robust to the violation of the homogeneity of variance assumption when sample sizes are approximately equal ($n_{largest}/n_{smallest} < 1.5$). For this ANOVA, the ratio of group sizes met this requirement; hence the ANOVA should be robust to violations of this assumption. The ANOVA was found to be statistically significant, $F(3, 51) = 4.19$, $p = .010$, partial eta squared = .20. A Tukey's HSD post hoc analysis was run. H-Scale scores for the Never category were found to be statistically significantly lower than the At Least Once a Week group (Table 5). No other statistically significant differences were found. The effect size of .20 is considered small to moderate given that 20% of the overall variance was accounted for by Religious Service Attendance in this analysis.

Table 5

Descriptive Statistics: Homophobia for Adjusted Frequency of Attendance

	<i>N</i>	<i>M</i>	<i>SD</i>
Never	14	8.00	2.99
Few Times a Year	14	10.07	3.56
2 or 3 Times a Month	13	12.62	7.44
At Least Once a Week	14	15.21	7.41

Number of LGB Individuals Known

An ANOVA was conducted with number of LGB individuals known to each participant to examine differences in homophobia as measured by the H-Scale. The category of 0 was dropped because there were only four participants in this category. Given the group size discrepancies, random samples were taken from the 3-5 category and from the 11+ category such that the sample sizes of all of the groups were nearly equal. Upon examining the assumptions underlying ANOVA, Levene's test of equality of variances was found to be significant indicating that variances among the groups were not equal. Specifically, the variances in H-Scale scores for participants in the 1-2 group were larger than they were for those in the other categories. According to Stevens (1999), ANOVA is robust to the violation of the homogeneity of variance assumption when sample sizes are equal or nearly equal ($n_{largest}/n_{smallest} < 1.5$). For this ANOVA, the ratio of group sizes met this requirement; hence the ANOVA should be robust to violations of this assumption. The ANOVA was found to be statistically significant, $F(3, 55) = 5.46$, $p = .002$, partial eta squared = .23. A Tukey's HSD post hoc analysis was run. H-Scale scores for the 1-2 category were found to be statistically significantly higher than the 6 - 11 and 11+ groups (Table 6). No other statistically significant differences were found. The effect size of .23 is considered small to moderate given that 23% of the overall variance is accounted for by the number of LGB individuals known.

Table 6

Descriptive Statistics: Homophobia for Adjusted Number of LGB Individuals Known

	<i>N</i>	<i>M</i>	<i>SD</i>
1 – 2	11	16.18	7.59
3 – 5	16	11.75	5.71
6 – 11	16	8.94	5.03
11+	16	8.50	3.08

Religious Affiliation

An ANOVA was conducted with religious affiliation to examine differences in homophobia as measured by the H-Scale. The categories of Moderate Protestant ($n = 2$) and Liberal Protestant ($n = 11$) were combined into a new group titled Moderate and Liberal Protestant. Given the large sample size discrepancy, a random sample was taken from the Non-Affiliated category ($n = 50$) such that it was nearly equal in size to the other groups. Upon examining the assumptions underlying ANOVA, Levene's test of equality of variances was found to be significant indicating that variances among the groups were not equal. Specifically, the variances in H-Scale scores for participants in the Conservative Protestant, Moderate and Liberal Protestant, and Catholic groups were larger than they were for those in the Non-affiliated and Non-Christian categories. According to Stevens (1999), ANOVA is robust to the violation of the homogeneity of variance assumption when sample sizes are equal or nearly equal ($n_{largest}/n_{smallest} < 1.5$). For this ANOVA, the ratio of group sizes met this requirement; hence the ANOVA should be robust to violations of this assumption. The ANOVA was found to be statistically significant, $F(4, 76) = 6.58, p < .001$, partial eta squared = .26. The effect size of .26 is considered small to moderate as 26% of the total variance in homophobia was accounted for by religious affiliation. A Tukey's HSD post hoc analysis was run. The Conservative Protestant category's H-Scale scores were found to be statistically significantly higher than Non-affiliated, Moderate and Liberal Protestant, and Non-Christian groups (Table 7). The Catholic group was found to have statistically significantly higher H-Scale scores than those in the Non-Christian group. No other statistically significant differences were found.

Table 7

Descriptive Statistics: Homophobia for Adjusted Religious Affiliation

	<i>N</i>	<i>M</i>	<i>SD</i>
Non-affiliated	17	8.06	3.34
Conservative Protestant	14	14.93	7.17
Moderate and Liberal Protestant	13	8.70	6.14
Catholic	18	12.56	5.85
Non-Christian	19	7.26	2.28

Religious Orientation

A stepwise multiple regression was conducted to determine which religious orientation variables were the best predictors of homophobia as measured by the H-Scale. All valid responses were included in the analysis. Descriptive statistics are in Table 8 and the correlations among the variables are in Table 9. The assumptions underlying multiple regression were met. The first model consisted of the predictor Religious Fundamentalism, $R = .746$, $R^2 = .557$, $R^2_{adj} = .553$, $F(1, 113) = 141.85$, $p < .001$. The second model included Religious Fundamentalism and Intrinsic Orientation, $R = .760$, $R^2 = .577$, $R^2_{adj} = .569$, $F(2, 112) = 76.34$, $p < .001$. The R -square change from Model 1 to Model 2 was .020 which indicates that Model 2 which included Religious Fundamentalism and Intrinsic Orientation accounts for 2% more of the variance in homophobia compared with Model 1 which included Religious Fundamentalism only. Therefore, of the five religiosity variables, only Religious Fundamentalism and Intrinsic Orientation were found to significantly predict homophobia. These two predictors accounted for 57.7% of the total variance in H-Scale scores.

