

THE CONTINGENCY OF FEMININE VICTIMIZATION: MODELING PATRIARCHAL
AGGRESSION THROUGH IDEOLOGICAL ATTITUDES AND AMBIVALENT SEXISM

by

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(Under the direction of Amos Zeichner)

ABSTRACT

Women continue to be disproportionately affected by sexual and intimate partner violence. Moreover, accumulating evidence indicates that women who are perceived as deviating from prevailing gender role norms are at increased risk for the receipt of physical aggression. Patriarchal aggression of this type begs identification of the mechanisms by which gender norms fashion and reinforce social hierarchies that subordinate women. Therefore, in the current study, a sample of 170 collegiate men participated in a sham aggression paradigm against a female confederate who projected either a restricted or nonrestricted socio-sexual orientation. Aggression was measured in terms of frequency, intensity, and duration of electric shocks ostensibly administered by the participant to his fictional opponent. Results suggest the potentiating effects of ambivalent sexism and abstract ideological attitudes on misogynistic aggression. These findings are discussed in terms of the construction and contingency of male aggression and female victimization.

INDEX WORDS: Patriarchal aggression, Intimate partner violence, Ambivalent sexism, Right wing authoritarianism, Social dominance orientation, Sociosexual orientation

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CHAPTER 1

INTRODUCTION

Approximately 5.3 million intimate partner victimizations occur among U.S. women ages 18 and older at the hands of their male partners each year, resulting in nearly 2 million injuries. In fact, it has been estimated that 30-55% of women treated in U.S. emergency rooms present with injuries related to domestic violence (National Center for Injury Prevention and Control, 2003). Epidemiological data of this type reveals important differences in the pattern of victimization experienced by women in comparison to men. While research reveals a large degree of “gender symmetry” in the most common forms of heterosexual relationship violence (e.g., slapping, throwing an objects at one’s partner), especially in societies in which women have achieved greater social status (Straus, Gelles, & Steinmetz, 1980), across the globe, the most serious forms of interpersonal violence are almost exclusively perpetrated by men (Daly & Wilson, 1988, 1990). Women generally experience multiple forms of violence (physical and sexual) in their lifetimes, while men’s receipt of violence is generally limited to physical attacks. For example, while the CDC estimates that nearly 1 in 5 women have been raped in their lifetime, only 1 in 71 men are estimated to suffer this violation (Black et. al., 2011). Furthermore, women report significantly more severe short-term and long-term residuals of the received violence including Post-Traumatic Stress Disorder (PTSD) symptoms and injury (Black et. al., 2011). Such striking gender differences in the incidence, pattern, and consequences of violence against women provide compelling evidence for the systematic influence of gender on this deleterious phenomenon.

Patriarchal Terrorism

The widespread violent assault of women's bodies produces a social reality whose consequences extend beyond those subject to direct violation of their physical integrity. As a tangible hallmark of the female experience, violence is an ever-present threat for women. As such, men's acts of violence against women operate as a form of psychological terrorism—a potent symbol of the threatening epidemiological reality (For a historical case-study of gender-linked violence as a form of psychological terrorism see Hall, 1984). The notion that male dominance is not maintained by force alone is captured in Johnson's identification of *patriarchal terrorism*—a form of terroristic control of women by their partners that involves the systematic use of not only violence but also economic subordination, isolation, and other tactics” (Johnson, 1995, p.284).

In a 1995 review of large-sample survey research utilizing qualitative and quantitative data gathered from women's shelters across the country, Johnson argued for a clear distinction between systematic patriarchal/intimate terrorism and the less insidious “occasional outbursts” of intimate partner violence that bubble up within dyads. For instance, differential patterns of gender symmetry arise from survey research methodology than that tapped by research with shelter populations and criminal justice and divorce court data. The latter records tend to indicate a lack of gender balance and instead, by-and-large describe men's terroristic attacks on their female partners. Johnson thus makes a case “for two forms of violence, one relatively nongendered, the other clearly patriarchal” (Johnson, 1995, 291). Moreover, the discovery of these subgroups was replicated via cluster analyses in four British samples (Graham-Kevan & Archer, 2003). Given such findings, Johnson has called upon researchers to integrate the distinction between intimate terrorism and common couple violence into the development of

interpersonal theories of violence and intervention efforts.

Copious research has been conducted to examine pertinent risk factors that contribute to intimate partner violence (IPV), including social context and characteristics of victims, as well as motivation and personal traits of the perpetrator. This work has resulted in a sizable body of literature documenting potential causal pathways to various forms of heterosexual intimate partner violence (IPV). However, this literature has yet to be systematically organized in terms of Johnson's subgroup distinctions; due in part perhaps to the lack of clear guidelines for doing so.

The General Aggression Model: Instrumental and Hostile Aggression

In order to house information gathered in the realms of cognition and behavior in a comprehensive conceptual framework, it is useful to consider a current theoretical model of aggression in the absence of an empirically derived model of patriarchal terrorism. As considerable overlap exists among the theories of causal and functional variables associated with aggressive behavior, Anderson and Bushman (2002) sought to integrate existing theories into one model known as the General Aggression Model (GAM). The authors suggest that the utility of this model lies in the fact that: "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.

As a model of aggression, the GAM is particularly well suited to structuring causal explanations of aggressive behavior within the contexts of individual attitudinal and personality characteristics. The model takes into account those factors tethered to the *person* as distal *inputs* influencing the likelihood of aggressive outcomes. Therefore, the GAM grants tremendous relevance to those variables each individual brings to the social interaction.

Within an aggressive social encounter, a distinction is also made between proximate and ultimate goals (Bushman & Anderson, 2001). The authors of the GAM view intention to harm as a necessary feature of all aggression, but it is sufficient only as a proximate goal. Aggression can be further distinguished into types at the level of the ultimate goal. If the singular goal of an aggressive act is the intention to harm, it can be considered *hostile*. However, the motives of aggressive behavior are often mixed. A conceptualization of *instrumental aggression* (Berkowitz 1993, Geen 2001) as a premeditated means of obtaining some goal other than harming the victim that is proactive rather than reactive (i.e. exclusively hostile) implies a proximate goal of causing harm and an unidentified universe of potential ultimate goals. Thus, to shed light on the nature of aggression of this mixed motive type, attention should be focused on those factors that inform the formation and maintenance of its more fundamental intent such as asserting power or symbolically enacting dominance. From this perspective, it becomes important to ask the question, what domains produce compelling motivations to aggress in which harm is a by-product of a larger goal? Considering the frequency with which men and women socially and intimately interact, particularly in light of the potential for those interactions to garner aggressive outcomes, the attitudes and assumptions relative to gender roles that individuals bring to an

interaction are prime inputs for analysis for reaching a more comprehensive understanding of patriarchal terrorism.

Gender Norm Adherence and Laboratory Aggression. Evidence suggests that antagonistic attitudes and feelings toward women in the form of male chauvinism could fuel impulsive, hostile aggression in the form of domestic violence (Eades, 2003). Furthermore, accumulating laboratory research indicates that deviations from prevailing gender role norms confer an increased risk for the receipt of physical aggression, in particular by those who strongly adhere to masculine gender role norms.

