

AGGRESSION AND SOCIAL DISTANCING TOWARD WOMEN BASED ON SEXUAL  
ORIENTATION AND GENDER EXPRESSION: EFFECTS OF SEXUAL PREJUDICE AND  
GENDER ROLE CONFORMITY

by

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(Under the direction of Amos Zeichner)

ABSTRACT

Bias-motivated aggression, particularly driven by sexual orientation, continues to have deleterious effects on society. Past research has identified perpetrator prejudice and victim nonconformity as risk factors for aggressive behavior. The current study sought to investigate effects of perpetrator sexual prejudice and gender conformity on aggression and social distancing toward women based on sexual orientation and gender expression. One hundred fifty-one undergraduate men and women participated in a competitive reaction-time task, during which they had an opportunity to shock an ostensible opponent as a measure of aggression. Participants were assigned to one of four opponent conditions (masculine, lesbian; feminine, lesbian; masculine, straight; feminine straight). Analyses revealed high prejudice women aggressed more toward heterosexual than lesbian opponents and that low gender conforming men aggressed more toward feminine than masculine opponents. Additionally, findings emerged regarding men's distancing behavior toward women. Findings are discussed in terms of variables that encourage or inhibit aggressive responding.

INDEX WORDS: Sexual prejudice, Anti-lesbian aggression, gender role conformity, women

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## CHAPTER 1

### INTRODUCTION

Violent behavior has been a grave societal concern as well as a stimulating area of research for decades. The United States Department of Justice reported that the rate of violent crimes steadily increased from 2004 to 2007, and then decreased by only 1.9 percent from 2007 to 2008. In 2008, the division reported a striking rate of over 1.3 million crimes nationwide (U.S. Department of Justice, 2008), indicating a strong need to investigate contributory factors of these incidents. As such, researchers have sought to examine pertinent risk factors that contribute to aggressive behavior, including social context and characteristics of victims, as well as motivation and personal traits of the perpetrator, such as prejudice. Prejudice is defined as a “preconceived opinion that is not based on reason or actual experience [and] dislike, hostility or unjust behavior [is] formed on such a basis (McKean, Jewell, & Abate, 2005).” According to the U.S. Department of Justice Uniform Crime Report, over 9,500 hate crime incidents occurred in 2008, and has increased over the past few years (U.S. Department of Justice, 2008, demonstrating that prejudice plays a role in aggressive behavior. Moreover, homosexuals comprise the third largest targeted group, indicating that prejudice based on sexual orientation is a current and pressing concern (U.S. Department of Justice, 2008).

Prejudice against members of sexual minorities has been a longstanding problem in our society. It has been overtly displayed in legislative acts that prevent gay men and lesbians from enjoying certain civil liberties (Defense of Marriage Act, 1996), in employment situations, as it is legal to dismiss or refuse to hire an individual based on his or her sexual orientation in multiple job settings across the nation, and in classroom settings where gay, lesbian, and bisexual

youth are verbally and physically abused because of their stated or perceived sexual orientation (D'Augelli, Pilkington, & Hershberger, 2002). Additionally, the Federal Bureau of Investigation reported that of the total number of hate crime incidents in 2008, over 1,700 were committed against individuals based on their sexual orientation, of which 12% were committed toward lesbians (Department of Justice, 2008).

### Definitions of Aggression

Historically, definitions of aggression have been proposed and debated, the first of which was offered nearly 70 years ago. This definition was posited by Dollard, Doob, Miller, Mowrer, and Sears (1939) and suggested that aggression is any behavior directed toward another individual with the intent to cause the person harm or injury. However, this definition was limited in that it only included aspects of physical aggression. In order to improve upon this, Bandura (1973) defined an aggressive act as one that causes physical or psychological harm, such as degradation or manipulation. However, Bandura's conceptualization was also incomplete because it failed to recognize the motive on the part of the aggressor. For example, situations in which a person accidentally harms another would be considered aggressive under this definition. In order to settle the disparity, Berkowitz (1993) proposed a definition that characterized aggression as a behavior that serves to intentionally harm another physically or psychologically. Again, this definition is limited in that it fails to capture motivation of the victim or target. For example, under Berkowitz' definition, a surgical procedure would be considered an aggressive act because the perpetrator (i.e., surgeon) is intentionally harming the target (i.e., patient). Therefore, this definition has since been expanded by Anderson and Bushman (2002) and includes previous proposals (Baron & Richardson, 1994; Berkowitz, 1993; Bushman & Anderson, 2001; Geen, 2001), which states that aggression is "any behavior directed

toward another individual that is carried out with the *proximate* (immediate) intent to cause harm [and] the target is motivated to avoid the behavior (p. 28).” This accurately portrays an aggressive act and excludes accidental injury because the perpetrator does not believe the target is motivated to avoid the harm.

The term *violence* has been used to capture extreme forms of aggression, characterized by the intent to cause severe harm to the victim, such as death (Anderson & Bushman, 2002). These authors state that not all aggressive acts are necessarily violent, but all violent acts are aggressive. In an attempt to deconstruct the multi-faceted nature of aggression, distinctions have been made between hostile and instrumental aggression (Bushman & Anderson, 2001). Hostile aggression has typically been considered to involve careless, impulsive acts motivated by feelings of rage and anger with a proximate and ultimate goal to harm a target. Hostile aggressive acts generally occur in response to some type of provocation. In contrast, instrumental aggression involves planned and deliberate actions directed toward another individual with a proximate goal to harm but an ultimate goal to obtain any type of gain. Similarly, Dodge and Coie (1987) conceptualized aggression into types based on the function of the behavior. They argued that reactive aggression, much like hostile aggression, is often in response to provocation, is retaliatory, and functions to remove a threat. In contrast, the authors suggest that proactive aggression parallels instrumental aggression and functions to gain some internally-generated goal. Anderson and Bushman (2002) discussed the hostile and instrumental aggression subtypes, specifically arguing that the distinction is not always easily recognizable, in that aggressive behavior can have mixed motives. This paper will attempt to support this argument, such that an individual may act aggressively toward a member of a sexual minority

(e.g., gay men and lesbians) in response to internal negative affect (hostile), as well as to reaffirm that s/he does not belong to that minority (instrumental).

### Theories of Aggression

Several theories of aggression have been proposed, which seek to describe the mechanism by which it occurs. Social Learning Theory (Bandura 1983, 2001) suggests that individuals learn aggressive behavior, much like any other social behavior, through observation or personal experience. By this process individuals gain an understanding of appropriate social conduct, and use such knowledge to interpret their world and direct future behavior. For example, a young child who witnesses spousal abuse between parents may learn to accept the behavior as appropriate and engage in such behavior in response to interpersonal conflict.

In an effort to provide a more detailed description of the aforementioned learning process, Huesmann formulated a Script Theory (1986, 1998) which takes a developmental approach to social learning by suggesting that children learn aggressive scripts through observation of violence in the media. As scripts are behavioral representations of certain situations, they function as sets of well-rehearsed ideas in memory that typically involve causal relationships and goal-directed behavior (Abelson, 1981; Schank & Abelson, 1977). A script is formed when a particular sequence of events or items become strongly linked so as to form a semantic association in memory (Anderson & Bushman, 2002). When an individual learns a script for a particular situation, s/he takes the position of the person involved and encodes strict rules for her/his behavior. Moreover, the behavior-situation link grows stronger after multiple rehearsals. For example, a child who views several vicious acts on television may be more likely to encode this script for violence than a child who views such acts few times or not at all. Once a

script is acquired, individuals may recover it later in their lives and use it as a directive source for behavior.

Another theory of aggression that has been proposed is Excitation Transfer Theory (Zillmann, 1983), which conceptualizes aggressive behavior through a mechanism that involves physiological arousal. This theory posited that an individual may become aroused during an event, particularly if it is anger-provoking, and may not be able to relieve the arousal immediately following the event. In this case, the individual may enter a new event, maintaining physiological arousal from the preceding event, which, as Zillmann argued, may be even stronger when the two events are not separated by an extended period of time. The theory states that the existing arousal may be misattributed to a second event and make the individual angrier than was s/he experiencing the subsequent event alone. Therefore, the excitation from the first event is transferred to the second, thus, results in aggressive behavior. The theory also suggested that this excitation can last for extended periods of time if the individual has labeled her/his arousal as anger. Zillmann proposed that labeling the physiological sensation increases propensity for future aggressive behavior.

Having recognized that previous theories of aggression lack an interactive component between an individual's internal states and environmental influences (e.g., aversive provocation), Berkowitz proposed a Cognitive Neoassociation Theory (1989, 1990, 1993), which contends that aggressive behavior is triggered by effects of aversive stimuli on an individual's internal state. These stimuli can include frustration, extreme temperatures, or even noxious odors, and they produce a negative affective state, which is indicative of discomfort and unpleasant physiological arousal. Negative affect may trigger embedded emotions and cognitions associated with physiological fight or flight response, inclusive of aggressive scripts, which, in turn, may result

in aggressive responding. For example, a typically docile individual can become aroused after being assaulted by another individual, and thus “fight” back by responding in an aggressive manner.

Another model of aggression that has arguably combined components of Berkowitz’s Cognitive Neoassociation Theory (1989, 1990, 1993) and Zillmann’s Excitation Transfer Theory (1983), is known as the Triggered Displaced Aggression model (Miller, Pederson, Earleywine, & Pollock, 2003). It posits that aggression occurs through a three-component process. As with Zillmann’s model (1983), Miller and colleagues (2003) have argued for a time-based conceptualization, in that aggression, specifically displaced aggression, occurs within a sequence of events. Displaced aggression occurs when an individual experiences provocation during an event and then exhibits retaliatory aggressive behavior toward an innocent other during a subsequent unrelated event. For example, a father who is verbally reprimanded by his supervisor at work may become angry and act in a hostile manner toward his children when he comes home, thus displaying displaced aggression. Triggered displaced aggression differs from displaced aggression in that the aggressive response occurs during the second event after a minor provocation, and is disproportional relative to the provoking stimulus. Referencing the previous example, the father may come home to his children who are whining and begging for money, which elicits an aggressive response that is harsh relative to the minor request. Miller and colleagues (2003) model contends that triggered displaced aggression depends on the particular features of the initial provocation (component 1) and cognitive processes and personality of the perpetrator, but more importantly, on the interval between the initial and subsequent provocation (component 2) and the characteristics and actions of the target that influence the extent of the (triggered) displaced aggression.

Theoretical models of aggressive behavior, notwithstanding, researchers have examined pertinent individual characteristics that are associated with physical aggression. For example, Bettencourt, Talley, Benjamin, and Valentine (2006) conducted a meta-analysis which explored the relationship between personality variables and traits on direct aggression under differential provocation conditions (neutral, provoking). The authors found that characteristics such as trait anger, Type A personality, dissipation-rumination tendencies, emotional susceptibility, narcissism, and impulsivity are positively associated with aggressive behavior under provoking circumstances. Moreover, they reported that trait aggressiveness and trait irritability are associated with aggressive behavior even when no provocation is present. These results suggest that personality characteristics influence aggressive responding as part of a larger context.