Table 8

Religious Orientation Variables

	<i>N</i>	<i>M</i>	<i>SD</i>
Religious Fundamentalism	115	35.68	22.65
Quest	115	61.33	14.49
Immanence	115	79.29	18.56
Intrinsic	115	23.96	5.72
Extrinsic	115	14.49	3.71

Table 9

Correlations Among Religiosity Variables and Homophobia

	Homophobia	Religious Fundamentalism	Quest	Immanence	Intrinsic	Extrinsic
Religious Fundamentalism	.746**	—				
Quest	-.163	-.276**	—			
Immanence	-.498**	-.572**	.516**	—		
Intrinsic	.568**	.610**	.108	-.211*	—	
Extrinsic	.171	.164	.261**	.117	.215*	—

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

Table 10

Religiosity Regression Coefficients that Significantly Predict Homophobia

	<i>B</i>	<i>SE</i>	Beta	<i>T</i>	Sig.
Model 1					
RF	.180	.015	.746	11.910	.000
Constant	3.442	.638		5.399	.000
Model 2					
RF	.153	.019	.636	8.202	.000
Intrinsic	.171	.074	.180	2.315	.022
Constant	.277	1.503		.184	.854

Table 11

Excluded Religiosity Variables

	Beta	<i>T</i>	Sig.
<hr/>			
Model 1			
Quest	.046	.711	.479
Intrinsic	.180	2.315	.022
Extrinsic	.050	.784	.434
Immanence	-.106	-1.392	.167
Model 2			
Quest	-.008	-.123	.903
Extrinsic	.029	.464	.644
Immanence	-.150	-1.974	.051

CHAPTER 5

DISCUSSION

The purpose of this study was to examine differences in homophobia, as measured by the H-Scale (Finlay & Walther, 2003), among the sociodemographic variables of gender, age, education level, frequency of attendance at religious services, the number of LGB individuals known by each participant, and religious affiliation. Moreover, this study sought to determine which religiosity variables (religious fundamentalism, quest, immanence, intrinsic, and extrinsic religious orientations) were the best predictors of homophobia. In an effort to replicate and expand upon prior studies, this study brought together previously examined sociodemographic and religiosity variables in a web-based survey format. The purpose in taking this approach was to explore these variables collectively (as might be the case in a real world experience) rather than singularly, and to overcome sampling limitations, such as using samples of convenience, through use of the internet. To help determine if a more representative sample was obtained in this study, participants were asked to report their geographic location in the sociodemographic questionnaire (Appendix B).

Sociodemographic Variables

The variables of gender, age, education level, religious service attendance, number of LGB individuals known, and religious affiliation were examined in this study. The purpose of including these sociodemographic variables was to determine which, if any, of the differences

within these factors are were indicative of differences in homophobic beliefs. Additionally, achieving a greater understanding of how and with whom homophobic beliefs are most likely to occur can help inform clinical practice, determine where educational initiatives should be directed, and identify what areas should be explored further through research. The analysis results, implications, and potential limitations for each of these variables are discussed below.

Gender

In this study, statistical analysis indicated that men were more homophobic than the women. This finding was not surprising given that similar results have been found in other studies. Men have been found to be more homophobic than women, especially toward gay men (Herek, 2000; Herek, 2007; Kite & Whitley, 1996) while women were more likely to report knowing LGB individuals (Herek & Capitanio, 1996).

An interesting finding in this study involved the differences in variability of homophobia scores between women and men. Although men were found to be more homophobic than women, there was more variability in homophobia for men. This indicates that there are likely other factors, such as contact with LGB individuals or exposure to positive images of LGB individuals in the media, which may have mediated homophobic beliefs for men in this study.

The findings for gender differences in the current study lend support to what has been found in previous studies, although gender was found to account for 10% of the variability in homophobia. Such a finding indicates that there are other variables not included in this analysis that further explain the remaining variance in homophobia. Recently, researchers have begun exploring factors which have been found to be correlates of being a woman or a man as a way to further understand how men and women experience and express prejudicial beliefs.

Greene (2005) proposed a taxonomy for homophobia and suggested that the homophobic beliefs held by men are a function of their desire to remain in positions of power and maintain the status quo for gender roles in the United States. Similarly, Aosved and Long (2006) found that there was significant overlap between homophobia and sexism. Sexism was found to be most strongly related to rape myth acceptance where blame for sexual assault is attributed to the victim, a belief system endorsed more by men than women. By the nature of their relationships, gay men, lesbians, and bisexuals threaten traditional gender roles. It may be that differences in homophobia between men and women have more to do with beliefs about the importance of masculinity and power and less to do with the inherent characteristics of being a woman or a man.

Although research, including this study, has consistently found differences between women and men in terms of homophobic beliefs, these differences may be due to differences in other factors for women and men. Expression of traditional gender roles, endorsement of rape myth acceptance, aggression proneness, and restrictive sexuality may be areas to explore further in light of the differences in homophobia between women and men (Aosved & Long, 2006; Greene, 2005; Nagoshi et al., 2008).

From a clinical perspective, it may be helpful for therapists to hold these additional factors in mind should they find homophobia to be an area of focus. It may be helpful to assess clients' thoughts and feelings about gender roles, sexuality, and power differentials between women and men. Such awareness may help to inform where and how treatment should be directed. Additionally, it is imperative that therapists be aware of their own sexism and how their beliefs may impact their clients (Balkin, Schlosser, & Levitt, 2009).

In terms of educational initiatives utilized to decrease homophobia, it may be useful to address sexism in conjunction with homophobia. Balkin et al. (2009) found that multicultural awareness did not necessarily lead to a decrease in sexism among therapists. Because sexism and homophobia have been found to be closely related, it may be important to address these issues in a different way outside of traditional multicultural education at all educational levels. Educational initiatives which focus on challenging sexist belief systems are likely to not only help with decreasing homophobia, but also improve self-esteem of girls and women and potentially, decrease violence against sexual minorities, girls, and women.

Age

A wide range of ages was included in this study in an effort to overcome sampling limitations of previous studies (using samples of convenience such as college students) and obtain a sample more representative of the population. While it is likely that the sample in the current study is a more representative one, the majority of participants reported their ages as being between 25 and 40. This may be the result of people in this age range being more likely to be online than those who are older and more likely to be drawn to electronic sites designed for the discussion of religion and spirituality than individuals who are younger. Those who identified as being 41 and older were found to be more homophobic. However, there was also more variability in homophobia for those in the older age group compared with participants who reported being 40 years old or younger.

Finding that there were differences in homophobia between people who were over the age of 40 and those who were 40 years old and younger is not surprising given that changes in how LGB people are represented and perceived in popular media have only occurred in recent years. Schiappa et al. (2005, 2006) found that college students were less homophobic at the end

of a semester after viewing two popular television series in which central gay male characters were portrayed in a positive way. Older adults have likely had less exposure to pro-LGB images and sentiment in comparison to younger adults. Adults 40 years of age and younger may be more likely to view television programs like these and have received positive messages about LGB people more frequently and possibly at an earlier stage in their development.

