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Effects of Traditional Gender Role Norms and Religious Fundamentalism on Self-Identified Heterosexual Men's Attitudes, Anger, and Aggression Toward Gay Men and Lesbians

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Abstract

Sexual prejudice and antigay anger were examined as mediators of the associations between traditional male gender norms, religious fundamentalism, and aggression toward gay men and lesbians. Participants were 201 self-identified heterosexual men recruited from the community to complete computer-administered measures of adherence to traditional male gender norms (i.e., status, toughness, antifemininity), religious fundamentalism, sexual prejudice, and frequency of aggression toward gay men and lesbians. Additionally, participants completed a structured interview designed to assess anger in response to a vignette depicting a male-male intimate relationship (i.e., partners saying “I love you,” holding hands, kissing). Results showed that sexual prejudice and antigay anger partially mediated the effect of antifemininity on aggression and fully mediated the effect of religious fundamentalism on aggression. Sexual prejudice alone fully mediated the effect of status on aggression and neither sexual prejudice nor antigay anger mediated the effect of toughness on aggression. Further, results suggested that religious fundamentalism is a multifaceted construct of which some aspects increase risk for aggression toward gay men and lesbians, whereas other aspects decrease this risk. These data provide multivariate evidence from a nonprobability, community-based sample that extreme internalization of dominant cultural values can set the stage for violence toward marginalized groups. Implications for intervention programming and future research are reviewed.

Keywords

Culture; Religious Fundamentalism; Masculinity; Sexual Prejudice; Anger; Violence; Aggression; Lesbians; Gay Men

Violence based on sexual orientation is an ongoing public health concern in the United States and abroad (NCAVP, 2009; Takács, 2006). Herek (2009) found in a recent national probability sample that approximately half of all gay men and lesbians experienced verbal abuse, 20% experienced a crime against their person or property, and more than one in ten were the victim of a violent crime. Notably, while nearly 60% of these aggressive acts are perpetrated toward gay men (NCAVP, 2007; 2008; 2009), a significant percentage of attacks are perpetrated toward lesbians, bisexuals, and transgender persons. In addition to the

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obvious physical consequences of attacks that involve physical violence, the psychological consequences of all forms of aggression based on sexual orientation (e.g., physical aggression, verbal aggression, property damage) include greater risk for depression, posttraumatic stress, anxiety, and anger compared to victims of nonbiased assaults (Herek, Gillis, & Cogan, 1999). Given the scope and depth of the consequences suffered by gay and lesbian victims, it is critical that research be conducted to enhance our understanding of the social context that sets the stage for these aggressive acts.

It has been asserted that aggression perpetrated toward gay men and lesbians reflects “extreme manifestations of dominant cultural values” (Franklin, 2000, p. 340). Indeed, prominent theorists have argued that cultural ideologies and institutions (e.g., norms about gender roles, religion, laws, language) provide the basis for individuals' negative beliefs and enactment of these beliefs toward gay men and lesbians (Herek, 1987; 2000; 2007; Kimmel, 1997). Consistent with this view, pertinent theory defines *sexual stigma* as “the negative regard, inferior status, and relative powerlessness that society collectively accords to any non-heterosexual behavior, identity, relationship, or community” (Herek, 2007, p. 906–907). Thus, sexual stigma represents socially shared knowledge that homosexuality is devalued in society. At the societal level, sexual stigma is termed *heterosexism* and provides the sociocultural context that sanctions individual-level antipathy toward gay men and lesbians (Franklin, 1998; Herek, 1990; 2004; 2007; Nielsen, 1990; Pharr, 1988). At the individual level, *sexual prejudice* refers to the internalization of sexual stigma (Herek, 2007). Sexual prejudice reflects heterosexuals' negative attitudes toward homosexual behaviors, gay and lesbian identities, and communities of gay and lesbian individuals (Herek, 2000, 2007). In addition to sexual stigma, Herek (2004) hypothesized that the internalization of other dominant cultural values and norms (e.g., traditional gender norms, religious values) is a powerful predictor of aggression toward gay men and lesbians. However, despite the pervasiveness of these cultural values and norms in most societies, there is great variability in the degree to which they are internalized at the individual level. In turn, theorists suggest that there is also great variability in the likelihood that any given individual will behave aggressively toward gay men and lesbians (Herek, 2002; Lewis, 2003; Whitley & Kite, 1995).

To better understand this variability, Parrott (2008) reviewed a number of individual-level risk factors for heterosexual men's aggression toward gay men and lesbians. Most notably, numerous survey-based studies have demonstrated a positive association between sexual prejudice and both anger and aggression toward gay men and lesbians (Franklin, 2000; Parrott & Peterson, 2008; Patel, Long, McCammon, & Wuensch, 1995; Roderick, McCammon, Long, & Allred, 1998). Consistent with this research, experimental studies have demonstrated that male sexual prejudice is positively associated with increased anger in response to male homosexuality and aggression toward gay, relative to heterosexual, men (Bernat, Calhoun, Adams, & Zeichner, 2001; Parrott, 2009; Parrott & Zeichner, 2005; Parrott, Zeichner, & Hoover, 2006). Further, Parrott and Peterson (2008) determined that anger in response to intimate behavior between gay men mediates the association between sexual prejudice and aggression toward both gay men and lesbians.

Whereas the association between sexual prejudice and aggression toward gay men and lesbians has been well established, further inquiry is needed to elucidate other individual-level risk factors that are internalized from dominant cultural values. Moreover, research is needed to determine the extent to which these factors are associated with sexual prejudice and, in turn, facilitate anger and aggression toward gay men and lesbians. The aim of the present study was to address this need. Specifically, we focused on adherence to traditional male role norms and religious fundamentalism given that past research has consistently

implicated internalization of these ideologies as correlates of sexual prejudice, which is known to predict aggression toward gay men and lesbians.