As a considerable overlap exists among the aforementioned theories and proposals, Anderson and Bushman (2002) sought to integrate existing theories into one model known as the General Aggression Model (GAM). The authors suggest that this model has improved upon previous “mini-theories” of aggression in four ways: “it is more parsimonious; it better explains aggressive acts based on multiple motives; it will aid in the development of more comprehensive interventions; and it provides broader insights about child rearing and development issues (Anderson & Bushman, 2002, p. 33).” The authors contend that aggressive behavior is an *outcome* of an interconnected system of *inputs* and *routes*. Inputs include *person* (e.g., traits) and *situational factors* (e.g., provocation) and are conceived as “causal” factors, which inevitably contribute to a propensity to engage in aggressive responding. These factors consequently foster internal states, or *routes*, which include cognitive, affective, and arousal conditions, and which function in concert. For example, exposure to violent cues may generate a state of negative

affect, thus contributing to increased ability to retrieve hostile thoughts. This particular circumstance (interaction of cognition and affect) is likely to facilitate aggressive reaction.

### Gender Differences in Aggression

Examination of gender differences has been of particular interest to researchers studying human aggression. Historically speaking, men have been viewed as generally more physically aggressive than women, which may be explained, in part, by adherence to traditional gender role norms. Moreover, this difference has been found in a plethora of studies (e.g., Buss, 1963; Crick & Werner, 1998; Zeichner, Parrott, Frey, 2003). In an effort to explore this notion, Zeichner and colleagues (2003) studied gender effects on direct physical aggression in response to provocation in a laboratory setting. The researchers provoked men and women in a reaction time competition, and gave them the choice to retaliate against an opponent or to refrain from responding. Men were found to aggress more quickly, frequently, intensely, and for longer durations than women, a finding which supports the aforementioned gender difference. However, women voluntarily engaged in direct physical aggression when they had the opportunity to completely refrain from responding, which challenges the notion that physical aggression is unique to men.

Upon closer examination, researchers have found that certain variables account for and diminish gender differences in physically aggressive behavior. For example, Crick and Werner (1998) explored gender differences from a developmental perspective in a study that investigated children's appraisals of aggressive behavior. The traditional gender difference mentioned above was partially confirmed in that boys were generally more likely to have positive views of overt (direct), physical aggression whereas girls were more likely to have positive views of relational (indirect) aggression. Direct aggression is defined as an act causing harm through direct physical



or verbal confrontation (e.g., punching, yelling) (Richardson & Green, 2006). These authors have defined indirect aggression as harm delivered via third party (i.e., person) or object belonging to the person (toward whom the harm is directed) , such as property destruction. The above mentioned findings suggest that boys view direct forms of aggression as more appropriate, which is indicative of gender-typical behavior and may contribute to an increased likelihood of physically aggressive responding. However, the results also indicated that girls reported positive attitudes toward overt aggression in the context of instrumental conflict, which suggests that situational variables may serve to suppress gender differences in such behavior regardless of whether or not they are consistent with traditional gender roles.

Suppression of gender differences was found approximately 30 years ago in a meta-analysis conducted by Frodi, Macaulay, and Thome, (1977), which investigated the role of biological sex on aggressive responding. The authors reported that traditional gender differences in physical aggression were not confirmed across all examined studies. In fact, when controlling for dispositional variables such as empathy and feelings of guilt, men and women aggressed similarly, especially when the behavior was viewed as justified or prosocial. These results further elucidate that gender alone does not predict aggressive responding and further support the notion that women, too, display direct physical aggression.

Given that gender differences may vary as a function of circumstance, several studies have sought to develop an understanding of the influence of situational variables on physical aggressive responding in men and women, with a focus on provocation, emotional arousal, and violent cues (Bettencourt & Miller, 1996; Bettencourt & Kernahan 1997; Frodi et al., 1977; Knight, Guthrie, Page, & Fabes, 2002). Bettencourt and Miller (1996) conducted a meta-analysis that assessed the role of provocation on aggressive responding in men and women.

Their results indicated that provocation moderates the role of gender on aggression, in that gender differences were present under neutral conditions only. The difference was not evident under conditions of provocation, indicating an influence of situational variables. This finding was further confirmed in Bettencourt and Kernahan's (1997) meta-analysis, which determined that women are as aggressive as men when violent cues are present.

In continued effort to consider causal factors, Knight and colleagues (2002) sought to examine the function of emotional arousal on gender differences in aggression. Based on their analysis of research studies conducted over a span of 35 years, they concluded that emotional evocativeness does influence the gender-aggression link. They found that in contexts where reported emotional arousal is absent or large, women and men differ in aggressive responding, with men exhibiting higher levels of aggression. However, when the level of emotional arousal is small or moderate, these differences disappear, indicating that sensitivity to arousal states or emotion regulation abilities function as a determinant of aggressive behavior.

#### Bias-Motivated Aggression

As previously mentioned, several variables may contribute to general physical aggression. However, far less research has focused on pertinent variables that uniquely relate to bias-motivated aggression. As its name suggests, bias-motivated aggression is aggression that is motivated by a bias on the part of perpetrator, such as racial prejudice or sexual prejudice. The purest example of bias-motivated aggression is a hate crime, which will be discussed in detail here. A hate crime is defined as "a crime against a person or property motivated by bias toward race, religion, ethnicity/national origin, disability, or sexual orientation" (U.S Department of Justice, 1996). As Craig (2002) argues, hate crimes differ from non-biased aggression in that the victims are selected by a perpetrator(s) because they belong to a certain group. These groups are

generally minority groups, and are generally ascribed negative characteristics. Therefore, individuals belonging to these minority groups are also viewed negatively and stereotypically labeled.

The distinctive quality of hate crimes begs the reasoning behind this particular type of aggression. Social Identity Theory (Tajfel & Turner, 1986) provides a useful and effective explanation of bias-motivated aggression, specifically hate crimes (Herek & Berrill, 1992; Craig, 2002). The theory posits that individuals strive to achieve and maintain a positive self-view, particularly self-esteem, which depends largely on promoting one's in-group. Promotion of in-group status is often associated with complementary discrimination of an out-group, which serves to enhance and increase self-esteem (Lemrye & Smith, 1985). Furthermore, Social Identity Theory suggests that both promotion of one's in-group and discrimination of the out-group serve as means to symbolically differentiate an individual from the respective out-group (Tajfel & Turner, 1986).

Tajfel and Turner (1986) argue that group differentiation often accompanies group conflict, which may arise during economic, social, and political shifts. For example, changes in economic conditions in the United States in the 1940's were associated with an increase in racially-motivated aggression (Hovland & Sears, 1940). Social and political shifts, however, may be responsible, in part, for modern examples of bias-motivated aggression. Pertinently, Green and Strolovitch (1998) investigated hate crime incidence in New York from 1987 to 1995 and found that it was related to economic strife. They concluded that social shifts, particularly movement of ethnic minority members into neighborhoods of ethnic majorities may have generated group conflict, which fostered hate-motivated aggression.

Recently, members of sexual minorities, such as lesbians and gay men, have become more socially visible as the concern for equality and civil rights becomes more pressing in the United States. Unjustly, the Federal Bureau of Investigation historically has had jurisdiction to investigate and prosecute offenders of all possible hate crimes, except for offenses motivated by sexual orientation. Only recently has sexual orientation been included in this group of offenses. Such minimal interest demonstrated in pertinent legislation likely has encouraged anti-gay and anti-lesbian offenses, as the perpetrators knew that they likely would receive little if any punishment, and that their crime may even go unprosecuted. This begs the question, what about these crimes that has made them receive less attention? One possible explanation is the continued and widely held negative attitudes and stereotypes regarding lesbians and gay men.

Several reasons have been purported to explain such negative opinions, with religiosity and adherence to traditional gender role norms being particularly prevalent. Not surprisingly, religiosity has been found positively related to anti-gay and anti-lesbian prejudice (Fisher, Derison, Polley, & Cadman, 1994; Herek, 1987). According to an American Religious Identity Survey conducted on almost 55,000 Americans in 2008, over 75% of the population in the United States report religious affiliation (Kosmin & Kaysar, 2008). Given this majority group of religious affiliates, it is also likely the majority of Americans hold anti-gay and anti-lesbian sentiments, as homosexuality is often viewed as sinful. With respect to Social Identity Theory (Tajfel & Turner, 1986), one's religious identity may serve as one's in-group, and correspondingly identifies gay men and lesbians as members of the out-group.

As mentioned previously, another identified risk factor for anti-gay and anti-lesbian sentiment has been adherence and advocacy of traditional gender role norms. As Berrill (1989) has suggested, heterosexism, which promotes strict sex-role dichotomization and places men

superior to women, serves as a fundamental source of anti-gay and anti-lesbian prejudice. Moreover, Herek (1988) found that adherence to traditional family and gender ideologies positively related to anti-gay and anti-lesbian prejudice for men as well as women. As Ehrlich (1990) argued, individuals, specifically men, may engage in anti-gay or anti-lesbian aggression as an opportunity to reaffirm adherence to gender role norms and status as heterosexuals. As such, aggression serves an instrumental function to not only reaffirm one's identity, but also to express disdain for gender role violations, which are particularly prevalent in homosexual identities. In fact, individuals who violate gender role norms by having atypical gender expressions may also become victims of anti-gay or anti-lesbian aggression. The concept of gender expression represents how one communicates her/his gender through behavioral and other visible cues, such as attire, hair style, and body posture. For example, female athletes often have more masculine gender expressions and are often misclassified as lesbians. Therefore, they have been at an increased risk for anti-lesbian victimization (Blinde & Taub, 1992).

### Sexual Prejudice and Aggression

Sexual prejudice has been found to be a pertinent risk factor for anti-gay aggression. As proposed by Herek (2000), the term *sexual prejudice* denotes a negative attitude toward an individual based on sexual orientation. In recent years, this term has been considered preferable to *homophobia* (Logan, 1996) because the latter is suggestive of a phobic or fearful reaction to homosexuals, which does not adequately capture hostility toward homosexual individuals. Because much of the pertinent literature has not made this distinction, studies assessing homophobia and sexual prejudice are reviewed below. In a study investigating the effects of homophobia on anti-gay aggression (Bernat, Calhoun, Adams, & Zeichner, 2001), the authors

found that homophobic men reported more negative reactions to gay erotica than nonhomophobic men and exhibited higher levels of physical aggression toward a gay target. The homophobic and nonhomophobic groups did not differ, however, in levels of aggressive behavior toward a heterosexual target. In a continued effort to examine this dispositional variable and expand upon previous findings, Parrott and Zeichner (2005) studied the effects of sexual prejudice on anger and anti-gay aggression immediately following erotic cues. They found that sexual prejudice was positively related to anger following exposure to gay erotica. Furthermore, for individuals who viewed this stimulus, anger and sexual prejudice were positively associated with physical anti-gay aggression. In fact, sexual prejudice has been found to explain effects of multiple variables, such as masculinity and gender role stress on anti-gay aggression in men (Parrott, 2009; Parrott, Peterson, Vincent, & Bakeman, 2008). Moreover, men's anger has been found to mediate the relationship between sexual prejudice and aggression toward gay men (Parrott & Peterson, 2008). Regarding anger, relationships have also been found for sexually prejudiced women in response to lesbian intimate relationship behavior (Parrott & Gallagher, 2008). The last study, notwithstanding, the collective findings of the reviewed studies indicate a strong influence of sexual prejudice on aggressive behavior toward homosexuals in men.