Previous studies examining sociodemographic variables and homophobia have not included age range as a variable. This may have been due to the utilization of samples of convenience, primarily college students (Finlay & Walther, 2003; Wilkinson, 2004). Although some of the sensitivity and specificity may have been lost due to the need to combine the age groups in this study, the resulting data add new information to the understanding of homophobia. Educational initiatives directed toward older individuals and continued exposure through popular media sources may be useful in combating stereotypical and inaccurate beliefs about LGB people. However, the results from this study should be interpreted with caution given that age accounted for a limited portion of the overall variance (4%) in homophobia. Continued research about the relationship between age and homophobia may help in guiding future interventions with more accuracy. It may also be advantageous to ask about age in a continuous way by having participants list their specific ages rather than using categories.

Education Level

Based on a thorough review of the literature, level of education does not appear to have been included in previous studies designed to examine religiosity and homophobia. This may have been due to the use of college students for sampling where there would be little variability in level of education among participants (Finlay & Walther, 2003; Wilkinson, 2004). In this study, no differences were found among the groups in terms of homophobia

The finding of no differences in homophobia based on level of education was surprising. It had been expected that having more education and thus, more exposure to various points of view from sources other than family-of-origin and one's religious congregation, would play an important role in differences in homophobic beliefs.

This unexpected finding indicates that education alone may not have an important impact on changing prejudicial beliefs. There may be specific aspects of an educational experience which make the difference and not every student is necessarily exposed to the same degree or at all to these situations. Swank and Raiz (2010) conducted a study with social work students and found that students who had friends who expressed positive attitudes toward LGB people were less homophobic. Negy and Eisenman (2005) found that for both African-American and White college students, gender and commitment to religion were strongly related to homophobia. Pettijohn and Waltzer (2008) found that college students who completed a course in which the content was only about prejudice experienced a substantial decrease in their own prejudice compared with students who completed a general introductory psychology class.

The data from this study and that which has been found in previous research are especially important in terms of how learning experiences should be crafted so that the maximum benefit is achieved in terms of reduction of homophobia and other prejudices. It seems that more education, in and of itself, is not what leads to reduction in homophobia. Rather, it is likely that exposure to specific types of education, namely those which address prejudice in an explicit way, is what may lead to a reduction in homophobia. It may be beneficial to explore the manner in which educational interventions that consist of specific information about prejudice are delivered and the optimal amount of exposure needed to effect change in belief systems.

A lack of differences in homophobia based on education level may have resulted for other reasons. First, there may have been other factors present in this particular group of participants which mediated the impact of level of education on homophobia. Specifically, there may be something about individuals who participate in online discussions of religion and spirituality which is far more significant than level of education when it comes to homophobia. It may be that those who are online and searching for or seeking out religious and spiritual resources are also being exposed to varying points of view about LGB people.

Religious Service Attendance

Participants were asked to indicate how often they attend religious services which ranged from Never to More Than Once a Week. The majority of respondents in this study reported that they never attend religious services or they attend a few times a year. Very few respondents indicated attending formal religious observance once a week or more. However, after taking random samples so that group sizes were equal, those who reported attending religious services at least once a week were found to be more homophobic than those who never participate in formal religious observance.

This finding was not surprising as previous studies have yielded similar results (Allport & Ross, 1967; Finlay & Walther, 2003). Like some of the other factors which have been discussed, the differences in homophobia based on how often one attends religious services may be due to what information about LGB individuals a person is exposed to and how often that exposure occurs. It may be that participants in this study who reported attending religious services more frequently tended to be affiliated with religious organizations which consistently espouse homonegative messages. Or, it may be that participants in this study who endorsed more homophobic beliefs were also more likely to attend religious services more frequently,

participate in online discussions about religion and spirituality, and agree to participate in research about religiosity. If this is the case, such a grouping of participants would be similar to the finding in the Allport and Ross (1967) study where participants who positively endorsed any item related to religion were found to be the most prejudiced.

Again, for those categories of Religious Service Attendance in which participants were found to be the most homophobic, there was also more variability when compared with other groups in which participants were found to be less homophobic. This finding may be indicative of differences in the ways in which LGB people are regarded among different affiliations and individual congregations within the same denominations. For example, someone who attends religious services frequently at a congregation where LGB people are regarded with compassion may be less homophobic than an individual who is attending religious services where sexual minorities are viewed as evil and sinful. Additionally, there are likely other factors, beyond increased exposure to religious teachings, which influence attitudes toward sexual minorities. These influential factors may include popular media or knowing someone who identifies as lesbian, gay, or bisexual.

Despite finding a significant difference in homophobia based upon religious service attendance, the effect size found in the current study is considered to be small to moderate. While religious service attendance accounted for more of the overall variance than many of the other sociodemographic variables, there are likely differences between groups not included in this analysis which also account for differences in homophobia. Negy and Eisenman (2005) found that early childhood experiences and commitment to religion (measured by frequency of attendance at religious services) were related to homophobia for African-American college students. Schwartz and Lindley (2005) found that a secure attachment style for children in

families where religious fundamentalism was emphasized was strongly related to homophobic beliefs for those children when they became adults. Previous researchers have criticized Allport and Ross's (1967) study for not accurately or completely measuring religious orientation, what they purported to measure by assessing frequency of church attendance (Altemeyer, 1996; Hunsberger & Jackson, 2005). The effect size for religious service attendance found in the current study was small to moderate. The remaining variance may be accounted for by differences between groups not included in the analysis.

Future research should focus on some of the correlates of religious service attendance to gain more understanding of what leads to increased homophobia. Do individuals who attend religious services more frequently hold more fundamentalist values? Is it a matter of exposure where frequent attenders hear homonegative messages more frequently than those who attend services less often? Do they subscribe to traditional gender roles? Do they tend to be more sexist? Clinicians may also want to be aware of these factors when they are working with clients who attend religious services frequently as it may not be religious service attendance in and of itself which makes a difference in terms of prejudice towards LGB people.

Number of LGB Individuals Known

For this study, participants were asked to indicate how many LGB people they know. Because of discrepancies in the dispersion of participants across categories, sample size adjustments had to be made prior to conducting the analysis. Overwhelmingly, participants in the current study indicated knowing six or more LGB individuals. It was found that participants who reported knowing one or two LGB people were more homophobic than those who knew six or more sexual minorities. The effect size found for this variable was one of the largest and accounted for a moderate amount of the overall variance in homophobia.