To date, in laboratory settings, effects of gender role violations on aggressive victimization have been studied predominantly in men. Moreover, the violations presented in these studies typically involved displays of intimacy (sexual and otherwise) in male-male dyads. Predictive routes linking men's gender role orientation with aggressive behavior against gay men have been explicitly drawn through the affective experience of perpetrator anger (Parrott & Peterson, 2008; Parrott, Peterson, Vincent, & Bakeman, 2008; Parrott & Zeichner, 2008; Parrott, Zeichner, & Hoover, 2006) in such laboratory investigations. Furthermore, conformity to male norms has been shown to predict greater levels of aggression by men competing against ostensibly gay men than against men whom they believe to be heterosexual in a laboratory paradigm (Bernat, Calhoun, Adams, & Zeichner, 2001).

Relatively lacking in body of literature outlined above, however, are women as actors and targets in those processes from which displays of aggression and gender emerge. Such empirical work is particularly imperative in light of troubling statistics regarding aggression directed at populations of women who display gender in ways that deviate from traditional norms of femininity—a subset of which include lesbian, gay, bisexual, and transgender (LGBT) identified

individuals. The Federal Bureau of Investigation reported that, of the total number of hate crime incidents in 2008, over 1,700 assaults were committed against members of a sexual minority, of which 12% were committed toward lesbians (Federal Bureau of Investigation, 2008). Individuals who violate gender role norms by having atypical gender expressions may also become victims of anti-gay or anti-lesbian aggression. 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).

Recent research investigating aggression against gender role violating females has shown that women who conform to traditional gender roles become angry after viewing a videotape depicting female gender role violations (Parrott & Gallagher, 2008). Moreover, Reidy, Sloan, and Zeichner (2009) found that women displayed more physical aggression toward a female confederate who violated traditional feminine gender roles as portrayed during verbal interview responses. These findings indicate that attitudes supportive of traditional gender roles confer increased risk for aggressive outcomes, even in the absence of heightened levels of perpetrator masculinity. Research demonstrating that women who value femininity are more likely to respond with anger and aggression when confronted with a norm-violating female target suggests the importance of considering both gender role adherence and masculinity as risk factors for aggressive outcomes.

As the constructs of masculinity and gender role conformity each appear to confer specific risk for aggressive responding, men endorsing high conformity to the male gender role represent a population at particularly high-risk for the enactment of aggressive behavior towards gender-nonconforming targets. Indeed, laboratory studies assessing the effect of female gender role violations on laboratory aggression by men have demonstrated that hypermasculine men are

more aggressive toward a female confederate who violated feminine gender role norms (Reidy, Shirk, Sloan, and Zeichner, 2009). The laboratory studies discussed above clearly demonstrate that attitudes and beliefs about gender are avenues through which distal motivations to aggress may germinate.

However, industrial societies dictate a fairly strict inhibition against men being violent toward women in general (Archer, 2000). For example, when men are asked to respond to vignettes designed to elicit anger, they report a greater likelihood of responding aggressively if the provocation comes from a male target as opposed to a female target (Harris 1994), thus supporting the influence of a dominant social message (e.g. women both need and deserve the protection of men) on men's self-reported behavior. In light of the moral proscription against public displays of female-directed violence, a direct causal link between male chauvinism and impulsive aggression may only be relevant to men evincing personality pathology (i.e. psychopathy). Furthermore, focusing on this proximate link colludes theorizing causal pathways between more nuanced sexist attitudes and potential distal motivations for instrumental, patriarchal aggression.

Ambivalent Sexism Theory

Lacking in a simple explanatory model linking chauvinism to violent victimization of women by men is the failure to capture the complexity of modern sexist attitudes. Not only do attitudes towards women encourage protection from male violence, research by Eagly and Mladinic (1993) has demonstrated that both men and women generally have more favorable overall attitudes towards women than men. Women are attributed a set of overwhelmingly "positive" traits. Such findings fly in the face of theories that equate prejudice with unalloyed

antipathy (Allport, 1954), forcing researchers to represent and examine a multifaceted prejudicial ideological set that renders women both adored and, simultaneously, universally disadvantaged.

In an effort to capture the dual nature of modern sexism, Glick and Fiske (2001a) coined the construct of ambivalent sexism and formulated a scale with which to measure its subtypes, namely, *benevolent* and *hostile sexism* titled the Ambivalent Sexism Scale. Glick and Fiske defined benevolent sexism as “as a set of interrelated attitudes toward women that are sexist in terms of viewing women stereotypically and in restricted roles but that are subjectively positive in feeling tone (for the perceiver) and also tend to elicit behaviors typically categorized as prosocial (e.g., helping) or intimacy seeking (e.g., self-disclosure)” (Glick & Fiske, 1996, p.491), whereas hostile sexism represents an expression of antipathy toward women in line with Allport’s original conceptualization of prejudice. These constructs have been demonstrated to be cross-culturally prevalent. In fact, data from a 19-nation study in which responses from more than 15,000 people who completed the Ambivalent Sexism Inventory were gathered, demonstrated that countries high in hostile sexism were invariably high in benevolent sexism (Glick & Fiske, 2001a). Additionally, within samples, benevolent and hostile sexism are moderately, positively correlated (Glick & Fiske, 1996), suggesting that an individual must negotiate both ideologies simultaneously.

Benevolent Sexism: A Legitimizing Ideology. Though the title *benevolent* may sound benign, it is important to acknowledge the negative implications of subjectively positive stereotypes. Paternalistic attitudes have served as ideological justification for such violence-saturated enterprises as the imperial carving up of Africa by the West and slavery in America. Glick and Fiske have demonstrated that men’s sexism scores tended to be strongly related to gender inequality within a country as measured by United Nation’s measures of gender and

human development (Glick & Fiske, 2001a). This finding suggests that Ambivalent Sexist attitudes may justify gender inequality within a country. Benevolent sexism appears to act hand-in-hand with its more hostile complement to legitimize inequality between groups and disarm women, in turn perpetuating hostile manifestations of sexist attitudes.

Research utilizing the Ambivalent Sexism Scale supports a model in which benevolent sexist attitudes are related to overtly hostile attitudes and behavior. Women who scored higher on benevolent sexism were more likely to excuse not only benevolence-driven discrimination by non-intimate men but also overtly hostile discrimination by a husband (Glick & Fiske, 2001a). In other words, women are more likely to tolerate, rather than challenge, sexist behavior when the sexist's motivation can be interpreted as being protective. Furthermore, a 2009 study by Expósito and colleagues revealed that in contrast with hostile sexism, women's benevolent sexism predicted fears of marital violence as evidenced by correlational associations. In addition, benevolent sexism predicted viewing the husband as more threatened by his wife's promotion and more likely to aggress against her. Literature also demonstrates that in contrast with hostile sexism, those who reported having higher levels of fear of crime also provide greater endorsement of benevolent sexism (Phelan et al., 2010), and that those higher in both benevolent and hostile sexism were more likely to minimize the impact they attribute to domestic violence. Those high only in benevolent sexism were more likely to blame the victim (Allen et al., 2009). These findings support a view of benevolent sexism as a "legitimizing ideology" that perpetuates the status quo of gender inequality through paternalism.