### Sexual Prejudice and Social Distancing

Although the link between sexual prejudice and aggression has not been replicated in women, a relationship between sexual prejudice and a concept known as social distancing has been found (Swim, Ferguson, & Hyers, 1999). Social distancing is defined as the act of "differentiating oneself socially from another person or group [and] can occur by expressing attitudes or beliefs dissimilar to another's attitudes (Swim et al., 1999, p. 61)." In their study,

Swim et al. (1999) investigated the role of sexual prejudice on women's tendency to agree with a lesbian regarding attitudes about feminism, sexism, and personal preferences while in the presence of others. They found that sexually prejudiced women were less likely to agree with a lesbian dissenter than a heterosexual dissenter when stating opinions about feminism and sexism. In fact, a prejudice-distancing link has been established for men and women and has been evident in a variety of contexts. For example, individuals have been found to socially distance themselves from others due to race (Boyanowsky & Allen, 1973), sexual orientation (Neuberg, Smith, Hoffman, & Russel, 1994), and even mere association with homosexuals (Sigelman, Howell, Cornell, Cutright, & Dewey, 1991).

#### Purpose and Hypotheses

Aggressive behavior toward gay men and lesbians has proven to be a grave concern for society at large. The reviewed studies have examined the role of sexual prejudice in men and have determined it to be a pertinent risk factor for anti-gay aggression. In these studies, the perpetrators were heterosexual men, and the victims were predominantly gay men. However, no studies to date have examined the impact of sexual prejudice on direct physical aggression in women when lesbians are the targets. Moreover, no studies have examined the effects of a target's gender expression on victimization of physical aggression. Given that sexually prejudiced men and women typically hold similar negative opinions about gay men and lesbians (Herek, 2000), it is likely that the findings of the present study will be similar to those previously mentioned (Bernat et al., 2001; Parrott & Zeichner, 2005). To date, the only study to describe the effects of sexual prejudice on women's discriminatory behavior toward lesbians conceptualized it in the form of social distancing. The purpose of the present study was to replicate and expand upon previous research by investigating effects of sexual prejudice and

gender role adherence on aggression toward women, particularly examining the influence of women's sexual orientation and gender expression using the same experimental paradigm as that of Bernat and colleagues (2001), Zeichner and colleagues, (2003), and Parrott and Zeichner (2005). In these studies, all participants competed against an ostensible opponent and had the opportunity to administer shocks as a form of punishment, which was used to measure direct physical aggression in the Response Choice Aggression Paradigm (Zeichner, Frey, Parrott, & Butryn, 1999). For the present study, several hypotheses were put forth.

Regarding physical aggression as a dependent variable, a main effect for opponent sexual orientation (SO) was hypothesized: participants were expected to be significantly more physically aggressive toward a lesbian opponent than toward a heterosexual opponent. Moreover, a main effect for opponent gender expression (GE) was also hypothesized: participants were expected to be significantly more physically aggressive toward a masculine woman than toward a feminine woman. Secondly, it was hypothesized that there will be a significant interaction effect between opponent sexual orientation and opponent gender expression: Participants were expected to be significantly more aggressive toward a masculine lesbian than toward a feminine lesbian or a masculine heterosexual woman and significantly less aggressive toward a feminine heterosexual woman than toward a feminine lesbian or masculine heterosexual woman. It was expected that men and women would not differ in levels of physical aggression regardless of their opponent.

Likewise, regarding social distancing as the dependent variable, a main effect for opponent sexual orientation was hypothesized: participants were expected to socially distance themselves significantly more from a lesbian opponent than from a heterosexual opponent. Moreover, a main effect for opponent gender expression was also hypothesized: participants



were expected to socially distance themselves significantly more from a masculine woman than from a feminine woman. Again, it was hypothesized that there would be a significant interaction effect between opponent sexual orientation and opponent gender expression: participants were expected to socially distance themselves significantly more from a masculine lesbian than from a feminine lesbian or a masculine heterosexual woman and significantly less from a feminine heterosexual woman than from a feminine lesbian or masculine heterosexual woman. It was expected that men and women would not differ in degree of social distancing regardless of their opponent.

Regarding physical aggression as the dependent variable, it was expected that sexual prejudice will moderate the relationship between opponent sexual orientation and physical aggression: high levels of sexual prejudice would be positively associated with physical aggression against a lesbian whereas low sexual prejudice would not be related. Likewise, it was expected that gender role adherence will moderate the relationship between opponent gender expression and physical aggression: high gender role adherence would be positively associated with physical aggression against a masculine woman whereas low gender role adherence will not be related. It was also expected that this moderation effect would be present for men and women.

Regarding social distancing as the dependent variable, it was expected that sexual prejudice would moderate the relationship between opponent sexual orientation and social distancing: high levels of sexual prejudice would be positively associated with social distancing from a lesbian whereas low sexual prejudice would not be related. Likewise, it was expected that gender role adherence would moderate the relationship between opponent gender expression and social distancing: high gender role adherence would be positively associated with social

distancing from a masculine woman whereas low gender role adherence would not be related. It was expected that this moderation effect would be present for men and women.

## CHAPTER 2

### METHOD

#### Participants

One-hundred seventy-two women and men were recruited from the University of Georgia research participation pool to participate in a study entitled “Effects of Personality on Competitive Behavior.” Participants were informed that the study comprised both a questionnaire session and a laboratory session, which would take place on two separate occasions. All participants received partial academic credit for their participation. Fourteen participants were excluded due to failed deception or technical problems, three participants were excluded due to endorsement of same-sex sexual orientation, and three were excluded due to a report that they only completed grade school. The final sample consisted of 152 undergraduates (men=39; women=113) in the Psychology Department. The mean age for the sample was 19.21 ( $SD = 1.19$ ). The sample was comprised of 76.3% White ( $n=117$ ), 10.5% Black or African American (16), 8.6% Asian (13), 2.6% Hispanic or Latino, and .7% American Indian or Alaska Native. Two participants identified as “Other.” One-hundred forty-two participants reported that they were “single, never having been married while seven indicated that they were in a committed or long term relationship with a domestic partner. The majority of the sample reported having completed some college ( $n = 104$ ). All demographic data can be found in Table 2.1.

Table 2.1

*Means, Standard Deviations, and Percentages for Gender, Age, Race/Ethnicity, Relationship Status, and Level of Education.*

Measure	Means and Percentages
Age	19.21(1.19)
Gender	
Men	24.7
Women	75.3
Race/Ethnicity	
Caucasian	76.3
Black/African American	10.5
Asian	8.6
Hispanic Latino	2.6
American Indian/Alaska Native	.7
Other	1.3
Relationship Status	
Single	93.4
Committed/Long-term partnership	4.6
Cohabitated/Not married	1.3
Separated	.7
Education	
High School	18.4
Some college	68.4
College	13.2

### Experimental Design

This study comprised a 2x2 factorial design. The two independent variables were sexual orientation (SO) of opponent (lesbian or heterosexual), and gender expression (GE) of opponent (masculine or feminine). Participants were randomly assigned to one of four conditions (masculine, lesbian; feminine, lesbian; masculine, heterosexual woman; feminine, heterosexual woman). Two additional variables were measured and treated as moderator variables for analyses. These were participants' level of sexual prejudice and gender role conformity. Lastly, participant gender was also treated as a moderator to test for potential gender differences. Two dependent variables were measured, which were direct physical aggression and degree of social distancing. The computation of each of these variables is described in detail below.

### Measures

*Demographic Form.* Participants completed a brief demographic form that assesses, age, race, sexual orientation, marital status, education level, and income.

*Attitudes Toward Lesbians* (ATL; Herek, 1984b). This 10-item Likert-type subscale from the Attitudes Toward Lesbians and Gay Men (ATLG) scale measures sexual prejudice, specifically toward lesbians and contains items that assess attitudes toward lesbians and female homosexuality. Participants were asked to indicate agreement with statements (e.g., "female homosexuality is an inferior form of sexuality") on a 9-point scale ranging from *strongly disagree* to *strongly agree*. Scores can range from 10 (extremely positive view) to 90 (extremely negative view). Alpha coefficient of .77 has been reported for the standardization sample. For the current study alpha reliability of .91 was obtained.

*Modern Sexism Scale* (Swim, Aiken, Hall & Hunter, 1995). This is an 8-item Likert-type scale, which contains items that assess three elements of modern sexist attitudes: *continued*

*discrimination toward women, antagonism toward women's demands, and resentment about special favors for women.* Participants indicate the extent to which they agree with sexist statements (e.g., “Women often miss out on good jobs due to sexual discrimination.”) on a 7-point scale. Swim and colleagues reported an alpha coefficient of  $r = .75$ . For the present study, an 11-point Likert-type scale was used and a feminist identification question was added to this questionnaire. Higher scores are indicative of less sexist attitudes. Participants were asked to indicate agreement with the statement, “I consider myself to be a feminist.” This statement has been used in previous studies in conjunction with sexist attitudes (Swim et al., 1999). Agreement on this item indicates endorsement of feminist-related beliefs and promotion of nonconformity to gender role norms (Garnets, 1996). The current study utilized a total score in analyses, which yielded an alpha reliability coefficient of .76.

*Conformity to Masculine Norms Inventory* (CMNI; Mahalik et al., 2003). This 94-item scale comprises statements that involve different aspects of masculinity (e.g., “I love it when men are in charge of women”) which are represented in 11 different subscales (*Winning, Emotional Control, Risk-Taking, Violence, Power Over Women, Dominance, Playboy, Self-Reliance, Primacy of Work, Disdain for Homosexuals, and Pursuit of Status*). Participants were asked to read statements and indicate agreement on a 4-point Likert-type scale that ranges from *strongly disagree* to *strongly agree*. The authors reported a coefficient alpha of .94 for the total scale, and a range from .72 to .91 for the subscales. The current study only utilized a total score as a measurement of gender role conformity in men which yielded a Cronbach's alpha of .91.

*Conformity to Feminine Norms Inventory* (CFNI; Mahalik et al., 2005). This 84-item is comprised of statements that involve aspects of femininity (e.g., “I regularly wear makeup”) which are represented in eight different subscales (*Nice in Relationships, Thinness, Modesty,*

*Domestic, Care for Children, Be in a Romantic Relationship, Sexual Fidelity, and Invest in Appearance*). Participants are asked to read statements and indicate agreement on a 4-point Likert-type scale that ranges from *strongly disagree* to *strongly agree*. The authors report an alpha coefficient of .88 for the total scale and a range from .77 to .92 for the subscales. Again, the current utilized a total score to measure gender role conformity in women, which yielded a Cronbach's alpha of .88.

*Demographic Audio Responses.* Participants are asked to verbally report several demographic variables to be viewed by an opponent (outlined below). The variables include first name, age, relationship status, year in school, major, and involvement in campus organizations, as well as organizations outside of school.

*Response-Choice Aggression Paradigm* (RCAP; Zeichner, Frey, Parrott, & Butryn, 1999). This paradigm is used to measure physical aggression. It involves a bogus reaction time (RT) task, where participants compete on 30 trials and have the opportunity to ostensibly administer shocks as a form of punishment to a fictitious opponent following each trial. This paradigm differs from the Taylor Aggression Paradigm (Taylor, 1967) in that participants in the RCAP may completely refrain from administering a shock following a "win" or "loss" outcome, whereas participants in the Taylor Aggression Paradigm are required to administer a shock after a "win" outcome. The added "choice" component of the RCAP places the paradigm in a more real-world context without sacrificing internal validity of its laboratory procedures.