This finding is not surprising given that previous studies have yielded similar results (Allport, 1954; Gentry, 1987; Herek, 1988; Herek & Capitanio, 1996; Herek & Glunt, 1993; Pettigrew & Tropp, 2006). Herek and Capitanio (1996) found that the more sexual minorities that heterosexuals know, the more positive their attitude tends to be toward the LGB community and knowing at least two LGB individuals has been associated with significantly more positive attitudes toward LGB people. Such findings lend support to Allport's (1954) contact hypothesis which states that under the right conditions contact between ingroup and outgroup members can lead to a decrease in prejudice. The nature of the relationships with LGB individuals was not thoroughly assessed in the current study and it is unknown if optimal conditions were present. Therefore, these data provide only limited support for the contact hypothesis. Based on findings from previous studies and the limited ones which resulted in this study, further exploration of the impact of contact between heterosexuals and LGB people on homophobic beliefs may be important.

Like other findings in this study, there was more variability in the group of participants who were found to be the most homophobic. For some participants who know one or two LGB individuals, this amount of contact may have been enough to challenge and decrease their homophobic beliefs. Also, this study did not assess the types of relationships that participants had with LGB individuals. For those who had closer relationships, such as family members or friends, with one or two people who are sexual minorities, their homophobic beliefs may have been influenced more than those whose contact with LGB people involved relationships with acquaintances or co-workers.

Recently, the general public has been exposed to more positive and affirming images of LGB individuals in popular media than ever before. Ellen DeGeneres came out as a lesbian on

nationally-televised sitcom in 1997. The television show *Will and Grace*, on which two of the main characters are gay, aired from 1998 to 2006. *Glee* is currently a popular television show on which one of the main characters, Kurt, is an openly gay high school student. This exposure may serve to mediate differences in homophobia related to differences in level of education.

Schiappa et al. (2005, 2006) have found support for this phenomenon which they call the Parasocial Contact Hypothesis. Based on this hypothesis, exposure to media sources is processed in the same way as actual face-to-face contact. These researchers found a decrease in homophobia after participants viewed two television series in which there were gay male characters. Additionally, LGB individuals may feel more comfortable being open about their sexual identities as a result of changes in the media. This openness may result in heterosexual people being aware of knowing more LGB individuals which has been shown to result in a decrease in homophobia (Allport, 1954; Gentry, 1987; Herek, 1988; Herek & Capitanio, 1996; Herek & Glunt, 1993; Pettigrew & Tropp, 2006).

In addition to the number of LGB people known, there are likely additional factors at work in the current study. The current study did not ask participants to indicate their sexual orientation. It is unknown whether all of the participants were heterosexual, but if some participants identified as lesbian, gay, or bisexual, they are probably less likely to endorse homophobic beliefs. Moreover, the types of relationships with LGB people were not assessed. Having a close friend or family who is a sexual minority is likely to have more of an impact on one's homophobic beliefs than having an LGB acquaintance or a colleague.

Despite the limitations in this study and other possible explanations for these findings, further exploration of the contact hypothesis and implementation of interventions based on the premises of this hypothesis should be pursued. The contact hypothesis has been researched a

great deal since Allport (1954) first introduced it. Pettigrew (1998) has suggested that the development of friendships between ingroup and outgroup members is especially important as it gives individuals from both parties the opportunity to have multiple experiences together in a variety of contexts. However, Pettigrew also points out that people who are more biased may simply avoid contact with minority group members altogether so that positive change via increased contact is not possible. It may be helpful to explore what, if any, interventions lend themselves to the increased probability of contact and even friendships across groups and at what point in the average individual's development such interventions would have the greatest effect. School settings may be the most ideal context in which to implement and study contact interventions as Pettigrew points out that social norms in a particular context can be especially important for intergroup contact. School systems may be less tolerant of overt prejudicial behavior and Pettigrew also points out that change in behavior toward minority group members results in a change in attitude toward those individuals.

However, there are situations or contexts in which intergroup contact is not likely or possible. Dixon, Durrheim, and Tredoux (2005) point out that contact between ingroup and outgroup members may not occur in areas where separation between these groups is heavily emphasized. In these situations, actual contact between group members may lead to an increase in prejudice because of fear. As a response to circumstances where direct contact is not likely, Wright, Aron, McLaughlin-Volpe, and Ropp (1997) proposed the extended contact hypothesis where prejudice is decreased in ingroup members who know another ingroup member who has a relationship with someone from the outgroup. Turner, Hewstone, Voci, and Vonofakon (2008) found support for the extended contact hypothesis and noted that it works by decreasing anxiety through the acquisition of knowledge about a positive intergroup contact, a change in norms for

members of both groups about how ingroup and outgroup members are supposed to be treated, and ultimately, ingroup and outgroup members come to be included in the conceptualization of the self. Getz and Kirkley (2006) found support for the extended contact hypothesis at a Roman Catholic University where a program was started in which LGB students and faculty (outgroup) and heterosexual students and faculty (ingroup) worked together to bridge the gap between the LGB community and the rest of the university community by conducting presentations about sexual minorities. It was found that a reduction in homophobia occurred across the campus and was not limited to the participants in the program. Replication and study of such programs in other settings may be important to further understand what interventions are the most promising in effecting a decrease in homophobia.

Schiappa et al. (2005, 2006) found support for the parasocial contact hypothesis where prejudice is decreased by presenting positive images of outgroup members (gay men) through the media. Under these circumstances direct contact and extended contact are not necessary. Popular media can be consistently streamed into homes through television and as such, is easily accessed by the masses. Rather than exploring only how many LGB people are known to an individual, it may also be helpful to find about exposure to positive images of sexual minorities on television, in movies, or in magazines and newspapers. Changes in homophobia may occur via interventions which utilize popular media modalities.

Crisp and Turner (2009) also noted that direct and extended contact may not be possible in some situations. They suggested using imagery as a means of reducing prejudice. The authors noted that imagery has been found to have the same neurological properties as actual experiences (Kosslyn, Ganis, & Thompson, 2001). Crisp and Turner found that imagining positive intergroup contact leads to the same outcome as if the experience actually occurred.

Although the effect is likely to be less strong or to last as long as the actual experience of intergroup contact, this is an intervention that may be especially useful in a one-on-one clinical setting.