In the context of anti-women violence in American society, benevolent sexism appears to maintain and exacerbate gender inequality through the induction of emotions such as fear and tolerance. Benevolent sexism's clout as an enforcer of gender inequality persists in the context of

the prevalence violence against women in modern society (National Center for Injury Prevention and Control, 2003). In other words, because the feared outcome (physical harm at the hands of men) is a tangible reality of the female experience, an ideology that places women in a protective role acts in the interests of both women (who seek to avoid physical harm in a violent world) and men (who benefit from the maintenance of social power). Nevertheless, the literature is lacking in its ability to demonstrate whether or not men's paternalistic notions of women is predictive of actual perpetration of physical aggression against them or just the fear and tolerance of such victimization.

Cognitive Dissonance and Gender Subtyping. The predominance of the seemingly contradictory (and mutually reinforcing) contents of hostile and benevolent attitudes of women as both idolized and denigrated, highlights the ambivalence of modern sexist attitudes that must be negotiated on both a societal and individual level. As a consequence of these conflicting feelings about women, Glick and Fiske posit that sexist men oscillate between attitudes of opposing valence. In an effort to avoid internal conflict in the form of cognitive dissonance, they point to the ways in which sexist men respond in polarized behavior depending on the target to which they respond (1996). For example, research has demonstrated that hostile sexism is more likely to be directed towards a "career woman" while benevolent sexism is more likely to be directed towards a "homemaker" (Glick et al., 1997). These findings suggest that, rather than lumping all women into a single category for which they possess dissonant beliefs, sexist men engage in a process of subtyping.

The elaboration, encapsulation, and evaluation (E³) model of subtyping (Green et al., 2005) highlights the processes by which stereotypes can be *elaborated* beyond broad categories through the development of more specific subtype categories to *encapsulate* instances of

stereotype deviation into the larger category. Subtypes and archetypes are then *evaluated* as either favorable or unfavorable. The attitudes elicited and expressed in regards to a particular individual are a reflection of these evaluative judgments.

In the case of female stereotypes, women are split into “good” and “bad” subtypes and each set of attitudes (either hostile or benevolent) is reserved for a particular type of woman. Ambivalent Sexism Theory posits that the evaluative judgments ascribed to subtype categories are based upon whether or not a woman upholds her socially assigned feminine role obligations (Glick & Fiske, 1996). Therefore, the theory predicts that women who demonstrate conformity to feminine norms are deemed “good” and elicit benevolent attitudes from sexist men, while nonconforming women are deemed “bad” and would elicit hostility.

The Madonna-Whore Dichotomy and Sociosexuality. Research on gender subtypes reveals that sexuality is a key domain within which gender stereotypes are based (Prentice & Carrazana, 2002). In other words, different sets of social rules govern expectations for how men and women “ought” to behave sexually. Such stereotypes prescribe a double standard for male and female sexual behavior that categorizes female sexuality within a polarized *Madonna-whore dichotomy*. Feminist scholars have long discussed this cultural complex, although the label appears to have stemmed from scholarship linking the influence of Christian thought with essentialist notions about sex and the body (Ruether, 1974). The Madonna-whore dichotomy casts women as either virginal and pure or promiscuous based on their adherence to or deviation from a dominant cultural script that tells women, “to look sexy but say no, to be feminine but not sexual, and to attract boys’ desire but not to satisfy their own”(Durham, 1998, p.172). This script is defined “in relation to and against the natural sexual aggression and prowess of a man” (Conrad, 2006, p. 310). Thus, engagement in casual sex simultaneously serves as a means for

men to accomplish manhood and for women to demonstrate their affiliation with the negatively evaluated subtype of womanhood—whore.

Casual sexual behavior has been the focus of significant scientific scrutiny in the past decade. A recently emerging body of literature in social and personality psychology on the behaviorally operationalized construct *sociosexuality* (defined as a willingness to engage in uncommitted sexual relations) has investigated the correlates of promiscuous sexual behavior and individual differences in variables such as self-esteem and responsibility (e.g. Hofer et al., 2010; Jonason et al., 2011). However, much less empirical work has been devoted to an exploration of the influence of gender stereotypes on the variability in women's *sociosexual orientation* and the social reactions elicited by women who demonstrate behavior in the *unrestricted* range of this dimension (for a broader discussion of terms related to sociosexuality, see Simpson & Gangestad, 1991).

Reactions to unrestricted female sociosexuality are important to consider in the context of subtyping and Ambivalent Sexism. Differentiating the evaluation and categorization of promiscuous women from chaste women in terms of sexist attitudes may allow for explication of specific causal routes motivating instrumental aggression. Indeed, researchers have theorized the potential for the removal of social inhibitions against male-perpetrated aggression against women in the face of sexual nonconformity (Rudman & Glick, 2008). In other words, men's greater social status and access to resources places them in a position of dominance. Because of the relative lack of social inhibitions experienced by the powerful in regards to how they treat subordinates (Keltner, Gruenfeld, & Anderson, 2003) men's likelihood of engaging in female-directed violence is enhanced. Furthermore, the fact that men who murder their female partners most often cite suspected infidelity as a rationale (Wilson & Daly, 1996) suggests the presence of

sexual motives underlying patriarchal aggression. Thus factors of dominance, control, and power are centrally implicated in theories addressing men's violent reactions to women's sexual impropriety. As explained by Rudman & Glick: "When women challenge male authority or violate ideals of feminine modesty, violence can swiftly replace protection...such violence often occurs within intimate relationships because male partners have strong motivations to control their female partner's behavior" (2008, p.260).

Ideological Attitudes

Regardless of a female target's self-presentation, the paternalistic nature of the ideology comprising benevolent sexism (i.e., women are special and require unique care) seems to render the relationship between men who endorse benevolent sexist beliefs and violence against women conceptually incompatible. However, paternalistic cognitions about women's roles may comprise an indirect route to outcomes of violence through ultimate goals that are not specific to gender attitudes but, rather, more deeply embedded in individual differences relative to a propensity to hold prejudiced and ethnocentric beliefs. Stated differently, it is possible that ambivalent sexists may be motivated to aggress against women, not because their paternalistic attitudes directly drive such behavior, but because benevolent sexism is a proxy for an individual proclivity to endorse a broader set of *ideological attitudes*.

Ideological attitudes are abstract in content, in that they do not refer to a specific group, and can be conceptualized as antecedents of prejudice (Sussenbach & Bohner, 2011). Two individual-difference dimensions of a propensity to hold ideological attitudes have received empirical support: Social Dominance Orientation (SDO; Sidanius and Pratto, 1999) and Right Wing Authoritarianism (RWA; Altemeyer, 1981, 1998). Scales measuring both SDO and RWA

have been shown to predict a broad range of intergroup attitudes and are particularly powerful predictors of chauvinistic ethnocentrism and generalized prejudice (Duckitt et al., 2002).