Traditional Male Role Norms, Sexual Prejudice, and Aggression Toward Gay Men and Lesbians

Masculinity is a multifaceted construct that can be understood in multiple ways (Connell, 2005; Connell & Messerschmidt, 2005). For example, Brannon's (1976) conceptualization of manhood explored American culture's "blueprint" of what a man should be, should desire, and should accomplish. More specifically, Brannon (1976, p. 12) theorized that there were four core themes, or standards, of the masculine gender role in the United States: "No Sissy Stuff" (i.e., avoiding femininity and concealing emotions), the "Big Wheel" (i.e., being the breadwinner and being admired and respected), the "Sturdy Oak" (i.e., "a manly air of toughness, confidence, and self-reliance"); and "Give `em Hell" (i.e., willingness to engage in violence and adventure). Thompson and Pleck (1986) advanced this conceptualization by analyzing the structure of male role norms via a factor analysis of Brannon's scale of masculinity ideology. These researchers found that men varied in their adherence to three distinct norms: (a) Status (i.e., the "Big Wheel"), which reflects the belief that men must gain the respect of others, (b) Toughness (i.e., the "Sturdy Oak" and "Give `em Hell"), which reflects the expectation that men are physically tough and willing to be aggressive, and (c) Antifemininity (i.e., "No Sissy Stuff"), which reflects the belief that men should not engage in stereotypically feminine activities.

Numerous studies have demonstrated that adherence to traditional masculinity norms is positively associated with sexual prejudice (Ehrlich, 1990; Keiller, 2010; Kilianski, 2003; Parrott, Adams, & Zeichner, 2002; Patel et al., 1995; Polimeni, Hardie, & Buzwell, 2000; Sinn, 1997). In particular, studies that used Thompson and Pleck's (1986) tripartite conceptualization found that male role norms were associated with prejudice toward sexual minorities (Kilianski, 2003, Sinn, 1997) and general hostility toward others (Sinn, 1997). Interestingly, recent studies using this conceptualization indicate that adherence to the status and antifemininity norms, but not the toughness norm, indirectly facilitate anger and aggression toward gay men and lesbians via sexual prejudice (Parrott, 2009; Parrott, Peterson, & Bakeman, 2011; Parrott, Peterson, Vincent, & Bakeman, 2008). Pertinent theory supports these findings. Numerous scholars (Brannon, 1976; Deaux & Kite, 1987; Herek, 1987; Kimmel, 1997; Kite, 2001; Pleck, 1981) agree that beliefs about the male gender role are culturally constructed from birth. Men learn from prevailing societal norms what they are expected to be (e.g., dominant, tough, heterosexual) as well as what they are not expected to be (e.g., submissive, weak, homosexual). Similar to male gender role beliefs, sexual prejudice is also culturally constructed (Franklin, 1998; Herek, 1990, 2004, 2007; Nielsen, 1990; Pharr, 1988). However, sexual prejudice emerges at the individual level via the internalization of sexual stigma during masculine identity development. Additionally, sexual prejudice functions to reinforce one's status as a heterosexual male (Herek, 2000) and to represent a specific "repudiation of femininity" (Kimmel, 1997, p. 229). Indeed, sexual prejudice is a likely by-product of masculine socialization (Shields & Harriman, 1984), especially an antifemininity theme within the male role (Parrott et al., 2002; Thompson, Grisanti, & Pleck, 1985).

In sum, the association between adherence to traditional gender norms and sexual prejudice is well established. Among men who rigidly adhere to traditional male role norms, antipathy toward gay men and lesbians may serve to reinforce their status as heterosexual men. Additionally, antipathy toward gay men and lesbians may reflect an antifeminine theme within the traditional male role. However, the effects of adhering to these specific norms on

aggression toward gay men and lesbians via both sexual prejudice and anger have yet to be examined.

Religious Fundamentalism, Sexual Prejudice, and Aggression Toward Gay Men and Lesbians

The scientific study of religious attitudes and beliefs has examined numerous constructs, including religious fundamentalism (Altemeyer & Hunsberger, 2004; MacFarland, 1989), which describes an authoritarian set of beliefs that identify one set of religious teachings as the fundamental truth that is “opposed by forces of evil which must be vigorously fought” (Altemeyer & Hunsberger, 1992; p. 118); religiosity (Cornwall, Albrecht, Cunningham, & Pitcher, 1986; de Jong, Faulkner, & Warland, 1975; Faulkner & de Jong, 1966), which is “the extent of religious practice and the impact of religion on one's daily, secular life” (Rorbaugh & Jessor, 1975, p. 307); Christian orthodoxy, which is defined as “the acceptance of well-defined, central tenets” contained in the officially adopted creeds of the various denominations of the Christian religion (Fullerton & Hunsberger, 1982, p. 318); intrinsically versus extrinsically motivated religious orientation (Batson, Schoenrade, & Ventis, 1993), with intrinsically motivated person being those who “live” their religion and extrinsically motivated persons being those who “use” their religion (Allport & Ross, 1967, p. 434); mysticism (Maranell, 1974), with mystical experiences described as intense, religious experiences (Hood, 1975, p. 29); and attributions of responsibility to God, which are attributions to divine causation for outcomes or events (Gorsuch & Smith, 1983, p. 340).

Not surprisingly, the likelihood of demonstrating an association between sexual prejudice and religious attitudes or beliefs depends on how such attitudes are conceptualized and measured. For example, research suggests that sexual prejudice is positively associated with religious fundamentalism and an intrinsically motivated religious orientation (e.g., Altemeyer & Hunsberger, 1992; Duck & Hunsberger, 1999; Tsang & Rowatt, 2007) but not with Christian Orthodoxy (Fullerton & Hunsberger, 1982; Kirkpatrick, 1993). Thus, it appears that some, but certainly not all, dimensions of religious attitudes and beliefs are associated with sexual prejudice and may constitute important facilitators of aggression toward gay men and lesbians. Most notably, religious fundamentalism has been consistently associated with sexual prejudice (Altemeyer & Hunsberger, 1992; Hunsberger & Jackson, 2005; Keiller, 2010; Schwartz & Lindley, 2005) and hostility toward gay men and lesbians (Altemeyer & Hunsberger, 2004). Further, Altemeyer and Hunsberger (1992) found that individuals who are high in religious fundamentalism are more receptive to traditional norms and values as well as more accepting of aggression toward people who violate these norms.