Continuing to explore the contact hypothesis and perhaps comparing the utility of the various forms of contact (direct, extended, parasocial, and imagined) to reduce homophobia may be especially important. Given that the effect size was small to moderate for this factor, there does seem to be something else at work that contributes to differences in homophobia. Exposure to LGB individuals through popular media would seem to affect the greatest number of people. Interventions utilizing this modality and measurement of their effectiveness should be explored in the future.

Religious Affiliation

Participants were presented with a list of 29 denominations (Appendix B) and were asked to select the one that best represented their own. Each denomination was categorized into one of six affiliation groups (Appendix C). Because of discrepancies in the number of participants in each of the categories, sample size adjustments had to be made before the analysis was conducted. Overwhelmingly, the majority of participants in this study reported not being affiliated with any religious denomination. Those who reported affiliations with denominations in the Conservative Protestant group were found to be more homophobic than those who reported being Non-Affiliated, Moderate or Liberal Protestant, and Non-Christian. Participants in the Catholic group were found to be more homophobic than those in the Non-Christian group. The effect size for this variable was the highest out of all of the sociodemographic variables and was in the small to moderate range.

Similar results have been found in previous studies (Finlay & Walther, 2003; Newman, 2002). Based on the results found in these studies, individuals who are affiliated with more conservative or orthodox denominations tend to be more homophobic when compared with those who either report no religious affiliation or are members of religious organizations classified as more moderate or liberal. It may be that those who are affiliated with more conservative and orthodox affiliations are more identified with their religious affiliation and are more likely to conform to negative messages about LGB individuals (Hunsberger & Jackson, 2005). Identifying with and conforming to the teachings of one's religious affiliation was not included in this analysis. However, factors underlying the degree to which one identifies with and conforms to religious dogma may have been captured through the use of the Religious Fundamentalism scale (Altemeyer & Hunsberger, 2004). Schwartz and Lindley (2005) explored religious fundamentalism, attachment, and homophobia. They found that those with secure attachment were more religiously fundamentalist and hypothesized that their beliefs had been transferred through their relationships with their parents. However, they also found that attachment was not related to homophobia and did not influence the relationship between religious fundamentalism and homophobia. Continued exploration of these factors may be useful in future studies where attachment styles of those low in religious fundamentalism are also assessed.

Again, for participants in categories which were found to be the most homophobic, Conservative Protestant and Catholic, there was more variability within these groups in terms of homophobia. This variability may have been due to differences among individual congregations with regard to how LGB people are viewed. Also, there may have been other factors, such as

contact with sexual minorities or influence of the media, which affected the homophobic beliefs of some individuals within these categories.

While it is important to assess characteristics of those affiliated with more conservative religious organizations and those who tend to be more fundamentalist in terms of homophobic beliefs, it may also be useful to explore further the characteristics of those who are not affiliated with Christian denominations or not affiliated with any religious organization. These individuals have consistently been found to be less homophobic and knowing whether their beliefs about LGB people led to them not being affiliated with conservative Christian denominations or whether their lack of affiliation led to more positive beliefs about sexual minorities could be a necessity in more completely understanding the conditions under which homophobia is likely to occur and when it is not.

Geographic Location

Participants in this study were asked to provide the city and state in which they reside. The purpose of this was to determine if a sample representative of the United States was obtained. A total of 113 included their geographic location on the demographic questionnaire. The majority of respondents in this study indicated their places of residence as being in the East North Central (20.9%), New England (14.8%), and Pacific (13.9%) regions of the United States. For the other regions, 11.3% were in the Mid-Atlantic region, 3.5% were located in West North Central, 12.2% indicated residing in the South Atlantic region, 3.5% and 2.6% were located in East South Central and West South Central, respectively, and 6.1% reported living in the Pacific geographic region of the United States. Because this study was web-based and its availability was not constrained by geographic borders, 9.6% of respondents reported living outside of the United States. Population densities for the nine divisions of the United States were obtained

through U.S. Census data (2010). A Chi-Square Goodness of Fit analysis was used to determine whether the sample obtained for this study was representative of the population based upon geographic location. The analysis was found to be significant, $\chi^2(8, n = 115) = 40.63, p = .000$, indicating that the sample distribution was significantly different than that of the population. Although it is likely that this study obtained a sample that was more representative of the population than those which utilized samples of convenience, future researchers may want to focus on obtaining a sample which more closely resembles the population in the United States.

Beyond obtaining samples which more closely represent the population, further exploration of differences in homophobia based upon geographic location, such as making distinctions between rural and urban locations, is needed to help guide educational initiatives and community activism designed to decrease prejudice toward sexual minorities. Eldridge, Mack, and Swank (2006) found that college students from rural backgrounds were more likely to be homophobic. Barton (2010) points out that living in the Bible Belt may be especially harmful to LGB individuals because fundamentalism and Christianity are woven into multiple aspects of everyday life. Schwartz and Lindley (2005) conducted a study in an area where religious fundamentalism is particularly high. Because of religiosity characteristics specific to this geographic location, they suggest that the impact of attachment on homophobic beliefs may have been obscured. Achieving greater understanding about geographic areas where homophobia tends to be more pervasive and discovering the conditions in those locations which perpetuate prejudice toward sexual minorities is vital for the proper implementation of pro-LGB educational programs.

Religious Orientation and Homophobia

Participants in the current study were presented with four scales: the Religious Fundamentalism Scale (Altemeyer & Hunsberger, 2004); the Quest Scale (Batson & Schoenrade, 1991); the Immanence Scale (Burris & Tarpley, 1998); and the Intrinsic/Extrinsic Religious Orientation Scale-Revised (Gorsuch & McPherson, 1989) designed to assess five religiosity characteristics. Each of the scales has been used either singularly or together in previous studies. All of the scales were included for the purpose of gaining a more comprehensive understanding of religious orientation.

This study was designed to determine which of the religious orientation measures were the best predictors of homophobia. Religious fundamentalism and an intrinsic religious orientation were found to be the best predictors of homophobia and accounted for over half of the variance in homophobia among participants. These factors appear to be quite important in gaining further understanding of homophobia. Similar results have been found in previous studies (Altemeyer, 2003; Altemeyer & Hunsberger, 1992; Herek, 1987; Kirkpatrick, 1993; Wilkinson, 2004). Although an intrinsic religious orientation has previously been found to be associated with less racial prejudice (Allport & Ross, 1967), this same relationship has not been found in assessing prejudice toward sexual minorities (Herek, 1987; Kirkpatrick, 1993; Wilkinson, 2004). This may be due in part to the very explicit homonegative messages which are part and parcel of some religious congregations. Therefore, this finding is not surprising given that individuals who belong to conservative or orthodox affiliations are more likely to hold an intrinsic religious orientation by identifying closely with religious teachings (Newman, 2002) and are also more likely to be homophobic (Newman, 2002; Wilkinson, 2004).