Pratto and colleagues (1994) define Social Dominance Orientation as “one’s degree of preference for inequality among social groups,” and have demonstrated strong positive correlations between SDO and sexism even when controlling for gender (Pratto et al., 1994). The theory upon which this construct rests posits, “societies minimize group conflict by creating consensus ideologies that promote the superiority of one group over another,” and identifies ideologies that promote or maintain group inequality as the tools that legitimize discrimination. “To work smoothly,” Pratto writes, “these ideologies must be widely accepted within a society, appearing as self-apparent truths; hence we call them *hierarchy-legitimizing myths*.” (Pratto et al., 1994, p.741). The extent to which one desires that the in-group to which they belong dominate and be superior to out-groups (i.e., their Social Dominance Orientation) informs their preference for hierarchy-attenuating legitimizing myths. In other words, those who are high in Social Dominance Orientation are likely to endorse prescriptive and descriptive stereotypes that contribute to the maintenance of a status quo characterized by unequal power relations. Moreover, Social Dominance Theory purports that the paternalistic beliefs about women represented by benevolent sexism exemplify the construct of a legitimizing myth.

The finding of individual differences in one’s preference for social dominance as an individual trait (distinct from any of the "Big Five" personality traits, including extraversion and neuroticism; Pratto et al., 1994), suggests that different types of people (i.e., those high or low in SDO) are differentially motivated to adopt sexist attitudes. Indeed Social Dominance Theory argues that “one can test whether a particular ideology is serving as a legitimizing myth and what type of myth it is by examine whether the ideology in question mediates the relationship between

SDO and endorsement of concrete social policies with clear hierarchy-enhancing or hierarchy attenuating outcomes” (Pratto et. al., 2006, p.287-288). For example, the notion that America’s immigration policy is free of racial bias and fair can be regarded as a hierarchy-enhancing myth if it can be shown to positively mediate the relationship between SDO and support for a hierarchy-enhancing social policy (e.g. University System of Georgia’s Board of Regent’s ban on undocumented students).

Additionally, dominance has been demonstrated to be positively related to self-report aggression measures in men (Johnson, Burk, & Kirkpatrick, 2007), while "self-perceived superiority" has been demonstrated to be positively related, and "social inclusion" inversely related, to behavioral aggression (Kirkpatrick, Waugh, Valencia, Webster, 2002). Thus, those individuals motivated ideologically to adopt benevolent sexism may be similarly likely to turn to violence in order to reiterate and reinforce this belief set.

The ideological attitude represented by Right Wing Authoritarianism is based on a refinement of a theory of the authoritarian personality style (Adorno et al., 1950). The RWA scale measures the three covarying attributes of conventionalism, authoritarian aggression, and authoritarian submission. The items in the pertinent scale represent beliefs in coercive social control, in obedience and respect for existing authorities, and in conforming to traditional moral and religious norms and values (Duckitt & Sibley, 2009). As it relates to polarized sexist attitudes captured by Ambivalent Sexism theory, authoritarianism may be linked to aggressive responding to nonconforming women via conventionalism, “as women who are violating traditional gender roles...pose an acceptable target for retributions that is authoritarian aggression toward nonconformists” (Sussenbach & Bohner, 2011, p.377).

Despite the fact that both SDO and RWA predict attitudinal and behavioral phenomena associated with ideologies of prejudice (the same ideologies that are correlated with self-report measure of aggression), the two scales seem relatively independent, often being nonsignificantly or only weakly correlated with each other (Altemeyer, 1998; McFarland, 1998; McFarland & Adelson, 1996; Sidanius & Pratto, 1999). Such findings suggest that these constructs might tap distinct dimensions of ideological attitudes and have encouraged empirical investigations attempting to elucidate their distinctions. For example, in a recent study examining the relationship between ideological attitudes and the acceptance of myths pertaining to sexual aggression, researchers demonstrated both SDO and RWA to be positively correlated with rape myth acceptance; however, only RWA explained unique variance when controlling for other measures of intolerant belief systems (e.g. xenophobia, sexism, homophobia, anti-Semitism). The authors concluded that “rape myths and victim blaming are targeting a particular subset of (nontraditional) women instead of women in general—as a social dominance perspective might suggest (Sussenbach & Bohner, 2011, p.382). However, this finding stands in contrast to that of Hockett et al., (2009) who found that SDO, but not RWA, explained additional variance in a hierarchical regression analysis. The nature of these contradictory findings demonstrates a need to examine individual’s levels of RWA and SDO and their endorsement of sexist belief systems from an experimental approach in which the characteristics of a female target vary in terms of adherence to female sexual norms. Furthermore, both the prevalence of female victimization by men in contemporary society, and the apparent relationship between this violence and ideologically driven stereotyping point to the need to examine and elucidate potential routes linking benevolent and hostile attitudes of men towards women and their engagement in female-directed physical aggression.

Purpose and Hypotheses

Taken in aggregate, a review of the theories espoused above regarding ambivalent sexism, ideological attitudes, and aggression prompted the following hypotheses regarding interaction of men ("actors") with women ("targets") in an experimental laboratory aggression paradigm. First, it was expected that Social Dominance Orientation and Right Wing Authoritarianism would be positively correlated with scores on both the Hostile and Benevolent Subscales of the Ambivalent Sexism Inventory. Second, however, replicating the work of Sibley, Wilson, and Duckitt (2007), a more robust association between Social Dominance Orientation and Hostile Sexism than between Social Dominance Orientation and Benevolent Sexism was expected; and, conversely, a more robust association between Right Wing Authoritarianism and Benevolent Sexism than between Right Wing Authoritarianism and Hostile Sexism was expected. Specifically, it was hypothesized that Social Dominance Orientation (when controlling for Right Wing Authoritarianism) would be statistically predictive of Hostile Sexism but not Benevolent Sexism, whereas Right Wing Authoritarianism (controlling for Social Dominance Orientation) would predict Benevolent Sexism but either weakly predict or be non-significantly associated with Hostile Sexism.

Third, in regard to the relationship between ideological attitudes and aggression, Right Wing Authoritarianism and Social Dominance Orientation were hypothesized to be significant predictors of both self-report and behavioral measures of aggression. However, it was expected that the strength of these relationships would be qualified based on opponent condition such that participants interacting with a gender nonconforming opponent (i.e. a woman endorsing an unrestricted sociosexual orientation) would be at greater risk of perpetrating aggressive behavior

in the laboratory aggression paradigm than participants assigned to the conforming opponent condition.

Furthermore, given the theoretical assumption that ideological variables act as superordinate antecedents to prejudice (Sussenbach & Bohner, 2011) it was hypothesized that RWA and SDO would act as the primary explanatory mechanism of patriarchal aggression and mediate any relationship between sexism scores (either HS or BS) and both self-report and laboratory aggression. Lastly, these mediation models were also expected to be moderated by opponent condition in the prediction of laboratory aggression.

CHAPTER 2

METHOD

Participants and Experimental Design

A sample of 170 undergraduate men were recruited as volunteers from the Research Participant Pool from The University of Georgia for a study with the pseudonym “Social Interaction, Attention, and Reaction Time.” Two participants were excluded due to failed deception. Therefore, the final sample comprised 168 undergraduates in the Psychology Department. The mean age for the sample was 19.76 ($SD = 2.34$). The sample was comprised of 72.0% White ($n=121$), 8.3% Black or African American (14), 13.1% Asian (22), 4.8% Hispanic or Latino (8), and 1.2% American Indian or Alaska Native (2) participants. One participant identified as “Other.” One-hundred sixty-six participants reported that they were “single, never having been married” while one indicated that they were cohabitating with a domestic partner and one identified as “widowed.” The majority of the sample reported that they were either in their first or second year of college ($n = 123$). All demographic data can be found in Table 1.