Participants are seated at a table inside a sound-attenuated chamber facing the aggression console, which is a white metal box. This box is mounted with light-emitting diodes, ten shock push buttons labeled "1" through "10," and a reaction time key. Shocks are administered through two electrodes, which are placed on the fingers of the participant's non-dominant hand.

The experiment is controlled by a computer system in a separate room, and shocks are produced by a Precision Regulated Animal Shocker (Coulbourn Instruments, Allentown, PA).

The reaction time task is presented to participants as a competition against an opponent who is ostensibly seated in a neighboring chamber. Participants are instructed to press the RT button when the yellow *press* light illuminates. Participants are to hold down this button until the green *release* light illuminates, at which time they are to release the RT button as quickly as possible. After a brief results-determination period, the green *win* light or red *lose* light illuminates, notifying participants of the ostensible outcome of that particular trial. After this outcome feedback portion, three lights (red, yellow, and green) are illuminated for a 6-s period, during which time the participants have the opportunity to administer a shock to the opponent as a form of “punishment.” Participants are free to choose from the 10 shock intensities and to activate a shock button for as long as they desire during the 6-s period. Participants are also informed that their opponent has the same opportunity.

Physical aggression is measured through seven different aggression indices: 1) *Mean Shock Intensity* (MSI) is the mean shock intensity for trials in which the participant administers a shock; 2) *Mean Shock Duration* (MSD) is the mean shock duration for trials which the participants administer a shock; 3) *Proportion of Highest Shock* (P10) is the number of times participants use the highest shock available for trials in which a shock is administered relative to all shock trials; 4) *Flashpoint Latency* (FP) defines the number of trials elapsed before the participants administer the first shock; 5) *Flashpoint Intensity* (FPI) defines the intensity of the first shock administered; 6) *Flashpoint duration* (FPD) is the shock duration of the first shock administered; and 7) *Shock Frequency* (SF), which is the number of trials that a shock is administered. For the current study, standardized aggression composites were utilized to reduce



Type I error. The first composite was a “general aggression” (GA) composite, which was the standardized average of MSI and MSD. The second composite was “nature of initial aggression” (IA) composite, which was the standardized average of FPI and FPD. Additionally, P10 was utilized as a index for “extreme aggression” (EA) and FP was utilized to measure latency of aggression (lower scores are indicative of more aggression).

*Deception and Opponent Sexual Orientation/Gender Expression Manipulation.* All participants viewed a brief demographic video of an ostensible opponent “Sam” who reports her relationship status as well as her sexual orientation. The video presentation (described in more detail in Procedure below) served to inform participants of the sexual orientation and gender expression of their opponent and to assure them that they indeed would be competing against another individual.

*Assessment of Social Distancing.* All participants were informed that they would be asked several questions about their attitudes with respect to women’s issues. These questions were part of the questionnaire battery in the screening session, and included all items from the Modern Sexism Scale and a feminist identification question. For each question, the experimenter asked the ostensible opponent to answer first so that participants could hear her respond. Then, the same question was posed to the participants. To assess for social distancing, the degree to which the verbal responses were different from the self-reported responses from the questionnaire session was recorded for each item. This was measured by the change in the Likert-type responses, and a difference score was computed for each item. As previously mentioned, higher scores on this scale indicate less sexist attitudes. Therefore, the within difference (i.e., from time 1 to time 2) was used to measure direction of social distancing, where a negative value is increased distancing (more sexist over time) and a positive value is decreased

distancing (less sexist over time). Additionally, a between difference was also computed (i.e., difference between participants' response at time 2 and opponent response). To compute a total distancing score, the within difference was multiplied by the absolute value of the between difference. This procedure is a modified version of that used in Swim et al.'s (1999) to control for the effects of social desirability or group conformity.

### Procedure

For the questionnaire session, participants met in a classroom separate from the laboratory. After informed consent was obtained, participants completed a questionnaire battery that included a demographic questionnaire, the ATL, CMNI, CFNI, and Modern Sexism Scale (with the feminist identification question). Participants were informed that the laboratory session would occur approximately one week following the questionnaire session. Participants selected a time to participate, were provided with appointment cards, and were sent reminder emails one day prior to the experimental session.

For the experimental session, participants were met outside a room separate from the aggression chamber and were randomly assigned to one of four conditions (outlined above). After initial greeting, the participants were asked to report their names and were informed that another person would be coming to the session. Participants were then escorted to the designated chamber and were seated facing the aggression console, at which time informed consent was obtained. To disguise the RCAP as a measure of aggression, participants were informed that the purpose of the study was to measure the effects of personal attitudes, opinions, and personality traits on reaction time. Next, the experimenter instructed participants that they would be asked to report verbally several demographic details that would ostensibly be viewed by their

opponent. Participants were informed that they would also view their opponent reporting the same demographics on a television facing participants placed adjacent to the aggression console.

After this introduction, participants were asked to wait while the experimenter greeted the “opponent” and explained the task to her. After a 5-min waiting period, the experimenter communicated with participants via intercom from a separate control room. Participants were led to believe that they would be providing some demographic information to their opponent via video camera. Participants were assured that their information would not be recorded. After providing this information, participants were informed that their opponent would provide the same information. Participants were led to believe that they were viewing their opponent during a live session. However, they were actually shown a videotape of a fictitious opponent who was either a heterosexual woman or a lesbian and who had either a masculine or a feminine gender expression. The video depicted the ostensible opponent answering several questions (mentioned above), which highlighted her sexual orientation and relationship status. In the lesbian condition, the opponent “Sam” reported having “been in a relationship with her girlfriend Chris for about two years.” In the heterosexual female condition, the opponent “Sam” reported having “been in a relationship with her boyfriend Chris for about two years.” The ostensible opponent “disclosed” her sexual orientation by reporting the gender of her partner. However, she did not directly state her sexual orientation, as that was not a requested demographic detail. Therefore, participants were not required to disclose their sexual orientation either. This manipulation served to enhance the salience of participants’ identities pertaining to sexuality and gender. In the masculine gender expression condition, the ostensible opponent had short hair, was wearing no makeup, and masculine clothing. In the feminine gender expression condition, the ostensible opponent had long hair, was wearing makeup, and feminine clothing. In all conditions, the

opponent reported being “20 years old”, with a “major in Sociology and a minor in Women’s Studies” and being involved in “Teach for American and the Lambda Alliance student organization” on campus and “Habitat for Humanity and the Human Rights Campaign.” The Lambda Alliance is an LGBT student organization (comprised of LGBT-identified students and Allies). The Human Rights Campaign is non-student Civil Rights organization, primarily concerned with LGBT rights.

Next, the experimenter explained the RT task to the participants. The experimenter then informed participants that they (and the ostensible opponent) would be verbally answering another series of questions via intercom. This procedure was followed so that they were able to hear each other’s responses. The experimenter notified the participants that “Sam” would respond first. The experimenter then returned to the chamber, attached the electrodes to the participants’ fingers, and explained that the pain tolerance assessment and RT task were to follow. The experimenter then returned to the control room from where pain levels were ostensibly assessed. This assessment served to limit the intensity of the shocks the participants received during the task. The tolerance assessment was achieved by first playing an audio recording of the confederate reading predetermined responses regarding her pain tolerance. Then, the participants’ pain tolerance was assessed by first asking them to report detection of a shock stimulus, which began at level “0” (imperceptible) followed by incrementally higher shocks until participants reported that the shocks have become “painful,” which served as the participants’ tolerance level.

After the pain tolerance was determined, participants began the RT task, before which they were reminded that they could to terminate the experiment at any time without penalty should they feel uncomfortable. The RT competition consisted of 30 trials, of which participants

experienced 15 “win” and 15 “lose” trials. This win-loss sequence was predetermined by a computer program that implemented the task and was the same for all participants. Participants were randomly administered shocks on 12 of the trials, which were pre-set to be 90%, 95%, and 100% of their reported “painful” level. Light-emitting diodes on the aggression console informed participants of the level of shock they were receiving. Following the task, participants were administered a manipulation check, thanked for their participation, debriefed, and given partial academic credit.

## CHAPTER 3

### RESULTS

#### Manipulation Check

Assessing the validity of aggression data involved demonstration that the participants believed they were in fact competing against another individual, and that they did not identify the task as a measure of aggression. This was achieved by conducting a brief interview composed of questions about the confederate, the RT task, and participants' motivation, prior to the debriefing. First, participants were asked whether they recognized the opponent as a friend or a classmate. Next, participants were requested to report their impression of their opponent, which primarily involved whether they believed that their opponent was "fair" during the task. Next, they were asked whether they believed the task to be a good measure of reaction time. Last, participants were questioned about their reasons for administering or refraining from administering shocks to their opponent. Participants' data were excluded if they indicated that they knew their opponent was fictitious, that the task was bogus, or if they indicated that they were not fully participating in the task (e.g., "I wasn't really trying.").

#### Preliminary Analyses

*Excluded participants.* Fourteen participants were excluded from final analyses due to failed deception. In order to measure behavior based on theoretical in-group/out-group behavior (Tajfel & Turner, 1986), only individuals who identified as heterosexual were included in analyses. Therefore, three participants were excluded due to endorsement of a non-heterosexual sexual orientation. Additionally, three participants were excluded for reporting that they had only completed "grade school." With these exclusion criteria, a total of 20 participants were

excluded. A series of one-way ANOVA's was conducted to determine whether deceived and non-deceived participants differed on any pertinent demographic variables or assigned condition. Results showed no significant differences for any of the demographic variables or opponent conditions.

*Demographic data.* Analyses were conducted to determine whether preexisting differences on demographic variables were present amongst participants assigned to the four experimental groups. A series of one-way ANOVAs was performed using pertinent demographics as dependent variables. No significant differences were found for age,  $F(3, 148) = .32$ ; gender,  $F(3, 148) = 1.39$ ; race/ethnicity,  $F(3, 148) = .34$ ; relationship status,  $F(3, 148) = .80$ ; education,  $F(3, 148) = .05$ ; or income,  $F(3, 147) = .25$ . Additionally, Pearson product-moment correlations computed between demographic variables and standardized aggression indices used in the regression analyses, revealed a significant relationship between race/ethnicity and IA ( $r = .2, p < .05$ ) and EA ( $r = .16, p < .05$ ). Therefore, in analyses where IA and EA were used as the dependent variables, race/ethnicity was entered as a control variable. Pearson product-moment coefficients were also computed between demographic variables and the standardized score for social distancing revealing significant relationships for age ( $r = -.27, p < .01$ ) and education ( $r = -.16, p < .05$ ). Therefore, these variables were entered into all regression analyses where social distancing was the dependent variable. Means and standards deviations for aggression indices based on race/ethnicity can be found in Table 3.1. As can be seen in the table, standardized aggression scores were lower for White participants than for African America, Asian, and Latino participants. Due to such a low number of non-White participants in the sample, analyses could not be conducted to test for differences amongst the groups. Therefore, in order to test for racial differences, the sample was split into White and non-White

groups. The Levene's statistic indicated the homogeneity of variance assumption was violated. As such, a modified independent samples t-test was conducted to test for significant differences between these groups on both IA and EA. Results of the independent samples t-test were nonsignificant for both IA,  $t(41) = -1.82, ns$  and EA,  $t(35) = 1.14, ns$ .