Given that the Quest Scale (Batson & Schoenrade, 1991) is designed to measure an open, evolving, and questioning approach to religion and the Immanence Scale (Burriss & Tarpley, 1998) assesses one's tendencies toward a religious orientation characterized by an emphasis on peace, kindness toward all beings, and a focus on the present moment, characteristics which are quite the opposite of religious fundamentalism and an intrinsic religious orientation, it was not surprising to find that these variables were not significant predictors of homophobia. Similar results have also been found in previous research studies (Altemeyer & Hunsberger, 1992; Wilkinson, 2004).

Extrinsic religious orientation was also not found to be a predictor for homophobic beliefs in this study. Individuals who hold an extrinsic religious orientation are more likely to value social support and interactions with others while in a religious setting, as opposed to an intrinsic religious orientation where religious teachings and instructions about how to live one's life are the primary focus. Individuals who have an extrinsic religious orientation are probably not as closely identified with their religious affiliation and negative messages about sexual minorities that they hear while in a religious setting are less likely to have a significant impact because religious teachings are not their primary focus. Therefore, it stands to reason that an extrinsic religious orientation would not serve as a significant predictor of homophobic beliefs and attitudes.

Limitations

Although this study found statistically significant differences in homophobia among various sociodemographic variables and found two religiosity variables which significantly predict homophobia, there were some limitations in this study. Some of these limitations may

affect how well the results of this study can be generalized to the population at large and are discussed below.

First, the sample obtained in this study was not large enough that multivariate analyses could be utilized. The probability of finding significant differences between groups for the sociodemographic variables when in reality there were no significant differences was increased because a series of one-way ANOVAs were run. Additionally, interaction effects between the sociodemographic variables, which may have explained more the variance in homophobia, were not computed due to the inadequate sample size.

When requests were made to advertise the study, the researcher received affirmative responses primarily from webmasters of electronic forums catering to those who were either not affiliated with any religious organization or who are not members of conservative or orthodox denominations. This discrepancy in responses limits the generalizability of the findings in this study and limited the ability to adequately explain how homophobia is perpetuated and maintained for those who belong to more conservative or orthodox religious organizations.

The majority of the participants in this study identified their gender as female. In previous studies, women have generally been found to be less homophobic than men (Herek, 2007; Herek & Capitanio, 1996; Wilkinson, 2004). Prior to making sample size adjustments, there were nearly twice as many female participants than male participants in this study. This discrepancy also indicates that gender may play a part in an individual's willingness to participate in web-based research in general, or perhaps, in this particular type of research where issues such as religion and homophobic beliefs are being explored. The results in this study are limited to individuals who access online discussions about religion and spirituality and are willing to participate in internet-based studies about religion and homophobia.

Next, the majority of participants in this study had higher levels of education, was less likely to be affiliated with a religious organization or to attend religious services on a regular basis, and was more likely to report knowing several LGB people. Many of these factors have been found to be related to more positive attitudes toward sexual minorities (Allport & Ross, 1967; Finlay & Walther, 2003; Herek & Capitanio, 1996) and indicate that the sample obtained in this study may not be representative of the population as a whole.

Additionally, almost all of the participants in this study fell between the ages of 24 and 65 which further limits the generalizability of the results to segments of the population represented by this sample. Obtaining this particular dispersion of age ranges may have been due to several factors. First, it may be indicative of the age range typically found to be utilizing online forums which are designed specifically to address issues related to religion and spirituality. Older adults, over the age of 65, may be less likely to use the internet and younger adults, between the ages of 18 and 24, may be less likely to pursue online resources related to religiosity.

Two demographic aspects which this study did not assess were race/ethnicity and sexual identity. Previous studies have found significant relationships between race/ethnicity and homophobic beliefs (e.g., Negy & Eisenman, 2005; Ward, 2005). Although internalized homophobia does occur for some individuals in the LGB community, it would seem far less likely that sexual minorities would outwardly express homophobic attitudes. Because these factors were not assessed, the results of this study are limited in their generalizability to the population as a whole. It may be beneficial for future studies to ask about participants' cultural background and their sexual identity to better understand how, where, and with whom homophobia is perpetuated throughout society.

Finally, although the instruments used in this study have been found to have moderate to good internal consistency and validity, the applicability of some of the questions for some of the participants in this study was lacking. Because this study aimed to include participants from denominations other than Judeo-Christian affiliations, as well as individuals who have no religious affiliation, there were a number of participants for whom some of the questions simply did not apply. This was especially true for participants who identified as Atheist or Agnostic, as these individuals did not engage in any religious practices. For example, on the I/E-R scale (Gorsuch & McPherson, 1989), several items ask about one's experience while attending religious services. For an individual who is non-affiliated and never attends religious services, this question does not apply. An item on the Religious Fundamentalism scale (Altemeyer & Hunsberger, 2004) asks respondents about whether or not they believe in Satan as an actual being. Some non-Judeo-Christian denominations have no concept of Satan as a being or a parable utilized to admonish followers about giving in to temptation and immoral behavior. Items such as these may not accurately measure religious orientation for some individuals because the content of the questions is not applicable to their experiences.

Implications for Future Research

This study aimed to expand upon previous research by using a web-based survey format and through the inclusion of multiple variables, both sociodemographic and religious, in an effort to better understand what factors perpetuate and maintain homophobic attitudes and beliefs. Based on the findings in this study and those which have been found in previous studies, there are some areas which are implicated for future research.

Obtaining a larger sample in future studies would allow for multivariate analyses and would decrease the probability of making a Type I error. Additionally, examining the interaction

effects between the variables would likely account for more of the variance in homophobia and such an analysis would provide a statistical snapshot which more closely resembles integration of variables, such as religious affiliation and frequency of attendance at religious services, that occur in real-world scenarios.