The study comprised two sessions; the first a questionnaire session and the second a laboratory session in which participants were randomly assigned to one of two experimental conditions—either to the Restricted Sociosexual Orientation (RSO: $N=82$) condition or the Unrestricted Sexual Orientation (USO: $N=86$) condition. See below for detailed procedures.

Table 1
Mean Age and Percentages for Race/Ethnicity, Relationship Status, and Level of Education.

Measure	Means and Percentages
Age	19.76
Race/Ethnicity	
Caucasian	72.0
Asian	13.1
Black/African American	8.3
Hispanic Latino	4.8
American Indian/Alaska Native	1.2
Other	0.6
Relationship Status	
Single	98.8
Cohabitated/Not married	0.6
Separated/Widowed	.6
Married	0.0
Year in College	
First	43.5
Second	29.8
Third	11.3
Fourth	12.5
Fifth or above	3.0

Measures

Demographic Form. Participants completed a brief demographic form to assess age, race, religious affiliation, relationship status and history, income, education level, extracurricular involvement, and sexual orientation.

Ambivalent Sexism Inventory (ASI; Glick and Fiske 1996). The ASI assessed attitudes of ambivalent sexism using a 6-point Likert scale, with responses ranging from 0 as “strongly disagree” to 5 as “strongly agree.” Responses were averaged so that higher scores indicated higher levels of sexism. The psychometric properties of the ASI have been well-established by multiple researchers and in a variety of settings and cultures (e.g., Glick and Fiske 2001b; Viki et al. 2004; Wiener and Hurt 2000). Consistent with prior research, in the current study, the HS and BS scales were positively correlated ($r = .412, p < .001$), and found to be internally consistent ($\alpha = .84$ for HS; $\alpha = .83$ for BS).

Social Domination Orientation Scale (SDO; Pratto et al., 1994) is a 16-item Likert-type scale ranging on a 7-point continuum from “very negative” to “very positive,” purported to measure the extent to which one desires that one's in-group dominate and be superior to out-groups. The 16 item version of the scale has been shown to be reliable ($\alpha = .91$) in a college population of men and women and correlated $.51$ ($p < .01$) with the Rombough and Ventimiglia (1981) sexism scale (Pratto et al., 1994). In the current study the Cronbach's alpha was $.92$

Right Wing Authoritarianism Scale (RWA; Altemeyer, 1981). The current study employed a shortened 12-item version of Altemeyer's scale (1996). The 12-item scale has demonstrated adequate reliability in previous studies (e.g. Weber et al., 2007). Responses on this scale ranged from “0” as “strongly disagree” to “5” as “strongly agree” and were designed to

measure the three covarying attributes of conventionalism, authoritarian aggression, and authoritarian submission. Reliability of the scale in the current sample was high ($\alpha=.82$).

Dark Triad Dirty Dozen (DTDD: Jonason & Webster, 2010). The Dark Triad Dirty Dozen is a new, concise personality inventory designed to measure individual differences in narcissism, psychopathy, and Machiavellianism in sub-clinical populations. The measure was used in the current study to distinguish models of patriarchal aggression from the well-documented link between dark triad traits and physical aggression (e.g. Hemphill, Hare, & Wong, 1998; Skeem & Mulvey, 2001). Participants used a response scale from 1 “*disagree strongly*” to 9 “*agree strongly*”. In terms of convergent validity, the DTDD traits have been positively correlated with their respectively longer measures. Moreover, factor analyses of the DTDD have revealed a three-dimensional structure (Jonason et al., 2011 and Jonason et al., 2009). Total Chronbach’s alpha for the scale in the current study was .826 while subscale reliability of the three factors ranged from $\alpha=.81$ to $\alpha=.82$.

Revised Conflict Tactics Scale (Straus et al., 1996). This self-report measure of intimate partner aggression included four subscales assessing a variety of tactics used in relationships (negotiation, psychological aggression, physical assault, and sexual coercion), as well as the injury subscale that addresses the impact of violence. The revised version of the scale (CTS2) used in the current study included additional items to enhance content validity and reliability, revised wording to increase clarity and specificity, provided better differentiation between minor and severe levels of each scale, comprised new scales to measure sexual coercion and physical injury, and provided a new format to simplify administration and reduce response sets. Given the low base rate endorsement of physical, sexual, and psychological aggression in the current sample, self-report aggression was scored to represent three dichotomous variables: sexual

aggression, physical aggression, and psychological aggression each denoting the presence of any report of the pertinent behavior.

Illinois Rape Myth Acceptance Scale (Payne, 1999). This 45-item scale assessed the endorsement of rape myth attitudes supportive of sexual coercion and aggression. Rape myths included “beliefs about rape (i.e., about its causes, context, consequences, perpetrators, victims, and their interaction) that serve to downplay, or justify sexual violence that men commit against women” (Gerger et al., 2007, p. 423). The scale was formatted on a 7-point Likert-type scale ranging from 1 “strongly disagree” to 7 “strongly agree”. Exploratory and confirmatory multivariate analyses have revealed a structure consisting of both a general **myth** component and seven subcomponents that have been replicated in subsequent studies comprising samples of youth with a mean age of 18.8 years. Moreover, the scale has also been shown to possess sufficient internal consistency in multiple studies (Payne, 1999; Diem, 2000). The current study produced a Cronbach’s Alpha of .94.

Conformity to Male Norms Inventory. (CMNI; Mahalik et al., 2003) The CMNI was used in the current study to assess men's meeting of societal expectations for what constitutes masculinity. The scale assessed behaviors, thoughts, and emotions congruent with male norms and comprised 11 distinct factors: Winning, Emotional Control, Risk-Taking, Violence, Dominance, Playboy, Self-Reliance, Primacy of Work, Power over Women, Disdain for Homosexuals, and Pursuit of Status. In the current sample, the Cronbach’s alpha for total CMNI was high ($\alpha = .91$).

Marlowe-Crowne Social Desirability Scale. (Crowne & Marlowe, 1960). This self-report measure was used in the current study to measure the tendency of participants to under-report socially undesirable traits. Social desirability was controlled for when calculating the incremental

validity of Ideological Attitudes as Predictors of Benevolent and Hostile Sexism. Crowne and Marlowe (1960) showed the internal consistency of the 33 items to be .88, and the test-retest correlation to be .89. Replicating previous research, this measure was shown to be reliable in the current sample ($\alpha = .76$).

Response-Choice Aggression Paradigm (RCAP; Zeichner, Frey, Parrott, & Butryn, 1999; Zeichner, Parrott, & Frey, 2003). This bogus reaction time task was used to measure physical aggression. The task comprised 30 trials during which the participant was given the option to administer an electric shock to an opponent ostensibly seated in an adjacent chamber. The participant was granted the choice of refraining from administering shocks following a “win” or “loss” outcome. The inclusion of choice distinguishes the RCAP from the Taylor Aggression Paradigm (Taylor, 1967) and enhances the external validity of the task. The reaction time task was presented to participants as a competition during which both they and their opponent might “punish” each other following each reaction time trial via electric shock administered to the middle and index fingers of their nondominant hand. Following each trial, participants received visual feedback through a green or red light located on the aggression console indicating whether they “won” or “lost,” respectively, the preceding trial and were permitted to administer a shock to their opponent regardless of the outcome of the trial. If they chose to shock, participants might press one of ten available “shock buttons,” of ostensible increasing intensity during a window of time lasting 6 seconds. For those participants who chose to deliver and degree of shock to their ostensible opponent, aggression was measured in terms of a standardized composite score comprising the frequency, intensity, and duration of those electric shocks administered.