Table 3.1

*Means and Standard Deviations for Standardized Aggression Indices Separate by Race/Ethnicity.*

	Ethnicity					
	Caucasian	Black/African American	Asian	Hispanic/Latino	American Indian/Alaskan	Other
GA	-.07 (.87)	.32(.74)	.31(.81)	.41(.99)	-.99--	-.52(.66)
FP	-.07(.98)	.28(.87)	.20(1.12)	.42(1.61)	-.80--	.65(2.05)
IA	-.07(.56)	.26(.75)	.49(1.62)	.09(.47)	-.46--	-.32(.20)
EA	-.09(.17)	.00(.28)	.84(3.41)	.06(.39)	-.19--	-.05(.19)

*Note.* GA = General Aggression; FP = Flashpoint; IA = Initial Aggression; EA = Extreme Aggression



*Group characteristics.* Although participants were randomly assigned to opponent conditions, confirmation was needed to ensure that the groups did not significantly differ on pertinent dispositional (moderating) variables before undergoing experimental manipulation. Therefore, a series of one-way ANOVAs was performed with sexual prejudice and gender role conformity reported from the questionnaire session as the dependent variables. These analyses revealed no significant differences for sexual prejudice,  $F(3,148) = .81$ , or gender role conformity,  $F(3, 148) = 1.8$ .

In order to ensure that all test variables were related in the theoretical directions, Pearson product-moment correlations were computed between all test variables, which included gender role conformity, sexual prejudice, and sexism. Masculine gender role conformity was significantly, negatively related to feminine gender role conformity,  $r = -.37, p < .001$ . Sexual prejudice was significantly, positively related to masculine gender role conformity ( $r = .24, p < .01$ ) but did not significantly relate to feminine gender role conformity,  $r = .10, ns$ . Similarly, masculine gender role conformity was significantly, negatively related to (lower) sexism,  $r = -.21, p < .05$ , while feminine gender role conformity was unrelated,  $r = -.02, ns$ . Lastly, sexual prejudice was found to negatively relate to sexism,  $r = -.41, p < .001$ . Pearson correlations for all test variables can be found in Table 3.2.

To assess for potential gender differences related to pertinent test variables, as well as the dependent variables used in regression analyses, a series of one-way ANOVA's was conducted, which revealed significant differences for sexism,  $F(1, 149) = 7.45, p < .01$ , indicating that men endorsed higher levels of sexism than women, masculine gender role conformity,  $F(1, 134) = 20.56, p < .001$ , indicating that men endorsed higher levels of masculinity than women, and feminine gender role conformity,  $F(1, 146) = 74.15, p < .001$ , which indicated that women

endorsed higher levels of femininity than men. Men and women did not significantly differ on sexual prejudice toward lesbians,  $F(1, 145) = .54, ns$ . Men and women did not significantly differ with respect to any aggression index or social distancing. Means, standard deviations, and ANOVA results can be found in Table 3.3. Again, gender was treated as a moderator in all regression analyses to test for potential differences with respect to opponent factors and moderator variables, as they related to outcome variables.

Table 3.2

*Pearson Correlations Between Hypothesized Moderators, Sexism, and Dependent Variables Separate by Gender.*

Measure	1	2	3	4	5	6	7	8	9
1. FGRC	--	-.36**	.10	.07	-.09	-.07	.14	-.11	-.26
2. MGRC	-.36**	--	.24**	-.22**	.16	.12	-.14	.22	.41**
3. ATL	.23*	.11	--	-.69**	.30	.17	.08	.34*	.55**
4. Sexism <sup>a</sup>	-.23*	-.05	-.29**	--	-.16	-.28	.03	-.16	-.79**
5. GA	.11	-.15	-.01	.06	--	.19	.61**	.63**	-.16
6. FP	.11	-.16	-.16	.13	.40**	--	.16	.10	.12
7. IA	.13	-.12	.07	-.01	.60**	.33*	--	.25	-.35*
8. EA	.07	-.07	.13	.00	.21*	.07	.74**	--	.03
9. SD	.23*	-.11	.12	-.71**	.06	-.06	.05	.02	--

*Note.* FGRC = Feminine Gender Role Conformity; MGRC = Masculine Gender Role Conformity; ATL = Attitudes Toward Lesbians; GA = General Aggression; FP = Flashpoint; IA = Initial Aggression; EA = Extreme Aggression; SD = Social Distancing

<sup>a</sup> = higher scores indicate less sexism; \*\*  $p < .01$

To assess for potential gender differences related to pertinent test variables, as well as the dependent variables used in regression analyses, a series of one-way ANOVA's was conducted, which revealed significant differences for sexism,  $F(1, 149) = 7.45, p < .01$ , indicating that men endorsed higher levels of sexism than women, masculine gender role conformity,  $F(1, 134) = 20.56, p < .001$ , indicating that men endorsed higher levels of masculinity than women, and feminine gender role conformity,  $F(1, 146) = 74.15, p < .001$ , which indicated that women endorsed higher levels of femininity than men. Men and women did not significantly differ on sexual prejudice toward lesbians,  $F(1, 145) = .54, ns$ . Men and women did not significantly differ with respect to any aggression index or social distancing. Means, standard deviations, and ANOVA results can be found in Table 3.3. Again, gender was treated as a moderator in all regression analyses to test for potential differences with respect to opponent factors and moderator variables, as they related to outcome variables.

Table 3.3

*Means, Standard Deviations, and ANOVAs for Gender Differences in Dispositional Variables and Outcome Measures.*

Measures	Men		Women		<i>F</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Masculine Gender Role Conformity	229.21	21.6	210.32	20.6	20.56	< .01
Feminine Gender Role Conformity	217.70	15.4	245.63	17.6	74.15	< .001
Attitudes Toward Lesbians	39.46	19.7	36.80	19.7	0.54	> .10
Sexism <sup>a</sup>	54.10	16.4	60.93	12.3	7.45	< .01
General Aggression	.02	0.9	.00	.09	0.01	> .10
Flashpoint	-.22	0.8	.08	1.1	2.65	> .10
Initial Aggression	-.06	0.6	.03	0.8	0.43	> .10
Extreme Aggression	-.07	0.2	.03	1.2	0.27	> .10
Social Distancing	.21	1.2	-.07	0.9	2.30	> .10

### Regression Analyses

*Main effects and interaction of opponent factors on aggression.* In order to examine opponent SO and GE as dichotomous variables within regression analyses, dummy coded variables were created for each of these factors. As such, for opponent SO, a variable was created with a designated value of “0” for cases where participants competed against a lesbian opponent and a value of “1” for cases in which participants competed against a heterosexual opponent. Likewise, for opponent GE, a variable was created with a designated value of “0” for cases in which participants competed against a masculine opponent and a value of “1” for cases in which participants competed against a feminine opponent. Additionally, participants’ gender was coded either “0” for male participants or “1” for female participants. To test main effects of opponent SO and GE, as well as participant gender, on general aggression as the dependent variable, the dummy coded variables for each of these factors were entered simultaneously into a regression analysis. For GA, neither opponent SO ( $\beta = .13, ns$ ) nor opponent GE ( $\beta = -.03, ns$ ). Likewise, gender was not a significant predictor in this model ( $\beta = -.01, ns$ ). The same analysis was performed to test main effects for Flashpoint (latency; FP). Again, neither opponent factor (SO,  $\beta = .06, ns$ ; GE,  $\beta = -.02, ns$ ) or participant gender ( $\beta = .13, ns$ ) were significant predictors of FP. To test main effects of opponent factors on nature of initial aggression, race/ethnicity and the dummy coded variables were simultaneously entered into a regression analysis. For IA, opponent SO ( $\beta = .04, ns$ ) and opponent GE ( $\beta = -.06, ns$ ) were not significant predictors, and neither was participant gender ( $\beta = .08, ns$ ). The same analysis was conducted when extreme aggression was the dependent variable. Again, neither opponent factor was a significant predictor (opponent SO,  $\beta = .10, ns$ ; opponent GE,  $\beta = -.09, ns$ ) of EA. Additionally, gender was a nonsignificant predictor ( $\beta = .06, ns$ ) of extreme aggression. In short, neither opponent factor

or participant gender accounted for a significant amount of variance in any of the aggression outcome measures.

To test interaction effects of opponent factors, a variable was created which multiplied the dummy coded variables for opponent SO and GE. Additionally, the coded variable for participant gender was multiplied by each of these opponent factors. Lastly, to test gender as moderator for interaction effects of opponent factors, a three-way interaction was also created, which multiplied the coded variable for participant gender, opponent SO, and opponent GE. Hierarchical regression analyses were performed for each aggression index as dependent variables. In the first step of these analyses, all possible main effects were entered (i.e., opponent SO, opponent, GE, participant gender). All possible two-way interactions were entered in the second step, and the three-way interaction was entered in the third step. Again, for IA and EA, race/ethnicity was also included in the first step. None of the models accounted for significant variance in any of the aggression outcome measures.

For general aggression as the dependent variable, a hierarchical linear regression analysis was conducted. Participant gender, opponent SO, and opponent GE were entered in the first step, gender x opponent SO, gender x opponent GE, and opponent SO x opponent GE interaction terms were entered in the second step, and gender x opponent SO x opponent GE three-way interaction term was entered in the third step. Neither the second step of the model ( $F(6, 145) = 1.19$ ) nor the third step of the model ( $F(7, 144) = 1.05, ns$ ) accounted for a significant amount of variance in general aggression. For aggression latency, the same hierarchical regression was analysis was performed. Again, neither the second step ( $F(6, 145) = 1.23, ns$ ) nor the third step,  $F(7, 144) = 1.16, ns$ ) accounted for a significant amount of variance in FP. For nature of initial aggression as the dependent variable, the same aforementioned hierarchical regression analysis

was performed with race/ethnicity entered simultaneously in the first step. Again, neither the second step ( $F(6, 145) = 2.15, ns$ ) nor the third step ( $F(7, 144) = 1.84, ns$ ) accounted for a significant amount of variance in IA. Lastly, the same hierarchical regression analysis was utilized for extreme aggression as the dependent variable. Again neither the second step of the model ( $F(6, 145) = 1.40, ns$ ) nor the third step of the model ( $F(7, 144) = 1.38, ns$ ) accounted for a significant amount of variance in EA.

*Main effects and interaction of opponent factors on social distancing.* To test main effects of opponent factors and participant gender on social distancing, the coded variables for each opponent factor and participant gender were entered simultaneously in a regression analysis. Additionally, age and education were also entered (see above). The main effects model was significant,  $F(5, 146) = 3.39, p < .01$ . However, examination of the beta weights of each variable indicated that age was the only significant predictor, ( $\beta = -.23, p < .01$ ). To test for interaction effects, hierarchical regression analyses were again employed. All possible main effects were entered in the first step, while all possible two-way interactions were entered in the second step, and the three way interaction (i.e., participant gender x opponent SO x opponent GE) was entered in the third step. The overall two-way interaction model was significant,  $F(8, 143) = 3.59, p < .01$ . Within this model, age ( $\beta = -.23, p < .01$ ), opponent SO ( $\beta = .43, p < .05$ ), and the participant gender by opponent SO interaction was significant ( $\beta = -.56, p < .01$ ). These results indicated that gender moderated effect of opponent SO, in that men distanced more toward a lesbian opponent than a straight opponent. For women, social distancing did not differ based on opponent sexual orientation.