It may be advantageous to use Finlay and Walther's (2003) H-Scale in future studies so that mean H-Scale scores can be compared across studies to assess if homophobia changes within groups over time and to make comparisons between groups. A single-sample *t*-test was run to compare the mean H-Scale score obtained in this study and that which was obtained in Finlay and Walther's study, $t(114) = -6.36, p = .000$. This indicates that the mean H-Scale score obtained in this study was significantly lower than that found in Finlay and Walther's study. The difference in H-Scale scores may be due to differences between the samples used in each of the studies or it may be the result of changes that have occurred within society since Finlay and Walther's study was published in 2003. Future research that utilizes the H-Scale may help illuminate some of these possibilities.

One interesting finding in this study involved increased variability in H-Scale scores for those in categories which were found to be the most homophobic. Specifically, men, those who are 41 years of age or older, and individuals who attend religious services at least two or three times a month had higher H-Scale scores and more variability in the range of these scores when compared with the other categories. This finding provides evidence that further exploration of these characteristics is needed to increase understanding of how homophobia persists and what interventions may be most effective to decrease prejudice against sexual minorities.

Additionally, the characteristics found in this study for those who were most homophobic and those which are obtained in future research may be able to add valuable information to current

theories in social psychology such as the contact hypothesis, as well as feminist theory in which power differences between majority and minority group members are often emphasized.

Further exploration and illumination of the contact hypothesis in its various forms (direct, extended, parasocial, and imagined) may be especially important given that LGB people are being represented more positively than ever before. Media such as television and film are available to the masses and if used to promote positive messages about LGB people, could have a significant impact on homophobia. Examining the impact of pro-LGB social media on homophobic beliefs may be important in the development and implementation of future interventions.

The type of relationship that one has with an LGB person may also contribute to variability in homophobic attitudes. For example, knowing a close friend or relative who is a sexual minority has been shown to have more of an impact on attitudes toward the LGB community as a whole when compared with those who report knowing an acquaintance or distant relative who is gay (Herek & Capitano, 1996). The current study did not assess participants' degree of relationship with LGB individuals, but this is an important factor to consider in future studies so that a greater understanding of how to effectively decrease homophobia may be found. Additionally, the contact hypothesis may gain further support through this type of research and greater understanding may be achieved about the intricacies of utilizing various forms of contact as an intervention against various types of prejudice.

Examining differences between women and men in terms of homophobia should continue and be expanded upon in future studies. Although men have consistently been found to be more homophobic than women, recent studies have indicated that there may be correlates of gender, such as sexism and a desire to have power by maintaining traditional gender roles, which are

related to homophobia as opposed to regarding whether one is woman or man to be indicative of the presence or absence of homophobia (Aosved & Long, 2006; Green, 2005). Exploring these correlates of gender may provide greater insight into why homophobic beliefs persist and ultimately, can provide direction and guidance in terms of intervention and treatment. Further, this type of research may provide additional evidence and support for feminist theories which address the prevalence of power differences, traditionally between women and men, and their impact on mental health and well-being for those who are not in positions of power.

The possibility that variability in homophobia is related to the variability in how LGB people are regarded among religious denominations and individual congregations may also account for the within group differences found in this study. Religious affiliations were assigned to one of six categories in this study; an approach which might have obscured characteristics specific to a particular denomination. For example, Southern Baptist and Latter Day Saints (LDS) were both assigned to the Conservative Protestant group, but there are likely some important differences between these denominations. Additionally, differences among individual congregations were not assessed which may have also contributed to the variability in H-Scale scores. Exploration of variability in messages about sexual minorities within individual congregations or subsets of denominations may aid in achieving greater understanding about homophobia and ultimately, provide guidance in working to decrease the psychological harm incurred by LGB people.

Sampling methods in the exploration of religion and attitudes toward sexual minorities, such as those that make use of the internet, should continue to be explored. The internet is a useful tool as it can reach many people in a short amount of time. This study utilized a web-based survey format in an effort to obtain a sample more representative of the general

population, but was not completely successful in doing so. Many webmasters of the online message boards and e-lists contacted by the researcher for this study either did not respond to the request to advertise the study or denied the researcher permission to do so. In future studies, researchers who utilize the internet may want to focus on establishing good lines of communication and building connections with webmasters and moderators of more orthodox and religiously conservative web-based forums. Conversely, seeking participants from general discussion boards which are not focused on topics of religion or spirituality may lend itself well to obtaining participants who are affiliated with a wider range of religious traditions that would include more of the conservative or orthodox denominations. Given that the topic of homosexuality can stir up strong feelings for some who closely identify with religious teachings that denounce relationships between people of the same sex, it is possible that less resistance to participation in studies examining religiosity and homophobia may be encountered if participants are sought from non-religious online social communities or sources.

In addition to exploring the relationship between religiosity and homophobia, it may be helpful to gain further understanding about the characteristics of people who utilize online discussion forums if web-based studies continue to be used. Understanding the characteristics of individuals who are drawn to internet resources and who actively seek out online topics related to religion and spirituality may prove to be useful in determining if there are mediating factors at work when religion and homophobia are assessed through web-based surveys. Additionally, results from studies which utilize the internet may be more meaningful as information is gained about the individuals for whom they are most relevant.

Finally, a qualitative approach may yield results which are richer and more informative about the mechanisms underlying the formation and perpetuation of homophobic beliefs.

Although quantitative measures can lay cursory groundwork for greater understanding of the relationship between religion and homophobia, they are also inherently limited in producing results that can both adequately capture the complexity and intricacies of this relationship and, which are representative of real-world situations. There may be a disconnect between the categories assigned by researchers through the use of survey measures and the actual manner in which people conceptualize sexual minorities and their expression of homophobia.

Implications for Practice

In addition to providing direction for future research, the results from this study may aid in better informing clinical practice with LGB clients who are experiencing homophobia. Further, these results may assist clinicians working with clients who tend to be more homophobic. Clinicians who utilize information generated from this study and other similar studies may experience increased self-awareness. Improved self-awareness on the part of clinicians may subsequently lead to improved mental health and overall well-being for LGB clients or sexual minorities who have contact with clients of self-aware therapists.

Therapists may be able to utilize the findings from this study to examine the presence or absence of certain characteristics within themselves as a way of being aware of their own propensity toward homophobia. Self-awareness is particularly important for clinicians who are working with LGB clients as their own biases and prejudicial attitudes may negatively impact these clients. Therapists may then be able to determine whether or not they can ethically continue working with LGB clients or if they need to become better educated about the LGB community.