Procedure

In the first session, participants gathered as a small group in a classroom and provided informed consent prior to completing a packet of questionnaires containing demographic information, a social desirability measure, the Ambivalent Sexism Scale, the Social Dominance Orientation Scale, the Right Wing Authoritarianism Scale, the Dark Triad Dirty Dozen, the Illinois Rape Myth Acceptance Scale, the Conformity to Masculine Norms Inventory, the Revised Conflict Tactic Scale, and an initial questionnaire session debriefing form (questionnaires were administered in the stated order). Participants were then provided with individual appointment cards for the second session scheduled to occur approximately one week later. Reminder emails were sent one day prior to the laboratory session to guard against attrition.

For the experimental session, participants were randomly assigned to one of two experimental conditions (Unrestricted Sociosexual Orientation; Restricted Sociosexual Orientation) and met by an experimenter outside a room separate from the aggression chamber. After initial greeting, the participants were asked to report their names and were informed that another person (opponent was always a woman named “Kelly”) would be coming to the session. Participants were then escorted to the designated chamber and seated facing the aggression console, at which time informed consent was obtained. To disguise the RCAP as a measure of aggression, participants were provided a cover story indicating that the purpose of the study was “to measure the relationships among social attitudes, attention to detail, and reaction time.” The experimenter then informed participants that they would be asked to provide verbally a detailed, truthful anecdote from a “typical” Friday night. Participants were told that this report would be audible to their ostensible opponent through a speaker connecting each chamber and instructed to

attend closely to one another's story. Participants were assured that their information would not be recorded and that they would not meet their opponent following the experimental session.

After this introduction, participants were asked to wait while the experimenter greeted the opponent and explained the task to her. Participants were then instructed to share their anecdote after hearing what they were led to believe was their opponent's live anecdote. In reality, participants were presented with an audio recording of a confederate. Both experimental condition recordings utilized the same confederate, controlling for volume, intonation, and cadence; however, the content of each anecdote varied in terms of endorsement of attitudes and behavior communicating information about the opponent's willingness to engage in uncommitted sexual relations.

Next, the reaction time competition was explained to participants. They were informed that the competition would potentially involve the delivery and/or receipt of shocks. Next, participants were administered a series of increasing shocks and instructed to indicate when the shocks reached a painful level and they no longer wanted the shocks to increase. This procedure was conducted to determine the range of shocks to be administered to the participants. The 10 available shock levels used in the task represented a range between 55% and 100% of the participant's pain tolerance level. Prior to the assessment of their pain tolerance, participants overheard a scripted interaction between the confederate and the experimenter performing an identical pain tolerance determination.

After the pain tolerance was determined, the reaction time competition commenced. The "winner" of each trial was ostensibly determined by computer, and the results communicated via an illuminated by a green "win" or a red "lose" light emitting diode (LED). LEDs also provided visual feedback to participants as to the level of shock (i.e., 1 through 10) they actually received

from the confederate. These shocks were generated by an animal shocker (Coulbourn Instruments, Lehigh Valley, PA). The competition comprised 30 trials, of which participants experienced 15 “win” and 15 “lose” trials. An identical random sequence of trials was administered to all participants. Following the task, participants were administered a manipulation check questionnaire, thanked for their participation, debriefed, and given research participation credit.

Manipulation Check

Ascertaining the validity of aggression data mandated that the participants believed they were competing against another individual, and that they did not identify the task as a measure of aggression. This objective was achieved by conducting a brief interview comprising questions about the confederate, the RT task, and participants’ motivation prior to the debriefing. Participants were asked whether they recognized the opponent’s voice as a friend’s or a classmate’s, whether they believed that their opponent was “fair” during the task, whether they believed the task to be a good measure of reaction time, and their reasons for administering or refraining from administering shocks to their opponent. Participants’ data was excluded if they indicated that they knew their opponent was fictitious, that the task was bogus, or indicated that they were not focused on the task. Participants were also asked questions pertaining to the details of their opponent’s anecdote to ascertain whether or not they attended to audio details. They were specifically asked about their opponent’s attitude toward casual sex in order to determine the perceived sociosexual orientation subtype elicited by the experimental condition.

CHAPTER 3

RESULTS

Preliminary Analyses

Excluded participants. Two participants were excluded from final analyses due to failed deception. Thus the final analyzed sample comprised 168 participants.

Missing data. After excluded participants' data were removed from the sample, missing values were examined. The percentage of missing data was minimal and comprised less than 2% of the complete data. To determine whether the pattern of missing data was random (i.e., Missing Completely at Random: MCAR) Little's omnibus test (1998) was employed and found to be nonsignificant (Chi-Square = 5827.945, DF = 10397, Sig = 1.000). Therefore, the Little's test supported the selection of an imputation method for handling the random pattern of missing data.

Expectation Maximization (EM) imputation was selected for use in the current study. The EM method is an iterative procedure with two steps in each iteration that were performed via the Missing Values procedure in SPSS; in the expectation step, starting values for the parameters (e.g., means, covariances) were obtained with available data. Regression methods were used to impute, on the basis of these initial values, the values for the missing data. When this step was completed in the maximization step, new values for the parameters were calculated with the newly imputed data along with the original observed data. These two steps were repeated until a stable solution was reached across maximization steps.

Group Characteristics. Random group assignment was expected to produce, on average, an equal distribution of scores on pertinent demographic and dispositional variables across the

two experimental groups. To confirm this assumption, a series of one-way analyses of variance were performed with age, year in college, relationship status, Social Dominance Orientation, Right Wing Authoritarianism, Hostile Sexism, and Benevolent Sexism as the dependent variables. These analyses revealed no significant group differences.

Principal Analyses

Zero-Order Correlations. Pearson product-moment correlations were computed among pertinent continuous predictor variables relevant to sexism (Hostile Sexism and Benevolent Sexism) and ideological attitudes (Social Dominance Orientation and Right Wing Authoritarianism). In an exploratory analysis, sexism scales and ideological attitudes were also correlated with Dark Triad personality constructs (i.e., Machiavellianism, Narcissism, and, Psychopathy). These correlations are described in Table 2. As expected, Hostile and Benevolent Sexism were moderately correlated with one another, as well as with each ideological attitude. Moreover, Social Dominance Orientation and Right Wing Authoritarianism were also moderately intercorrelated. Hostile sexism was correlated with all three Dark Triad constructs, while Benevolent Sexism was modestly correlated with Narcissism alone. Social Dominance Orientation was moderately correlated with Machiavellianism and Psychopathy. Despite its moderate correlation with Social Dominance Orientation, Right Wing Authoritarianism was not correlated with any Dark Triad Construct.