### Moderation Analyses

*Moderating effects of sexual prejudice and gender role conformity on aggression.* In order to test for moderation effects, variables hypothesized as moderators (i.e., sexual prejudice and gender role conformity) were first standardized by computing z-scores. Next interaction terms were created with these z-scores and their respective opponent factor. For sexual prejudice, its z-score was multiplied by opponent SO. Likewise, for gender role conformity, its z-score was multiplied by opponent GE. Additionally, participant gender was also multiplied by each standardized moderator variable, and three-way interaction terms were created which multiplied participant gender, moderator variable, and respective opponent factor. To test whether sexual prejudice moderated the relationship between opponent SO and aggression, separate hierarchical regression analyses were performed for each aggression index. In each of these, opponent SO, sexual prejudice, and participant gender were entered in the first step. All possible two-way interactions (gender x prejudice, gender x opponent SO, opponent SO x prejudice) were entered in the second step, and the three way interaction was entered in the third step. As previously mentioned, for IA and EA, race/ethnicity was entered in the first step. For GA, the two-way interaction model was significant,  $F(6, 145) = 2.18, p < .05$ ). Within this model, the interaction of sexual prejudice and opponent SO was a significant predictor of general aggression ( $\beta = .26, p < .05$ ). The results of this interaction suggested that at low levels of sexual prejudice, participants were more aggressive toward a lesbian than a heterosexual opponent, whereas at high levels of sexual prejudice, there were no differences on aggression toward opponents based on sexual orientation. No models accounted for significant variance in latency of aggression. However, for IA, the two-way interaction model was significant,  $F(7, 144) = 2.21, p < .05$ , which yielded significant main effects of race/ethnicity ( $\beta = .17, p < .05$ ),

interaction of prejudice x opponent SO ( $\beta = .28, p < .05$ ), and interaction of gender x opponent SO ( $\beta = .38, p < .05$ ). The results revealed differential effects of prejudice by opponent SO based on participant gender. In women, elevated prejudice predicted higher levels of aggression toward heterosexual women and lower levels of aggression toward lesbian women (see Figure 3.1). In men, sexual prejudice had no effect on aggression regardless of opponent sexual orientation (see Figure 3.2). No models accounted for a significant amount of variance in extreme aggression.

To test whether gender role conformity moderated the relationship between opponent GE and aggression, four separate hierarchical regression analyses were again performed for each aggression index. For GA, opponent GE, gender role conformity, and participant gender were entered in the first step, all two-way interactions were entered in the second step (gender role conformity x opponent GE, gender role conformity x gender, gender x opponent GE, and the three-way interaction was entered in the third step. For IA and EA, race/ethnicity was also entered in the first step. No models accounted for significant variance in general aggression or aggression latency. However, the three way interaction model accounted for significant variance in IA  $F(8, 143) = 2.25, p < .05$ . Within this model, main effects of race/ethnicity ( $\beta = .23, p < .05$ ) and opponent GE ( $\beta = .45, p < .05$ ) were significant predictors of IA. Additionally, gender role conformity x opponent GE ( $\beta = -.50, p < .05$ ), and gender x opponent GE ( $\beta = -.56, p < .05$ ) accounted for significant variance in IA. Finally, the three-way interaction term approached significance ( $\beta = .42, p < .06$ ).

As the three way interaction approached significance, separate analyses were conducted for men and women examining effect of GE and gender role conformity on the nature of initial aggression. For men, the interaction model showed a trend effect ( $F(4, 34) = 2.17, p < .10$ ),

which yielded effects for opponent GE ( $\beta = .50, p < .05$ ) and gender role conformity x opponent GE ( $\beta = -.63, p < .05$ ), indicating that men initially aggressed more toward feminine than masculine opponents. Regarding the moderating effects of gender role conformity, results suggested that low masculine men aggressed more toward feminine than masculine women, whereas high masculine men aggressed evinced no differences based on opponent GE (see Figure 3.3). In women, gender role conformity ( $\beta = .19, p < .05$ ) and race/ethnicity were significant predictors ( $\beta = .31, p < .01$ ). These results indicated that low feminine women aggressed more than high feminine women regardless of opponent GE (see Figure 3.4). Although race/ethnicity accounted for significant variance in IA in women, the effect was not examined further because the results of the aforementioned t-test (see above) revealed that White and non-White participants did not significantly due to unequal variances. Lastly, no models accounted for significant variance in extreme aggression.

*Moderating effects of sexual prejudice and gender role conformity on social distancing.*

The aforementioned standardized moderator variables were utilized, as well as the created interaction terms in analyses with social distancing as the dependent variable. Regarding sexual prejudice as the moderator, a hierarchical regression analysis was performed. Opponent SO, sexual prejudice, participant gender, age, and education were entered simultaneously in the first step, two-way interactions (i.e., gender x sexual prejudice; gender x opponent SO; sexual prejudice x opponent SO) were entered in the second step, and the three-way interaction (i.e., gender x sexual prejudice x opponent SO) was entered in the third step. The second step of the model accounted for significant variance in social distancing,  $F(8, 143) = 5.17, p < .001$ , which yielded significant effects for age ( $\beta = -.22, p < .01$ ), sexual prejudice ( $\beta = .49, p < .01$ ), opponent SO ( $\beta = .34, p < .05$ ), gender x opponent SO ( $\beta = .37, p < .05$ ), and gender x prejudice

( $\beta = -.39, p < .05$ ). These results suggested that prejudice was significantly associated with increased distancing in general. Additionally, given that gender moderated effects of both sexual prejudice and opponent sexual orientation on social distancing, analyses were then conducted separately for men and women. In men, prejudice remained a significant predictor ( $\beta = .31, p < .05$ ) and opponent SO showed a trend effect ( $\beta = .25, p < .09$ ), which indicated that men distanced more as prejudice increased, and they distanced more toward a lesbian than a heterosexual woman. In women, only age was a significant predictor., indicating that as age increased, distancing also increased regardless of opponent factors.

Regarding gender role conformity as the moderator, a hierarchical regression analysis was employed. Opponent GE, gender role conformity, age, and education were entered simultaneously in the first step, while the two-way interaction terms (i.e., gender x gender role conformity; gender x opponent GE; opponent GE x gender role conformity) were entered in the second step, and the three-way interaction (i.e., gender x gender role conformity x opponent GE) was entered in the third step. The first step was significant,  $F(, 146) = 6.17, p < .001$ ), which revealed main effects of age ( $\beta = -.24, p < .01$ ) and gender role conformity ( $\beta = .29, p < .001$ ) accounted for significant variance in social distancing. These results indicated that high gender conforming participants distanced less in general.

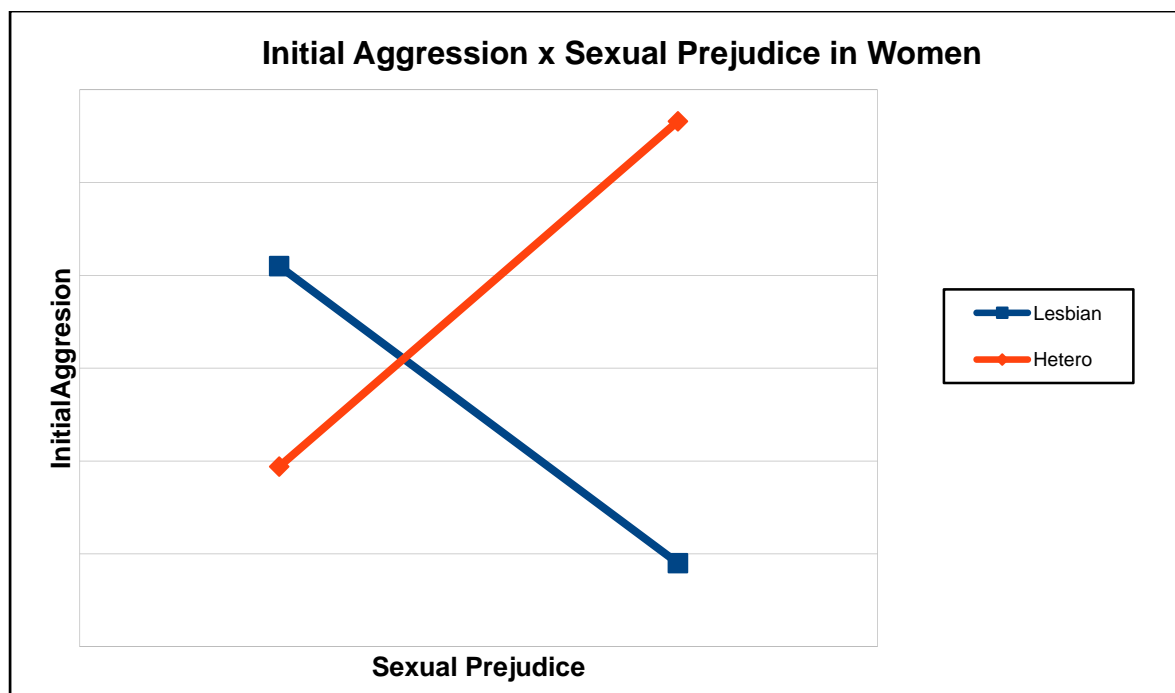


Figure 3.1. Moderating effects of Sexual Prejudice on the relationship between opponent sexual orientation and Initial Aggression in women.

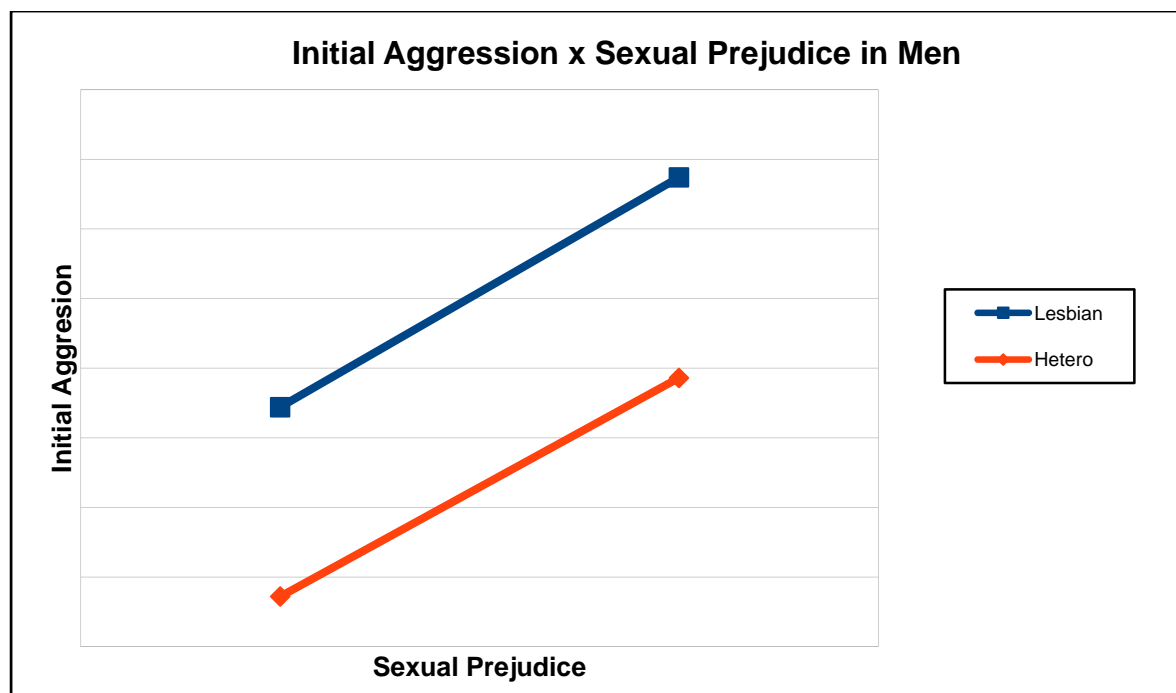


Figure 3.2. Moderating effects of Sexual Prejudice on the relationship between opponent sexual orientation and Initial Aggression in men.