Hunsberger and Jackson (2005) advanced a theoretical framework to explain the association between religious fundamentalism and sexual prejudice. Specifically, they posited that individuals are drawn to religion because it provides them a means to participate in and to derive values from society. As a part of this process, followers of a given religion will invariably be exposed to heterosexism that exists in society. If heterosexism is legitimized by religious institutions, higher levels of sexual prejudice will result. In contrast, if heterosexism is not tolerated or supported by religious institutions, lower levels of sexual prejudice will result. However, for several reasons, individuals high in religious fundamentalism are particularly likely to develop high levels of sexual prejudice. For instance, research indicates that religious fundamentalists possess convergent cognitive processing styles (Hunsberger, 1996), such that they do not adapt and change their beliefs to accommodate new information. Rather, they assimilate contradictory information and doubts into their existing religious belief systems (Hunsberger, 1996). As such, high fundamentalists tend to evidence rigidity in their resistance to arguments and data that

contradict their sexually prejudiced beliefs. Further, high fundamentalists may derive self-esteem from being members of a socially valued religious institution that implicitly or explicitly devalues gay men and lesbians (Hunsberger & Jackson, 1995). Indeed, consistent with social identity theory (Tajfel & Turner, 1986), numerous researchers have argued that heterosexual individuals derive a positive evaluation of their in-group by attacking or denigrating gay and lesbian out-groups held in even lower social regard (e.g., Franklin, 1998; Hamner, 1990).

In sum, the positive association between religious fundamentalism and sexual prejudice is well documented in the literature. However, studies to date have not investigated the relations between religious fundamentalism and the actual expression of aggression toward gay men and lesbians. The present study aims to address this critical gap in the literature.

The Present Study

As previously noted, prevailing cultural values associated with sexual prejudice will, in extreme cases, manifest as aggression toward gay men and lesbians (Franklin, 2000; Herek, 2000; Yang, 1997). As such, it is necessary to examine men's internalization of these societal values and norms. There is little doubt that sexual stigma pervades social institutions of most cultures, including those that influence religious attitudes and gender role norms. However, men differ in the extent to which they internalize gender role and religious ideologies that reinforce heterosexism. Extreme internalization of these dominant ideologies in the form of rigid adherence to traditional male gender norms or religious fundamentalism may increase the likelihood that heterosexual men manifest sexual prejudice and, subsequently, anger and aggression toward gay men and lesbians. However, the relative influence of adherence to male norms and religious fundamentalism is unknown, as research has yet to examine their associations with anger and aggression within a single study. The aim of the present study was to address this gap in the literature. Study hypotheses are enumerated below.

Hypothesis 1

Adherence to the status and antifemininity norms and religious fundamentalism will be associated with aggression toward gay men and lesbians directly and indirectly via sexual prejudice and antigay anger.

Hypothesis 2

Adherence to the toughness norm will be directly associated with aggression toward gay men and lesbians.

Hypothesis 3

Sexual prejudice will be associated with aggression toward gay men and lesbians directly and indirectly via antigay anger.

Method

Participants

The distinct set of hypotheses tested herein utilized data that were drawn from a larger investigation on the effects of alcohol on aggression toward gay men and lesbians (Parrott, Gallagher, Vincent, & Bakeman, 2010). Thus, although the focus of the present investigation did not examine alcohol-related effects, all participants who presented to the laboratory reported consuming alcohol on at least one occasion during the past year.

Participants were 241 heterosexual men recruited via newspaper and online advertisements in a southeastern United States city. Advertisements sought men aged 18–30 for a study on “drinking behaviors and social attitudes” and offered \$25 for participation. Upon contacting the laboratory, respondents were informed that their participation would require approximately two hours and involve answering questions on the computer and in an interview. Telephone screening confirmed gender, age, race, and a self-identified heterosexual orientation. Women were excluded because, relative to men, they report lower levels of sexual prejudice, and men are more likely to engage in aggression toward gay men and lesbians (Baker & Fishbein, 1998; Lim, 2002; Polimeni, Hardie, & Buzwell, 2000; Whitley & Kite, 1995). In addition, males between the ages of 18 and 30 were recruited because perpetrators of hate crimes toward gay men and lesbians are typically men in their late teens and early to mid-twenties (Harry, 1990; NCAVP, 2009). Because the metropolitan catchment area is comprised of a high African-American population (i.e., 57% per 2006 Census estimate), we sought to obtain a sample with approximately equal representation of White and African American men.

Upon arrival to the laboratory, a heterosexual orientation was confirmed via participants' responses to the Kinsey Heterosexuality-Homosexuality Rating Scale (KRS; Kinsey, Pomeroy, & Martin, 1948) in accordance with the recommendations of Savin-Williams (2006). Specifically, 35 participants were removed from subsequent analyses because they did not endorse exclusive sexual arousal to females and sexual experiences that occurred mostly or exclusively with females. Further, two participants who reported a heterosexual orientation on pertinent study measures were excluded because they later identified themselves as non-heterosexual. An additional three participants were excluded because they were found to be older than 30 years of age upon arrival to the laboratory. The final sample consisted of 201 participants (see Table 1).

Measures

Participants completed a questionnaire battery self-administered on a computer via MediaLab 2000 (Empirisoft Research Software, Philadelphia, PA). For each questionnaire, instructions and items were presented sequentially on the computer screen. Measures were administered in a fixed order as presented below.

Demographic items—These items obtained information such as age, years of formal education, income, self-identified race, relationship status, and self-identified sexual orientation.

Kinsey Heterosexual-Homosexual Rating Scale (KRS; Kinsey et al., 1948)—A modified version of this instrument was used to confirm heterosexual orientation by assessing prior sexual arousal and experiences. This 7-point scale asks participants to rate their sexual arousal and behavioral experiences from 1 (“exclusively heterosexual”) to 7 (“exclusively homosexual”). As noted previously, only participants who reported exclusive sexual arousal to females and behavioral experiences that were mostly or exclusively with females were included as heterosexual males in the analyses (Savin-Williams, 2006).