Table 2
Pearson Correlations among Independent Variables

<u>Measure</u>	<u>Sexism</u>		<u>Ideological Attitude</u>			<u>Dark Triad</u>	
	HS	BS	SDO	RWA	Mach	Narciss	Psychopath
HS	-	.412**	.584**	.350**	.207**	.186*	.241**
BS		-	.223**	.477**	.093	.167*	-.126
SDO			-	.352**	.369**	.105	.365**
RWA				-	-.006	-.027	-.090
Mach					-	.514**	.528**
Narciss						-	.240**

Note * $p < .05$, ** $p < .01$; HS= Hostile Sexism; BS= Benevolent Sexism; SDO= Social Dominance Orientation; RWA= Right Wing Authoritarianism; Mach=Machiavellianism; Narciss=Narcissism; Psychopath=Psychopathy.

Tests of Incremental Validity of Ideological Attitudes as Predictors of Benevolent and Hostile Sexism. Table 3 presents the results of four separate hierarchical regression analyses in which the incremental predictive utility of ideological attitudes (SDO and RWA) above and beyond one another was tested with both Hostile and Benevolent Sexism as criterion variables. In each analysis, social desirability (as measured by the Marlowe Crowne Social Desirability Scale) was controlled in the first step. In the second step, either RWA or SDO was entered into the model. In the third step, the remaining ideological attitude variable (i.e., SDO when RWA was entered first, or vice versa) was entered for analysis of incremental validity. Regressions of BS and HS on ideological variables produced significant models regardless of the variable entered in the final step (BS: RWA entered last $F(3, 186) = 23.541, p < .01$; SDO entered last $F(3, 186) = 22.507, p < .01$; HS: RWA entered last $F(3, 186) = 33.142, p < .01$; SDO entered last $F(3, 186) = 34.995, p < .01$). RWA accounted for significant unique variance in both HS and BS (i.e., above and beyond variance accounted for by SDO). However, SDO only demonstrated incremental predictive utility for the HS model. SDO failed to account for variance in BS over and above that explained by RWA.

Table 3
Incremental Validity of Ideological Attitudes as Predictors of Hostile and Benevolent Sexism

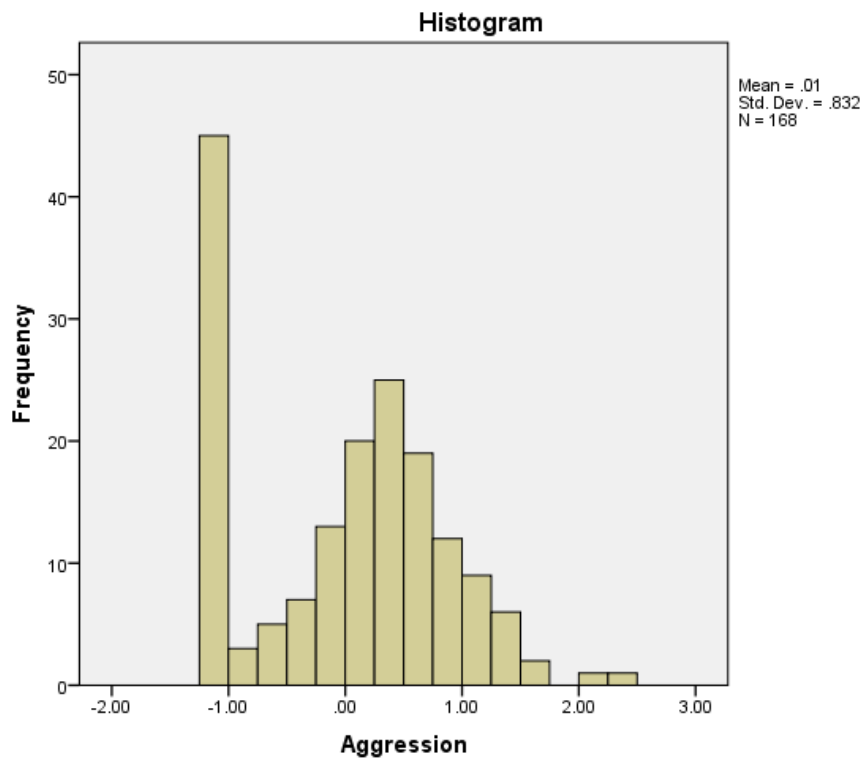
Predictor	Ideological Attitudes			
	HS		BS	
	ΔR^2	β	ΔR^2	β
Incremental effects of RWA				
Step 1:	.014	-.118	.003	.054
Social Desirability				
Step 2:	.306**	.564**	.053**	.234**
SDO				
Step 3:	.044**	.222**	.214**	.488**
RWA				
Incremental effects of SDO				
Step 1:	.014	-.118	.003	.054
Social Desirability				
Step 2:	.141**	.376**	.261**	.512**
RWA				
Step 3:	.210**	.492**	.005	.077
SDO				
Total R²	.365**		.270**	

Note * $p < .05$, ** $p < .01$; HS= Hostile Sexism; BS= Benevolent Sexism; RWA= Right Wing Authoritarianism; SDO= Social Dominance Orientation

Double-Hurdle Modeling Predictors of RCAP Aggression: Given the social proscription of men's aggression against women, a distribution of the standardized index of shock intensity, duration, and frequency was examined in order to investigate the extent to which the behavior of the men in the present standard conformed or deviated from expected social norms. A histogram depicting this distribution can be found in figure 1. These data reveal that men's mode response fell at the bottom of the aggression index distribution such that 45 participants did not deliver any shock throughout 30 RT trials.

In light of the inflated frequency with which participants withheld shocks, a new dichotomous variable was created to indicate whether or not the participant engaged in any aggression whatsoever during the Response Choice Aggression Paradigm (RCAP). Participants who delivered an electric shock were coded "1" while those who did not were coded as "0." In the results that follow, a "Double-Hurdle" model approach (Cragg, 1971) was utilized in the regression analyses used to predict aggressive behavior. Such a model purportedly addresses sample selection biases associated with zero observations generated by non-participation decisions by undertaking a two-step estimation procedure. In this procedure, a full sample logistic estimation is followed by a censored linear regression estimation carried out on the selected subsample. Thus logistic regression was conducted to estimate *selection/participation equations* –the probability of observing a positive outcome (i.e., shock vs. no shock) and linear regression was conducted to predict *conditional equations* –the level of participation conditional on observing positive values (i.e., level of aggression if shock was present: Dow & Norton, 2003).

Figure 1.
Distribution of the standardized composite index of mean shock duration, intensity, and frequency.



Main Effects of Ideological Attitudes and Opponent Sociosexual Orientation on Aggression. A dummy coded variable was created to investigate main effects based on opponent condition (i.e., sociosexual orientation). A value of “0” was assigned for cases where participants competed against an opponent endorsing an unrestricted sociosexual orientation (USO), and a value of “1” was assigned for cases in which participants competed against an opponent endorsing a more restricted sociosexual orientation (RSO). To test main effects of the variables of interest, the dummy coded group variable and ideological variables (i.e., RWA and SDO) were entered as predictors of laboratory aggression using the Double Hurdle approach previously described.