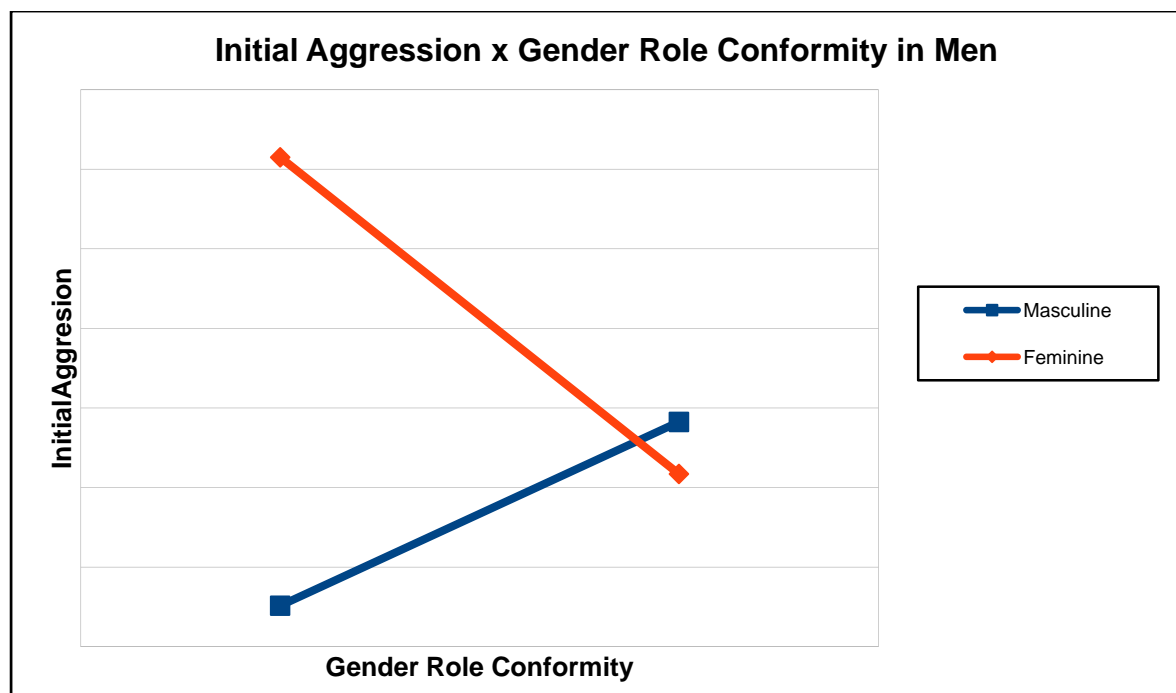


Figure 3.3. Moderating effects of Gender Role Conformity on the relationship between opponent gender expression and Initial Aggression in men .

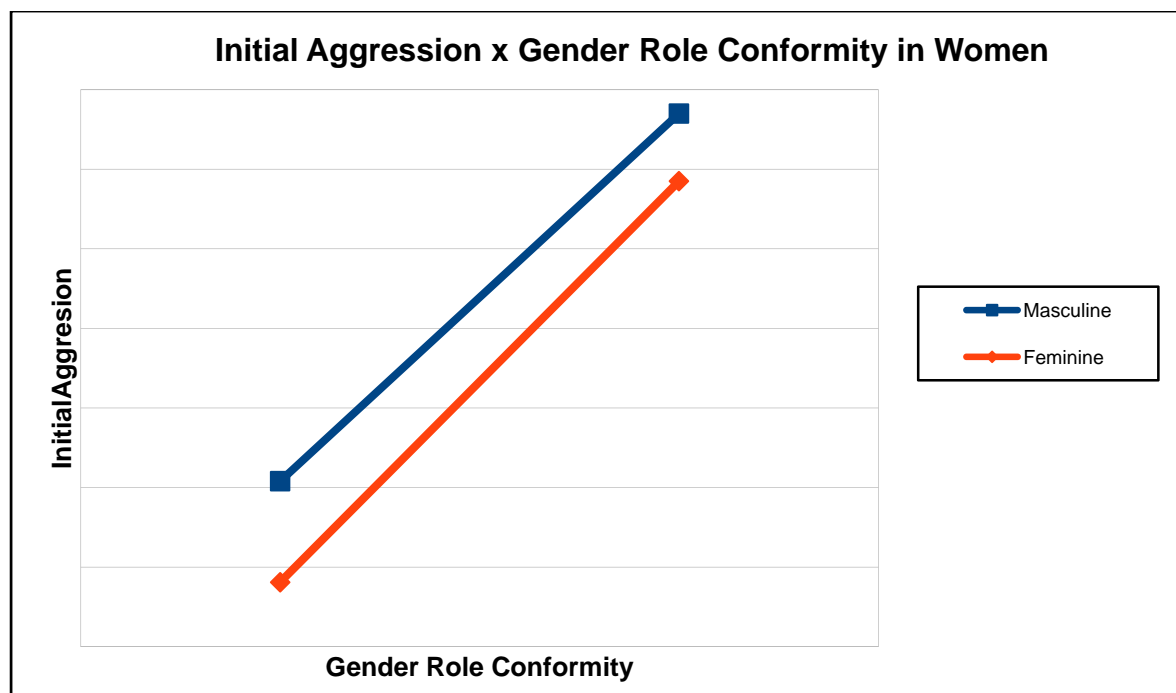


Figure 3.4. Moderating effects of Gender Role Conformity on the relationship between opponent gender expression and Initial Aggression in women.



## CHAPTER 4

### DISCUSSION

The current study sought to replicate previous findings regarding effects of sexual prejudice on aggression based on sexual orientation. Moreover, it intended to expand upon previous research by examining other dispositional characteristics, such as gender role conformity as a risk factor for perpetrated aggression, as well as gender expression as a risk factor for victimization. Furthermore, the study was the first to examine both sexual orientation and gender expression using women as targets. It was expected that findings would emerge that are similar to those of previous studies examining the role of sexual prejudice on anti-gay aggression and those examining gender role violations in women targets. Although some hypotheses were supported, results of the current study revealed patterns in aggressive behavior that are different than those described in previous research. First, as hypothesized, gender alone was unrelated to any outcome variables. However, significant differences on test variables did emerge based on gender. Men were found to have greater (modern) sexist attitudes, higher masculine gender role conformity, and lower feminine gender role conformity than women. Additionally, gender role conformity for men and women related differently to test variables. Feminine gender role conformity was unrelated to sexism and sexual prejudice, whereas masculine gender role conformity related positively to both, which is consistent with previous research (Parrott et al., 2002). Gender was included in all analyses and was treated as a moderator variable in hierarchical regression analyses. Indeed, different patterns of behavior emerged for men and women, which was inconsistent with proposed hypotheses.

In women, regardless of opponent gender expression, low feminine women aggressed more than high feminine. This finding suggests that low feminine women are more likely to engage in behavior that is inconsistent with traditionally feminine behavior (i.e., aggression). In men, a main effect for gender expression of opponent was revealed for nature of initial aggression. Specifically, men initially aggressed at higher levels toward a feminine than a masculine opponent, which was contrary to hypotheses and warrants further discussion. The current study manipulated gender expression by appearance, specifically hair, makeup, jewelry, and clothing. However, in both the masculine and feminine conditions, the opponents verbally and openly expressed strong anti-sexist attitudes. Consequently, endorsement of anti-sexist ideals may have been interpreted as a more extreme gender role violation in feminine than masculine women. Indeed, research has shown that women who violate role norms are at increased risk for perpetrated aggression (Reidy, Shirk, Sloan, & Zeichner, 2009; Reidy, Sloan, & Zeichner, 2009). In these studies, the female confederate displayed gender norm violations by expressing attitudes inconsistent with femininity. In the current study, the first component of gender was introduced via appearance, which arguably contributed to participants' expectations of opponent behavior. Subsequently, endorsement of attitudes surrounding sexism was the second component of gender. Therefore, the results of the current study seem to suggest that feminine women may be more at risk for victimization when they openly endorse ideals that are inconsistent with traditional femininity.

Upon closer examination of the nature of men's initial aggression, results also revealed a moderation effect for masculine gender role conformity. Men who were low on masculine gender role conformity evinced more initial aggression toward a feminine woman than toward a masculine woman, whereas for men high on gender role conformity, no differences emerged.

An explanation of this finding relates to gender role and sexism. As previously mentioned, masculine gender role conformity positively related to sexism. As such, low-masculine men endorsed less sexist ideals, which may indicate that they view even feminine women as equal and, thus, “fair game” during competitive activities. At the same time, low-masculine men engaged in significantly lower aggression toward a masculine opponent. Given that low-masculine men experience lower stress about adhering to gender role norms (Cohn & Zeichner, 2006), men were likely willing to tolerate provocation from non conforming women without retaliating. High-masculine men did not evince differences in aggression toward masculine or feminine opponents. Again, in relation to sexism, it appears that masculine men hold more modern sexist beliefs, which suggests that they have more traditional views of women. As such, these men may not have aggressed toward women regardless of the way she appeared due to societal norms disapproving of violence toward women (Basow, Cahill, Phelan, Longshore, & McGillicuddy-DeLisi, 2007).

Although sexual orientation did not predict increased aggression for men, it did predict men’s social distancing behavior. Consistent with hypotheses, men engaged in greater social distancing toward a lesbian woman than toward a heterosexual woman. This finding parallels those of Swim and colleagues (1999) study, thus indicating that men socially distance similarly to women. However, in the current study, there were no significant differences in distancing behavior for women based on opponent sexual orientation. Therefore, further explanation regarding men’s distancing behavior toward woman is warranted. As proposed by Lott (1995) distancing behavior is a form of interpersonal discrimination. In the context of interactions between men and women, men often engage in distancing behavior by ignoring or, more blatantly, disagreeing, the latter of which relates more to the current study’s paradigm. However,

Lott (1995) also states that men's distancing behavior toward women becomes minimized if and when there is a possibility of receiving sexual or nurturing outcomes. Indeed, this explains men's increased distancing from lesbians in that men certainly cannot expect sexual intimacy and likely do not expect nurturance from same-sex oriented women. Additionally, this explanation remains valid regardless of sexual prejudice. In fact, contrary to hypotheses, sexual prejudice did not influence the relationship between sexual orientation and social distancing for men or women. Interestingly, findings emerged regarding gender role conformity, suggesting that high conforming men and women socially distanced less. Perhaps conforming individuals are more likely to agree in general.