Male Role Norms Scale (Thompson & Pleck, 1986)—This 26-item, Likert-type inventory assessed three dimensions of masculine ideology: Status (e.g., “A man must stand on his own two feet and never depend on other people to help him do things”), Toughness (e.g., “A good motto for a man would be ‘When the going gets tough, the tough get going’”), and Antifemininity (e.g., “It bothers me when a man does something that I consider ‘feminine’”). Participants were asked to rate each item on a scale from 1 (strongly disagree) to 7 (strongly agree), with higher scores reflecting endorsement of more traditional gender

norms. Internal consistency coefficients for these subscales range between .74 and .81 in standardization samples (Thompson & Pleck, 1986). In the present sample, alpha reliability coefficients of .78, .65, and .72 were found for Status, Toughness, and Antifemininity subscales, respectively.

Religious Fundamentalism Scale (Altemeyer & Hunsberger, 1992)—This 20-item Likert-type scale measured the degree to which participants adhere to religiously fundamentalist doctrine. Participants rate each item from 1 (“strongly disagree”) to 9 (“strongly agree”), with higher scores representing greater religious fundamentalism. Sample items include, “There is a religion on this earth that teaches, without error, God's truth” and “God's true followers must remember that he requires them to constantly fight Satan and Satan's allies on this earth.” Internal consistency for this measure typically exceeds .90, which was consistent with our sample ($\alpha = .93$). Participants were not asked their religious denominations or specific religious beliefs. This scale was developed using “wordings that would apply beyond Christianity” (Altemeyer & Hunsberger, 1992, p. 118).

Attitudes Toward Lesbians and Gay Men Scale (Herek, 1988)—This 20-item, Likert-type scale assessed sexual prejudice toward lesbians and gay men. Scores range from 20 to 180, and higher scores indicate higher levels of sexual prejudice. Sample items include, “I think male homosexuals are disgusting” and “Female homosexuality is an inferior form of sexuality.” Internal consistency for this measure typically exceeds .90, which was consistent with the present study ($\alpha = .93$).

Self-Report of Behavior Scale – Revised (SBS-R; Roderick et al., 1998)—This 20-item Likert-type measure assesses the frequency of respondents' avoidant and aggressive behaviors toward gay men and lesbians. Participants are asked to rate each item on a scale from 1 (“never”) to 5 (“always”), with higher scores indicating more frequent engagement in avoidant or aggressive behaviors toward gay men and lesbians. While the SBS-R is comprised of separate Avoidance and Aggression subscales, prior research has adopted a revised 8-item aggression subscale that includes only those items that clearly reflect aggressive behaviors (Parrott & Peterson, 2008). These eight items originated from both the original Aggression subscale (e.g., “I have physically hit or pushed someone I thought was gay because he or she brushed his or her body against mine when passing by”) and the Avoidance subscale (e.g., “I have been with a group in which one (or more) person(s) yelled insulting comments to a gay person or group of gay people”). This resulted in eight face valid items that indicated intent to harm, rather than to avoid, another person because of their sexual orientation. While participants completed the full SBS-R, only the revised Aggression subscale was analyzed. An internal consistency coefficient of .74 was obtained in the present sample.

Assessment of Antigay Anger

Assessment of heterosexual men's state affect toward gay men typically involves the presentation of video clips or photographs that depict same-sex intimacy, followed by the administration of a self-report measure of state affect. Given that stimuli used in past research are sexually explicit, concerns about the ecological validity of such stimuli have been raised for two reasons (Hudepohl, Parrott, & Zeichner, 2010). First, heterosexual men are rarely exposed to sexually explicit male-male interactions (e.g., nudity, male-male oral or anal sex). Second, participants are not asked to assume a first person point of view in the situations depicted in these videos/photos (e.g., imagine themselves in the situation rather than passively watching the situation presented on a computer screen). The present study aimed to rectify these limitations by (a) using a vignette that depicted a public situation that

could feasibly be experienced by a heterosexual man in real life, and (b) asking participants to imagine that they were in that situation.

All participants were verbally administered a vignette describing a male-male intimate interaction in a public setting (see below). This vignette was adapted from a video clip used in prior research designed to elicit anger in response to male-male intimacy (e.g., Hudepohl et al., 2010; Parrott, 2009). The vignette depicted a public, rather than private, interaction to best approximate “real world” situations in which heterosexual men would be most likely to witness male-male intimate behavior. Participants' experience of anger in response to this vignette was then assessed with the 6-item Anger-Hostility scale from the Positive and Negative Affect Schedule-Expanded form (Watson & Clark, 1994), which was presented orally in conjunction with 20 positive and negative affect items (Watson, Clark, & Tellegen, 1988). Participants were asked to rate verbally the extent to which they would experience each mood descriptor in this situation on a 5-point scale from 1 (*very slightly*) to 5 (*extremely*). Although assessment methods that involve self-administration of the vignette and PANAS items are likely less susceptible to self-presentation biases, an orally administered vignette and verbal report of state affect was deemed preferable for two main reasons. Specifically, this method maximized the likelihood that participants attended to the entire vignette and imagined themselves in this situation. Indeed, use of an interviewer-administered approach best ensures that participants understand the content of the vignette and the instructions, thereby maximizing the likelihood of them imagining themselves in the situation.

Prior to the oral administration of these mood descriptors, the interviewer asked participants to imagine themselves in the situation depicted in the following vignette:

Imagine you are in the airport waiting for a friend's flight to arrive. As you wait, you see a man who has just returned from his trip greet his male friend. They hug each other for several seconds, and then kiss on the lips for several seconds. They hug again and then kiss on the lips several more times. You overhear both men say how much they missed each other, and one of the men specifically says “I love you” to his male friend. The man who has been waiting at the airport then gives flowers to his friend who has just returned. Upon receipt of the gift, this man is visibly thankful, they embrace again, and both say that they love each other. The two men then walk away together holding hands.

Anger in response to intimate behavior between two men, but not two lesbian women, was preferred to prevent responses based on the eroticization of lesbians (Louderback & Whitley, 1997). An alpha reliability coefficient of .84 was obtained.

Procedure

Upon arrival to the laboratory, all participants provided informed consent. They then completed computer-based, self-administered questionnaires in a semi-private area that was separated from the researcher by a room divider that functioned as a barrier. Next, a male interviewer conducted the structured interview that began with the administration of the vignette and verbal administration of mood descriptors. The same male researcher interviewed all participants and was trained to administer the measures in a consistent, dispassionate manner. Other measures were administered via computer and during the structured interview, but they are unrelated to the present study and are not reported here. Upon completion of the study, participants were debriefed, compensated with \$25, and thanked. All participants completed the study protocol individually.