Asking about and making a thorough assessment of their clients' various sociodemographic and religiosity factors may be helpful to therapists who are working with LGB

individuals or with individuals who are experiencing distress related to their own beliefs about sexual minorities. Being aware of what factors account for differences in homophobia may assist clinicians with identifying if their LGB clients are being exposed to homonegative beliefs based upon the characteristics of the people with whom they are close. For example, knowing that a client, who identifies as a sexual minority, has an elderly father, who belongs to a conservative religious organization and attends religious services more than once a week, can be very informative about the potential risk to that client's well-being. Alternatively, a therapist working with a religiously fundamentalist, elderly, man whose son has just disclosed that he is gay, can achieve a greater understanding of the distress that the client may be feeling based upon these factors.

Mental health clinicians are in a unique position to not only help LGB people on an individual basis through therapy, but also to act as advocates for sexual minorities on a larger scale. This may be achieved by utilizing research when providing trainings or workshops about homophobia and the LGB community to other clinicians. Additionally, therapists can remain aware of the potential risks to the well-being of sexual minorities and can convey a pro-LGB sentiment in their interactions with others. Such actions may aid in slowing the perpetuation of homophobic beliefs and provide much needed support to the LGB community.

Summary

This study sought to examine differences in homophobia based upon sociodemographic variables and to determine which religiosity variables were the best predictors of homophobic beliefs. Significant differences in homophobia were found among the groups for the variables of gender, age, religious service attendance, number of LGB individuals known, and religious affiliation. These results added further support to what has been found in previous studies.

Religious fundamentalism and an intrinsic religious orientation were found to be the best predictors of homophobia.

A web-based survey format was utilized in this study in an effort to overcome sampling limitations associated with using samples of convenience. Participants were asked to provide their geographic locations to determine if a sample representative of the U.S. population was obtained. While this did not occur, the sample was likely more representative of the population than what has been achieved in previous studies.

This study added further support for what has been found in previous research. It expanded upon methodological procedures by utilizing a web-based survey format. Limitations of this study and the implications for future research and clinical practice were discussed. Recommendations for continued study in this area were made, particularly with regard to exploring the various forms of the contact hypothesis and the impact of positive representations of LGB individuals in popular media, as well as continued exploration of the correlates of gender and homophobia.

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APPENDIX A: INFORMED CONSENT

Dear Participant,

You are being asked to participate in this study which will be examining religious and sociodemographic factors, as well as beliefs and attitudes toward lesbian, gay, and bisexual individuals. All data gathered in this study will be kept confidential and no individual will be identified by name. The results of this research will be used in the researcher's doctoral dissertation and may be published in a professional journal or presented in professional settings. No participants will be identified in either publications or presentations.

You are being asked to respond honestly to all questions in the survey. You may elect to refuse to answer any of the questions without penalty or repercussions. Your participation in this study is voluntary and you may discontinue your participation at any time without penalty.

As this is a web-based study, measures have been taken to ensure that all information will be kept confidential. You will not be asked to include your name or address on any of the items. It is highly unlikely that your identity will ever be known, but be advised that transmissions via the internet are never completely secure.

Participation in this study requires completion of a demographic questionnaire and a survey. It should take no more than 15 minutes to complete. Completion and submission of these items via the internet indicates that you have read the informed consent and are willing to participate in the study. Questions related to the research project should be directed to the lead researcher, Erin E. Coale, by email at ecoale@mymail.indstate.edu, or the faculty sponsor Dr. Michele Boyer, Department of Communication Disorders, Counseling, School, & Educational Psychology, College of Education, at 812-237-2832, or by email at mboyer@isugw.indstate.edu.

Questions regarding the research participant's rights should be directed to the Indiana State University Institutional Review Board Chairperson at 812-237-8217 or irb@indstate.edu. The IRB # is 9025 approved 9-22-08. Your participation in this study is greatly appreciated.

Sincerely,

Erin E. Coale, M.S.

APPENDIX B: DEMOGRAPHIC QUESTIONNAIRE

You will be asked to provide some information about yourself in the following items. Please answer as honestly as possible. You will not be asked to provide your name or contact information on this form.

1. Sex

Male Female

2. Age

Please indicate your current age

18-24
 25-40
 41-65
 65 +

3. Geographic Location

I currently reside in _____, _____.
City State

4. Education Level – Highest Grade Completed

Less than High School Graduate
 High School Graduate
 Some College
 Associate's Degree (2-year)
 Bachelor's Degree (4-year)
 Some Graduate School
 Completion of Graduate Degree

5. Religious Service Attendance

I attend religious services (please choose one):

Never
 A few times a year
 Every month or two

- Two or Three times a month
- About once a week
- More than once a week

6. Contact with individuals who identify as lesbian, gay, or bisexual

How many people do you know who identify as lesbian, gay, or bisexual?

- 0
- 1-2
- 3-5
- 6-11
- 11 or more

7. Religious Affiliation

_____ (Select the one which best describes your current affiliation)

- 7th Day Adventist
- Agnostic
- Assembly of God
- Atheist
- Baptist
- Bible Church
- Buddhist
- Catholic
- Christian
- Church of Christ
- Disciples of Christ
- Episcopalian
- Evangelical Christian
- Greek Orthodox
- Hindu
- Jewish
- LDS (Mormon)
- Lutheran
- Methodist
- Muslim
- Nazarene
- Non-Affiliated
- Pagan
- Pentecostal
- Presbyterian
- Primitive Baptist
- Southern Baptist
- Unitarian Universalist
- Wiccan

APPENDIX C: CATEGORIES OF RELIGIOUS AFFILIATIONS

(adapted from Finlay & Walther, 2003)

Non-Affiliated

Atheist
 Agnostic
 Non-Affiliated

Conservative Protestant

Baptist	Evangelical Christian
Christian	Assembly of God
Church of Christ	Pentecostal
Southern Baptist	7 th Day Adventist
LDS (Mormon)	Bible Church
Nazarene	Primitive Baptist

Moderate Protestant

Methodist
 Lutheran

Liberal Protestant

Presbyterian
 Episcopalian
 Disciples of Christ
 Unitarian Universalist

Catholic

Catholic
 Greek Orthodox

Non-Christian

Jewish	Wiccan
Buddhist	Pagan
Hindu	Muslim