Although sexual prejudice did not emerge as a moderator between opponent SO and social distancing as an outcome in women, it did influence the relationship between opponent SO and multiple indices of aggression. However, the moderation elucidated a relationship that was unexpected and quite puzzling. Results revealed that at low levels of sexual prejudice, women did not differ in their aggression toward heterosexual and lesbian women. However, at high levels of sexual prejudice, women evinced less aggression toward a lesbian woman than toward a heterosexual woman, which certainly warrants further discussion. Literature regarding prejudice has focused on cognitive and affective components of prejudice, as well as their behavioral sequelae. However, research has also investigated processes by which such biased behavior may be reduced or inhibited. According to Devine (1989), individuals who are both high and low in prejudice engage in stereotypical thinking. However, she argues that only low-prejudice individuals can monitor behavior following appraisals of a compunction process. Compunction theory (Devine, 1989) suggests that when people engage in behavior that is discrepant from their personal beliefs, they experience guilt. For example, a white woman who is minimally

prejudiced toward African Americans and considers herself to be an equal rights proponent, quickly locks the doors of her car when an African American man walks by her vehicle. The man smiles to her and walks by her car toward a store. The woman, having engaged in behavior that is inconsistent with her personal beliefs, experiences compunction, which influences (inhibits) future biased behavior. A later study investigated this process further (Devine, Monteith, Zewerink, & Elliot, 1991) and, specifically, investigated affective consequences of discrepant (hypothetical) behavior. Results suggested that individuals low in prejudice internalize low prejudice standards, which in turn contributes to guilt toward the self. In contrast, high prejudice individuals internalize societal standards, and thus purport to engage in behavior consistent with societal standards in response to negative affect toward the target group.

Indeed, results of past research investigating anti-gay prejudice (e.g., Parrott et al., 2008) have provided support for Devine's (1989; 1991) theory. Results of these past studies have indicated that men with high levels of anti-gay prejudice, experience negative affect, particularly anger, when confronted with gay men, and consequently, exhibit elevated levels of aggression toward gay men. Perhaps these highly prejudiced men engage in behavior consistent with internalized societal standards (i.e., men can be aggressive; discriminatory behavior toward homosexuals is acceptable). With regards to findings from the current study, highly prejudiced women may have refrained from engaging in aggressive behavior in order to be consistent with internalized societal standards of acceptable behavior for women (i.e., women should not be aggressive). This argument provides further support for arguments regarding the function of aggression. Baumeister and Campbell (1999) contend that aggression has multiple functions, one of which is ego-defensive and extrinsically-motivated. It is argued here that absence of aggression may serve the same function, particularly in women. Therefore, women refrain from

engaging in discriminatory or aggressive behavior to gain extrinsic reward of maintaining both personal and group (i.e., heterosexual women) self-esteem. This seems to be especially true for women who have deeply engrained ideals about societal standards (i.e., highly prejudiced women).

At the same time, highly prejudiced women exhibited higher levels of aggression toward heterosexual women, which suggests that underlying processes (i.e., motivation) of aggressive behavior may have been different when the target was heterosexual. At the outset of the study, the opponent sexual orientation manipulation was considered more salient to other variables (e.g., involvement in organizations), as it related to components of identity. Therefore, it was assumed that when heterosexual, gender conforming participants interacted with a lesbian, conceivably a gender non-conforming opponent, they would perceive the opponent as a member of an out-group. As such, the hypotheses were presented under this notion while utilizing Social Identity Theory (Tajfel & Turner, 1986) as support. However, it is possible that when ostensible heterosexual opponents strongly endorsed anti-sexist beliefs and report engagement in “gay” activities (i.e., Lambda Alliance and Human Rights Campaign), which are arguably different from typical heterosexual, gender-conforming students, participants began to see these opponents as in-group members behaving like members of an out-group. This appears to have been particularly salient for women endorsing high levels of anti-lesbian prejudice. Therefore, these women may have been especially sensitive to their heterosexual counterparts engaging in behavior that is typical for lesbians, and thus punished their opponents for “misbehaving.” This argument is consistent with past findings regarding girls’ accepting attitudes toward aggression in certain contexts (Crick & Werner, 1998). Additionally, Baumesister and Bushman (1998) found that narcissism and insult leads to aggression toward the insulter. Although the current

study did not measure narcissistic traits, it is possible that high prejudice women felt insulted by fellow in-group members, which consequently resulted in aggression toward the generator of that insult (i.e., heterosexual woman acting like a lesbian woman). Consistent with arguments proposed by Baumeister and Campbell (1999) and Brown (1968), these women sacrificed extrinsic rewards (i.e., behaving consistently with societal norms) in order to “maintain face.”

The findings from the current study (both consistent and inconsistent with hypotheses) shed further light on the multi-faceted nature of aggressive behavior. The General Aggression Model still provides a comprehensive rationale for why people engage (or refrain from engaging) in aggressive behavior. Regarding *inputs*, the *person factors* of the current study that were directly measured were gender role conformity, sexual prejudice against lesbians, sexist attitudes, and a number of demographics. The experimental paradigm attempted to manipulate *situational factors*, specifically relating to the ostensible opponent. Based on previous literature, it was expected that aggressive *outcomes* would emerge based on the aforementioned factors. However, the *routes* (e.g., cognitive and affective components) were not measured and, likely, would have provided further explanation for inconsistent and unexpected findings. Indeed, previous studies have uncovered affective components that have influenced aggressive responding (e.g., Parrott et al., 2008). Future research on anti-lesbian aggression should examine “route” components, especially stereotypes given that they represent cognitive components of prejudice (Jones, 2001). Given that these components were not included in the current study, the underlying mechanism by which the components of the GAM contribute to aggression (or lack thereof) is left to speculation.

As discussed above, the current study yielded findings that are consistent with null hypotheses. Null findings, although they do not have any implications, can stimulate questions

regarding the experimental paradigm and manipulations utilized in the current study.

Specifically, the sexual orientation manipulation utilized in the current study merely involved the opponent's mention of a "girlfriend" or a "boyfriend." Additionally, the opponent mentioned membership in LGBT organizations, although they also reported involvement in non-LGBT organizations. Therefore, perhaps the sexual orientation manipulation was not salient enough to trigger aggressive behavior based on the opponent's sexual orientation. Previous research utilizing samples of men and examining aggressive behavior toward gay men has suggested that exposure to same-sex erotica influences affective responses and contributes to engagement in bias-motivated aggression (e.g., Bernat et al., 2001). However, the current study did not utilize or manipulate exposure to erotic stimuli. It is possible that aggression toward lesbians but not heterosexual women would have been heightened following exposure to female-female erotic cues. Moreover, research has also shown that less graphic and potentially less threatening cues (i.e., expressions of non-sexual affection between two men) have elicited similar results, when utilizing samples of men (Parrott, et al., 2008). Once again, it is possible that exposure to any form of relationship behavior between two women may have contributed to increased aggression toward lesbian but not straight targets. Salience of sexual orientation manipulation must be considered when conducting future research.

The relationships between demographic and outcome variables are noteworthy. As previously mentioned, race/ethnicity was a significant predictor of aggression. Although White and non-White participants did not significantly differ with respect to certain aggression indices, it is likely that the inequality of variances was due to such unequal sample sizes. Nevertheless, the race demographic was significantly related to aggression and remained a significant predictor when combined with other variables, indicating that components surrounding racial/ethnic



identity play a key role in behavioral outcomes. Past research has suggested that a non-White individuals endorse past aggression toward females more than White individuals (Harris, 1992) and express more acceptance of retaliatory aggression toward females than Whites (Haff, Floyd, and Shinn, 2006). Therefore, the significant relationship between race and aggression is not surprising. However, this result is to be interpreted with caution. One's race does not necessarily indicate increased aggressive behavior. Multiple components are contained in one's racial identity. Cultural factors play a pertinent role in aggressive behavior that likely interacts with both dispositional variables and opponent characteristics. For example, it has been found that Black women hold more negative attitudes toward lesbians than do White women (Vincent, Peterson, & Parrott, 2009). Although the current study did not examine interactive effects of race and opponent factors, it is possible that race could have influenced bias-motivated aggression. However, race/ethnicity, much like gender, is highly influenced by socialization, thus the implications of the findings here are limited. Future research should seek to investigate differences based on race/ethnicity, and other cultural characteristics, as they relate to aggressive behavior. Moreover, age emerged as a significant predictor of social distancing, specifically, predicting increased distancing. Therefore, it appears that younger age is related to a tendency to express ideas similar to others, even if it is possibly different from personal beliefs. It is possible that undergraduates who are younger in age may be more likely to endorse values similar to others, regardless of sexual orientation or gender expression in an effort to be accepted. Future research should investigate effects group conformity to further examine this phenomenon.

Several limitations of the current study deserve mention. First, the sample utilized was rather homogenous, as it was obtained in a university setting, with a majority of Caucasian, single, and female participants. Inclusion of non-university participants with more variable

racial identities would have increased external validity of the findings or allowed for potential between-group comparisons to be made regarding null findings (e.g., alternative hypotheses evident in a community sample versus an undergraduate sample). In a similar vein, a larger, stratified sample based on race may be utilized. Moreover, sample sizes with respect to gender were unequal, thus limiting the confidence in gender differences findings. Additionally, the methodology during the experimental session was somewhat taxing, which may have contributed to participant exhaustion and lack of motivation to participate in the bogus reaction time task. Furthermore, no measure of social desirability or demand characteristics was included, which also may have influenced aggressive behavior in the laboratory (e.g., in the presence of an experimenter). Although participants were apparently naïve to the measurement of aggression, they were informed that they could “punish” their opponent as part of a competitive game. It is possible that individuals who want to appear favorably to others may inhibit engagement in negative (i.e., punishment) behavior. Last, Social Identity Theory posits that individuals denigrate out-group member in order to enhance self-esteem. However, the current study did not include a measure of collective (i.e., group) self-esteem. Inclusion of such a measure would have allowed for assessment of possible disruptions to self-esteem, as well as mechanisms (i.e., aggression) by which self-esteem is maintained. Future studies examining in-group/out-group behavior should include such a measure.

Despite these limitations, the current study shed much light on the complex intertwining of factors that contribute to aggressive behavior. Results support past findings regarding the importance of dispositional variables that explain supposed gender differences. The current study suggested that men and women engage in aggression under different circumstances and according to different internal characteristics. Specifically, the current study’s findings seem to

suggest that prejudice influences women's aggression toward lesbian women differently than prejudice influences men's aggression toward gay men in previous studies. It appears that sexually prejudiced women's appraisal processes following experiences with same-sex oriented women possibly include behavioral inhibition of aggression, whereas past studies with men have shown an opposite effect. Moreover, the current also suggested that men's gender role conformity influences aggression toward women, whereas sexual prejudice does not. Lastly, findings confirm theories regarding men's distancing toward women. Collectively, results of the current study stimulate future research, particularly questions surrounding gender, sexual orientation, and gender role conformity, as they relate to aggression based on components of identity in targets.

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