Results

Descriptive Statistics

Means, standard deviations, and ranges for measures of key variables are presented in Table 2, along with their correlations. All variables except for anger and aggression toward gay men and lesbians were reasonably distributed (i.e., skew < 2.56 times its standard error). A reciprocal transformation was required for the positively skewed aggression toward gay men and lesbians to meet this criterion. While the positively skewed anger variable did not meet this criterion after several attempts at transformation, the absolute value for the skew statistic was reduced from 14.7 times its standard error to 5.5 times its standard error with the reciprocal transformation. The transformed variables were used in subsequent analyses (although analyses with the untransformed variables yielded essentially the same results). The number of participants who scored low (one standard deviation below the mean) and high (one standard deviation above the mean) on each measure included in the primary analyses was calculated (see Table 2). Of note, because anger and aggression variables were positively skewed, no participants scored in the statistically defined low range. However, data indicated that most participants reported low levels of antigay anger and a low frequency of aggression toward gay men and lesbians. Specifically, the 27 men who scored high on antigay anger reported a per item mean of 2.60, which corresponds to a response between “a little angry” and “moderately angry.” The 29 men who scored high on aggression reported a per item mean of 2.16, which corresponds to a response between “rarely aggressive” and “occasionally aggressive.”

Structural Model

We used path analysis, a form of structural equation modeling (Kline, 2005; Tabachnick & Fidell, 2007), to examine whether sexual prejudice and antigay anger mediated the effects of traditional male gender norms of status, toughness, and antifemininity, and religious fundamentalism on aggression toward gay men and lesbians. In contrast to alternative statistical procedures, path analysis permits simultaneous examination of relations between multiple predictors and mediators and the criterion variable. In addition, this analytic approach produces global fit indices that enable one to test the degree to which the hypothesized, structural model fits the relations among the variables in the data. All model analyses were conducted in MPlus version 5.21 (Muthén & Muthén, 2009).

Bootstrapping was used to determine the significance of hypothesized indirect effects (Preacher & Hayes, 2004; 2008). Bootstrapping (Mooney & Duval, 1993; Shrout & Bolger, 2002) is a highly powered, nonparametric procedure based on resampling with replacement. Specifically, 5,000 random samples from sample n of the data set ($n = 201$) were drawn to obtain unbiased estimates, confidence intervals, and standard errors of indirect effects that are equivalent to values that could be obtained by randomly sampling these indirect effects from the population. This nonparametric test is not bound to assumptions of parametric procedures (e.g., normal, non-skewed data), as resampling with replacement renders moot the statistical assumption that the data must be normally distributed. The structural model (Figure 1) fit the data adequately: $\chi^2(4, N = 201) = 6.22, p = .183$, root mean square error of approximation (RMSEA) = 0.05 (90% confidence intervals [CIs], 0.0 – 0.128), comparative fit index (CFI) = 0.99.

Hypothesis 1—A significant, direct effect of antifemininity on aggression toward gay men and lesbians was detected ($\beta = .24, p = .002$). However, contrary to the hypotheses, direct effects of religious fundamentalism and status on aggression toward gay men and lesbians were not significant. Notably, after controlling for sexual prejudice and attendant anger in response to gay men, the direct effect of religious fundamentalism on aggression toward gay

men and lesbians was *negative*, albeit not significant ($\beta = -.14, p = .067$). Significant indirect effects were also detected. Specifically, analyses revealed significant indirect effects via sexual prejudice of antifemininity ($\beta = .05, p = .043$), status ($\beta = .05, p = .049$), and religious fundamentalism ($\beta = .12, p = .018$) on aggression toward gay men and lesbians. Further, consistent with hypotheses, the indirect effects via both sexual prejudice and antigay anger of antifemininity on aggression toward gay men and lesbians ($\beta = .03, p = .040$) and religious fundamentalism on aggression toward gay men and lesbians ($\beta = .06, p = .018$) were significant. However, contrary to hypotheses, the indirect effect via both sexual prejudice and antigay anger of status on aggression toward gay men and lesbians was not significant.

Hypothesis 2—There was a significant direct effect of toughness on aggression toward gay men and lesbians ($\beta = .15, p = .044$). No indirect effect of toughness on aggression via antigay anger or aggression toward gay men and lesbians was detected.

Hypothesis 3—As expected, the effects of sexual prejudice on antigay anger ($\beta = .59, p < .001$), antigay anger on aggression toward gay men and lesbians ($\beta = .20, p = .013$), sexual prejudice on aggression toward gay men and lesbians ($\beta = .24, p = .016$) were significant. In addition, the indirect effect via antigay anger of sexual prejudice on aggression toward gay men and lesbians was significant ($\beta = .12, p = .016$).

Summary of findings—Given the constellation of significant relative to non-significant direct and indirect effects, sexual prejudice alone (1) partially mediated the effect of antifemininity on aggression toward gay men and lesbians, and (2) fully mediated the effects of religious fundamentalism and status on aggression toward gay men and lesbians. As was the case with sexual prejudice alone, the combination of sexual prejudice and antigay anger partially mediated the effect of antifemininity on aggression and fully mediated the effect of religious fundamentalism on aggression. However, the combination of sexual prejudice and antigay anger did not mediate the effect of status on aggression. Finally, antigay anger partially mediated the effect of sexual prejudice on aggression toward gay men and lesbians. Given that there were no significant indirect effects of toughness on aggression toward gay men and lesbians, there was no evidence of mediation of the effect of toughness in the model.

Discussion

Theorists assert that violence perpetrated toward gay men and lesbians represents extreme expressions of dominant cultural values (Franklin, 2000; Herek, 2000; Yang, 1997). Consistent with this view, the present investigation hypothesized that endorsement of traditional male gender norms and religious fundamentalism would be related to aggression toward gay men and lesbians directly and indirectly via sexual prejudice and antigay anger. Results generally support this hypothesis. In sum, traditional male gender norms of status, toughness, and antifemininity, and religious fundamentalism exercised an effect on aggression toward gay men and lesbians either directly, indirectly, or both.

The present data suggest that male role norms differ from each other in how they are associated with aggression. Of all of the male role norms, adherence to the antifemininity norm was the only factor to show both direct and indirect effects on aggression toward gay men and lesbians. This significant indirect effect is important because it suggests that adherence to the antifemininity norm was demonstrated by heterosexual men's endorsement of sexual prejudice and, in turn, their expression of anger and aggression toward gay men. This is consistent with pertinent theory, which asserts that sexual prejudice represents a "repudiation of femininity" (Kimmel, 1997, p. 229) that can be manifested by means of

anger and aggression toward gay men and lesbians (Parrott, 2009). The significant direct effect is also of importance. It suggests that strong adherence to this cultural norm of masculinity is associated with aggression toward gay men and lesbians independent of heterosexual men's endorsement of sexual prejudice. In addition, analyses revealed a significant indirect effect of status on aggression toward gay men and lesbians via sexual prejudice. This finding suggests that adherence to the status norm is associated with aggression toward gay men and lesbians to the extent that heterosexual men believe that antipathy toward gay men and lesbians confers upon them the respect that they seek. Indeed, sexual prejudice is posited to emerge from the development of masculine identity to reinforce one's status as a heterosexual male (Herek, 2000). Interestingly, however, the association between adherence to the status norm and aggression toward gay men and lesbians was not accounted for by antigay anger. This suggests that one's desire to reinforce his status as a heterosexual man does not require feelings of anger to elicit aggressive behaviors toward gay men and lesbians.

In contrast, the effect of men's endorsement of the toughness norm on aggression toward gay men and lesbians was not accounted for by sexual prejudice or antigay anger. This pattern of results is consistent with prior research (Parrott, 2009; Parrott et al., 2008) and leaves open the possibility that heterosexual men's adherence to the toughness norm is of import when aggression toward gay men and lesbians is facilitated by motives other than antipathy toward gay men and lesbians. For instance, Franklin (1998) posited that aggression toward gay men and lesbians serves to "prove both toughness and heterosexuality to friends" (p. 12). Relatedly, other researchers have demonstrated that the masculine identity is fragile and requires constant proof and validation (e.g., Copenhaver & Eisler, 1996; Kilianski, 2003; Kimmel, 1997; Vandello, Bosson, Cohen, Burnaford, & Weaver, 2008). To the extent that men possess a fragile masculine identity, their rigid endorsement of the toughness norm may predispose them to fear emasculation by their peers and, as a result, motivate them to restore their masculine self-concept via aggression toward gay men and lesbians (Franklin, 1998; Hamner, 1990; Kimmel, 1997). This motivation might be especially relevant to the perpetration of aggression toward gay men and lesbians by small groups of men (Franklin, 2000). Future research should consider the factors that diminish or inflate men's sense of security in their masculine identity and how these factors are associated with aggression toward gay men and lesbians.

Importantly, these findings are the first to show that religious fundamentalism is associated with the perpetration of aggression toward gay men and lesbians. More specifically, these data suggest that religious fundamentalism is associated with aggression toward gay men and lesbians via its link to sexual prejudice and, to a lesser extent, antigay anger. These results are also consistent with prior research that has demonstrated associations between religious fundamentalism, sexual prejudice, and antipathy toward gay men and lesbians (Altemeyer & Hunsberger, 1992, 2004; Hunsberger & Jackson, 2005; Schwartz & Lindley, 2005). Interestingly, while the bivariate correlation between religious fundamentalism and aggression toward gay men and lesbians was positive and significant, the direct effect was negative and approached statistical significance ($\beta = -.14, p = .067$). This pattern suggests a suppression effect (MacKinnon, Krull, & Lockwood, 2000), in which the strength of the relationship between two variables (e.g., a bivariate correlation) is increased by the inclusion of an additional variable. Such an effect includes circumstances in which the inclusion of a third variable reveals a negative association between the two variables that originally showed a positive correlation (Kline, 2005). Indeed, once the effects of sexual prejudice and antigay anger were accounted for, the strength of the relation between religious fundamentalism and aggression toward gay men and lesbians increased in a negative direction.

These data support religious fundamentalism as a multifaceted construct of which some aspects are associated with a lower likelihood of aggression toward gay men and lesbians and other aspects are associated with a higher likelihood of aggression toward gay men and lesbians. Although further study is necessary, these data suggest that religious fundamentalism is a risk factor for aggression toward gay men and lesbians inasmuch as it fosters sexual prejudice. Otherwise, religious fundamentalism could potentially serve as a protective factor for aggression toward gay men and lesbians. For example, some men who are high, relative to low, in religious fundamentalism may be more likely to aggress toward gay men and lesbians as part of a broader ideology that supports negative attitudes and anger in response to gay men and lesbians. Indeed, for these men, gay men and lesbians may represent “forces of evil which must be vigorously fought” (Altemeyer & Hunsberger, 1992, p. 118). However, other men who are high in religious fundamentalism may adhere strongly to religious views that make them less likely to aggress toward gay men and lesbians because they do not adhere to a broader heterosexist ideology or to norms supporting the use of violence generally. In such instances, religious fundamentalism may support non-aggressive behaviors in ways that reduce the risk for violence toward gay men and lesbians.

As expected, antigay anger mediated the effect of sexual prejudice on aggression toward gay men and lesbians. This finding is consistent with prior results (Parrott & Peterson, 2008). More broadly, these data suggest that antigay anger is a critical mediating variable linking the endorsement of traditional gender norms, sexual prejudice, and aggression toward gay men and lesbians. Previous studies provide only piecemeal support for this theoretically-based pathway (e.g., Parrott & Peterson, 2008; Parrott et al., 2008). These data are important because they are the first support for this pathway while simultaneously examining all of these variables in the same study. Collectively, the present findings suggest that some heterosexual men will become angered by and punish men and women who do not conform to normative expectations of gender (e.g., men who act in stereotypically feminine ways or are perceived to be of lower social status) – regardless of those targets' actual sexual orientation. Indeed, these gender-based acts of aggression likely function to demonstrate the perpetrator's masculine identity and enforce traditional gender norms (Herek, 1988; Kite & Whitley, 1998). In support of this view, research indicates that perpetrators of hate crimes based on sexual orientation are more likely to aggress against persons perceived to be gender nonconforming relative to persons perceived to be conforming to traditional gender norms (Harry, 1990). More recently, research has shown that heterosexual men's evaluations of other men are more negative to the extent that male targets are perceived to possess feminine attributes (Blashill & Powlisha, 2009). Interestingly, the majority of participants in the present study reported low levels of antigay anger and a low frequency of aggression toward gay men and lesbians. These findings are consistent with prior research that used a similar vignette (Parrott et al., 2008) and the SBS-R (Jewell & Morrison, 2010) with undergraduate samples. Thus, it can be argued that truly “pathological” levels of antigay anger and aggression were not adequately represented. Nonetheless, aggression against toward sexual minorities is widespread (Herek, 2009), and the present findings suggest that perpetrators of these acts may not routinely express high levels of anger and aggression toward sexual minorities.

Study Limitations

Some caveats for the present results should be noted. First, given the correlational, cross-sectional study design, the results cannot speak directly to causal and temporal relations among the variables. Consequently, any causal interpretations regarding the associations among these variables should be made with caution. Second, we assessed participants' expectation of becoming angry rather than their actual experience of anger. Although this limitation may be addressed by manipulating anger in laboratory-based studies, such studies

are limited in their ability to examine mediational effects of state variables as examined in the present study (Lindsay & Anderson, 2000). Additionally, the present findings regarding the mediational path linking sexual prejudice, anger, and aggression are consistent with prior research (e.g., Bernat et al., 2001; Parrott & Zeichner, 2005). These prior findings support the conclusion of multiple pathways to men's experience of felt anger in direct response to intimate behavior between gay men and to aggression toward gay men and lesbians, in general. Relatedly, this assessment approach was also limited because participants were asked to provide verbal responses of anger directly to a male researcher. Indeed, this assessment method might have elicited self-presentation biases, such that some men attempted to reaffirm their masculine identity in their presentation to the male interviewer by endorsing stereotypically masculine attributes (e.g., heightened anger in response to male-male intimacy). Alternatively, self-presentation biases may have been primed because measures of negative attitudes and aggressive behaviors toward gay men and lesbians were administered prior to participants' verbal self-report of anger. This limitation is somewhat tempered by a pattern of results which are consistent with prior research that employed written measures of anger toward gay men or lesbians (e.g., Parrott & Zeichner, 2005). Third, while recruitment of a nonprobability community-based sample of men is a strength of this study, research with probability samples will be a decisive step forward in establishing the generalizability of laboratory and field studies to the rest of the male population. For example, given that the mean annual income of the sample was approximately \$27,000 and participants were all residents of a large, southeastern city of the United States, caution must be taken when attempting to generalize these results to individuals of different socioeconomic status living in different regions of the United States.

Fourth, it must be emphasized that we assessed sexual prejudice and aggression toward both gay men and lesbians, yet assessed anger only in response to gay men. Anger in response to lesbians was not assessed in order to avoid emotional responses related to heterosexual men's eroticization of lesbians (Louderback & Whitley, 1997). Because of this methodological limitation, it is difficult to conclude from these data that anger invoked by lesbians would similarly explain aggression toward lesbians. In fact, heterosexual men's anger and aggression is likely more intense toward gay men relative to lesbians, as evidenced by disproportionate rates of violence toward these two groups (e.g., NCAVP, 2009). On the other hand, pertinent theory suggests that heterosexual men who adhere strongly to the antifemininity norm may segregate and attack *any* sexual minority individual (i.e., regardless of perceived gender) as the non-masculine "other" (e.g., Kimmel, 2000). Clearly, it is critical that future research distinguish between gay men and lesbians (and gender more broadly) when examining attitudes, emotions, and behaviors directed toward sexual minorities.

It should be noted that our sample was more racially diverse than the samples used to develop and validate the measures used in our analyses. As such, it is not entirely clear whether the measures we used were adequate for this diverse sample, because participants from different cultural groups may interpret items differently. Unfortunately, this is a limitation in many studies that are able to recruit racially and ethnically diverse samples. Related to this limitation, the variability of cultural experiences within such groups makes it difficult to detect cultural specific effects by simply examining racial and ethnic differences among participants. Clearly, future research that clarifies how *cultural factors* may moderate the present findings would advance this literature. Further, although religious fundamentalism was assessed in a manner consistent with prior research (Altemeyer & Hunsberger, 1992; 2004), religious denominations and specific religious beliefs of participants were not assessed. It may be useful for future research to determine the extent to which fundamentalism between different religious denominations may account for the present findings.

Importantly, all variables in the present study were measured at the individual level. Inasmuch as violence toward gay men and lesbians represents extreme manifestations of dominant cultural views, examination of male role norms and religious fundamentalism at the structural level may provide further insights into how these cultural factors set the stage for violence toward gay men and lesbians and other stigmatized groups. For example, masculine gender role norms may be evaluated in future research at the institutional level to clarify their role in the enactment of aggression toward gay men and lesbians. Specifically, Connell (2005) posited that institutionalized, gender-enforcing practices support prevailing ideologies regarding masculinity and allow some heterosexual men to claim authority and dominance in asserting their masculinity. For example, some gendered domains (e.g., games played by more boys than girls) and forms of masculinity (e.g., jocks relative to other boys) are socially valued more than others, and, thus, social hierarchies among boys and between boys and girls are established (Connell, 1996). As boys and men become invested in dominant systems of masculinity, some may engage in behaviors, including violence (e.g., aggression toward gay men and lesbians), aimed at maintaining it. Like gender role ideology, future research may assess religious fundamentalism at the institutional level of church denominations. It may be that a religious institution can serve as a protective factor against or represent a risk factor for aggression toward gay men and lesbians. Indeed, Batson, Schoenrade, and Ventis (1993) noted that, while religious communities may prohibit some prejudices (e.g., racism), they typically do not prohibit negative attitudes toward lesbians and gay men. To the extent that religious teachings support, condone, or fail to prohibit sexual prejudice, individuals' internalization of their churches' teachings may facilitate anger and aggression toward gay men and lesbians. Alternatively, churches that teach acceptance of gay men and lesbians may reduce adherents' likelihood of anger or aggression toward gay men and lesbians.

Intervention Implications

Coupled with findings from prior studies with college samples (e.g., Parrott & Peterson, 2008; Parrott et al., 2008), results from the present community-based sample suggest that intervention programming and prevention studies should aim to diminish sexual prejudice and stereotypic attitudes about the male gender role, particularly surrounding the antifemininity norm. Potential points of intervention for such work include the societal (e.g., federal laws, economics), institutional (e.g., school, workplace, military, media), and individual levels (e.g., person, small group). For example, one societal-level approach that has received considerable attention is social marketing, which is defined as "the adaptation of commercial marketing technologies to programs designed to influence the voluntary behavior of target audience to improve their personal welfare and that of the society of which they are a part" (Andreasen, 1994, p. 110). Although there is a dearth of research on the use of social marketing to address male role norms and sexual prejudice, some promising data exist. For example, Fabiano and colleagues (2003) found that men's perceptions of other men's and women's norm adherence strongly influenced their own adherence to consensual sexual activity and their willingness to act as women's allies in response to sexual violence. Further, Rochlen and Hoyer (2005) discussed social marketing strategies used to successfully reach men, such as first-person testimonials, epidemiological and statistical data to inform their sense of normative behavior, and delivery of social messages through radio, billboards, televisions, and brochures. Together, these results suggest that social marketing campaigns that employ these strategies could reduce sexually prejudiced attitudes and promote more flexible, gender-based attitudes by including social messages that report these beliefs as normative for men.

At the individual level, a substantial research literature (e.g., see Allport, 1954; Pettigrew & Tropp, 2000) indicates that intergroup bias may be attenuated by increasing structured

interactions between in-group (e.g., heterosexual men) and out-group members (e.g., gay men). Indeed, research has consistently demonstrated that individuals who report knowing someone who is gay report lower levels of sexual prejudice (Herek & Capitano, 1996; Herek & Glunt, 1993). Diversity training interventions are examples of individual-level interventions based on intergroup contact theory. These interventions may be adapted to address norms of masculinity and sexuality, such as by challenging stereotypes of gay men and lesbians and incorporating role-play interactions with gay men and lesbians or, more generally, individuals who do not conform to traditional gender role norms (Parrott & Miller, 2009). As reviewed above, aggression toward gay men and lesbians is sanctioned by a culture of heterosexism that emphasizes heterosexual masculinity. Given that heterosexist norms are propagated through various social institutions, diversity-training interventions must be supported by the institutions in which they take place (e.g., schools, workplaces). For instance, McNaught (1993) has developed a diversity training workshop designed to increase understanding of issues related to sexual orientation in the workplace. Role-play or actual interactions with gay men and lesbians to accomplish specific tasks could be included into this approach. Of course, research is clearly needed to design and evaluate the effect of such interventions. Nevertheless, the present findings support the development and evaluation of interventions that address traditional gender role norms and sexual identity.

Conclusion

Results of this investigation indicate that heterosexual men's internalization of pertinent male gender role norms and religious fundamentalism is associated with aggression toward gay men and lesbians directly and indirectly via sexual prejudice and antigay anger. Collectively, these data (1) indicate that antifemininity is associated with aggression toward gay men and lesbians with and without activation of sexually prejudiced beliefs and emotional responses; (2) support religious fundamentalism as a multifaceted construct that is negatively associated with aggression toward gay men and lesbians to the extent that it does not lead to sexual prejudice; and (3) buttress sexual prejudice as a critical intermediate variable linking adherence to the status norm to aggression toward gay men and lesbians. Collectively, these findings highlight the importance of examining critical cultural factors that influence aggression toward gay men and lesbians. Future research may benefit by extending such findings beyond the individual by examining the role of social structures in the perpetration and psychology of aggression toward gay men and lesbians and other stigmatized groups.

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Figure 1. Structural paths depicting effects of religious fundamentalism, status, toughness, and antifemininity on increased frequency of aggression toward gay men and lesbians mediated by sexual prejudice and anger toward gay men and lesbians. * $p < .05$. ** $p < .01$. *** $p < .001$. NS = not significant.

Table 1

Sample Means (SD); Percentages for Age, Years of Formal Education, Race, and Relationship Status; and Ranges for Age, Education Level and Income Level

Age (years)	24.3 (3.4)	Range: 18 – 30
Years of Formal Education	14.3 (2.5)	Range: 8 – 24
Income Level	\$26,940 (\$20,388)	Range: \$0 to \$70,000
Race (%)		
American Indian or Alaska Native	0.5	
African American	48.5	
White, non-Hispanic	48.5	
Multiracial (%)	2.5	
Relationship Status (%)		
Single, Never Married (%)	80.1	
Married (%)	7.8	
Not Married but Living with Intimate Partner (%)	9.2	
Divorced	1.9	
Separated	1.0	

Table 2

Descriptive Statistics and Intercorrelations for Key Variables

Variables	Descriptives					Correlations						
	M	SD	Range	# Low	# High	1	2	3	4	5	6	7
1. Religious Fundamentalism	81.3	33.9	20 – 163	44	28	—						
2. Status	52.7	11.8	23 – 77	33	39	.298	—					
3. Toughness	34.1	8.5	8 – 56	24	29	.193	.439	—				
4. Antifemininity	22.2	8.2	7 – 43	37	34	.242	.195	.435	—			
5. Sexual Prejudice	81.1	39.2	20 – 172	39	38	.616	.420	.336	.404	—		
6. Antigay Anger	8.3	3.8	6 – 29	0	27	.388	.278	.287	.354	.590	—	
7. Aggression Toward Gay Men and Lesbians	11.2	3.3	8 – 30	0	29	.155	.165	.338	.426	.395	.401	—

Notes. N = 201. # Low = Number of participants scoring one standard deviation below the mean; # High = Number of participants scoring one standard deviation above the mean. $p < .01$ for all correlations except between religious fundamentalism and aggression toward gay men and lesbians ($p < .05$) and between status and aggression toward gay men and lesbians ($p < .05$).