In the selection equations, the model including RWA and Opponent Condition did not adequately fit the data: $\chi^2(1, N=168)=.543ns$. As such, neither RWA ($b=-.01, ns$) nor Opponent Condition ($b= -.127, ns$) significantly influenced the likelihood of administering a shock. However, the logistic regression model including SDO and Opponent Condition was significant $\chi^2(1, N=168)=15.384 p<.01$, indicating a probable effect of the independent variables, taken together, on predicting the presence of aggression. Examination of the log-odds coefficients, (which denote the ratio of the odds of an event occurring in one group to the odds of it occurring in another group) in this model revealed no effect of Opponent Condition ($b=-.041, ns$); however, SDO emerged as a significant predictor of laboratory aggression ($b= .028, p<.01$, $OR=1.028$) such that every unit increase in participant SDO score increased the likelihood of administering a shock by a factor of 1.028.

To investigate regression models of aggression frequency, intensity, and duration of electric shocks participants administered to the ostensible opponent, a standardized composite score comprising these variables was created. Conditional equations were created by regressing

ideological attitudes and Opponent Condition on this standardized composite score. Thus, the total sample was censored to exclude participants withholding any level of aggression (conditional N=124). Neither Opponent Condition nor ideological attitudes predicted the level of aggression employed by men who shocked their opponent: Opponent Condition ($\beta = -.114$, *ns*), SDO ($\beta = .063$, *ns*), or RWA ($\beta = .123$, *ns*).

For self-report measures of aggression (physical, sexual, and psychological), the hypothesis that ideological attitudes would emerge a significant predictor of aggression against women was tested via logistic regression (given the dichotomous treatment of these outcome variables). For physical aggression, the model including SDO did not adequately fit the data: $\chi^2(1, N=168)=3.061$ *ns*. As such, the log-odds coefficients for SDO ($b = .017$, *ns*) failed to emerge as a significant predictor of self-reported physical aggression. Similarly, the logistic regression model including RWA failed to produce a significant model ($\chi^2(1, N=168)=1.363$ *ns*) or a significant predictor of physical aggression ($b = .001$, *ns*).

In terms of psychological aggression, the model including SDO was significant $\chi^2(1, N=168)=9.471$ $p < .01$, indicating a probable effect of the independent variable on the dependent variable. Examination of the log-odds coefficient in this model revealed a significant effect of SDO on psychological aggression ($b = .028$, $p < .01$, OR=1.028) such that every unit increase in participant SDO score increased the likelihood of having reported a history of psychological aggression by a factor of 1.028. The model of psychological aggression including RWA failed to produce a significant model ($\chi^2(1, N=168)=1.061$ *ns*) or predictor of physical aggression ($b = .011$, *ns*).

No proposed models of sexual aggression emerged as a probable fit for the data. The model of sexual aggression including SDO emerged as a poor fit of the data ($\chi^2(1,$

$N=168$)=.491 ns) nor did it produce a significant predictor of sexual aggression ($b = .006$, ns). Null effects were also observed for the model including RWA ($\chi^2(1, N=168)=1.486ns$; ($b = -.017$, ns).

Moderation Analyses. Although Opponent Condition failed to produce significant main effects, it is possible that ideology by condition interactions might reveal a significant model masked in an analysis of main effects. Therefore, interaction terms were created to test for the hypothesized moderating effects of Opponent Condition over and above the effect of SDO on laboratory aggression. First, ideological attitude total scores were standardized by computing z-scores. Next, interaction terms were created with respective z-scores and the opponent factor. To test whether Opponent Condition moderated the relationship between SDO and laboratory aggression, a hierarchical regression analysis was performed in which Opponent Condition and SDO were entered in the first step and the two-way interaction (SDO X Opponent Condition) was entered in the second step.¹

For laboratory aggression and SDO, the main effects model (first step) was significant, $F(2, 167) = 6.24$, $p < .01$ and the interaction model (second step) was also significant, $F(3, 167) = 4.22$, $p < .01$ but did not add significant variance over and above the main effects model, $F_{change}(1, 164) = .24$, ns . To examine the hypothesis that a RWA by Opponent Condition interaction would predict variance masked by a main effects model the two-way interaction (RWA X Opponent Condition) was entered in the second step of a regression equation, controlling for the main effects of each variable. The interaction term failed to produce a significant model, $F(3, 186) = .372$, ns . Thus, no moderation effects were observed.

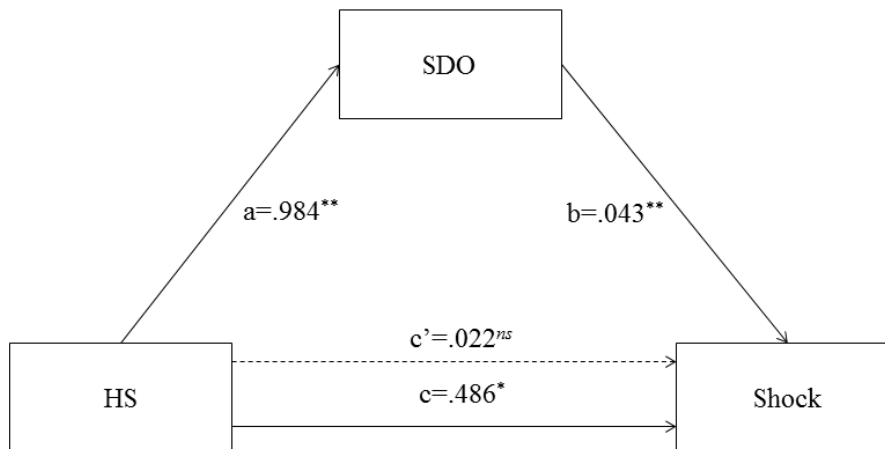
¹ Because logistic regression methods subject the dependent variable to a nonlinear transformation, the resulting interaction coefficients do not properly reflect moderation effects in the original probabilities (Hess et al., under review). Therefore, for moderation and moderated mediation analyses, the double barrel method was abandoned in favor of an examination of the entire aggression index distribution ($N=168$).

Mediation Analyses. In order to test whether ideological attitudes (SDO or RWA) mediate the relationship between sexism (Hostile or Benevolent) and aggression against women, mediation was tested by the procedure outlined by Baron and Kenny (1986). Baron and Kenny have argued that mediation can be tested by regressing (a) the proposed mediator (SDO/RWA) on the independent variable (HS/BS), (b) the dependent variable (aggression) on the independent variable, and (c) the dependent variable on both the mediator and the independent variable. They noted that mediation is present if (a) the relations in the first two equations are significant, (b) the mediator is significantly related to the dependent variable in the third equation, (c) and the influence of the independent variable on the dependent variable is substantially reduced following the inclusion of the mediator in the model. These tests were carried out separately for both forms of sexism and SDO in models regarding laboratory and self-report aggression (physical, psychological, and sexual). Hypotheses in which RWA mediates the association between sexism and aggression were not explored further given the failure of RWA to emerge as a significant predictor of self-report or laboratory aggression in previous analyses.

In terms of laboratory aggression, the conditions of mediation described above were tested in keeping with a double-hurdle model. Thus a dichotomous dependent variable representing whether or not any shock was administered throughout the RCAP was utilized as the outcome variable of interest in the model. Mediation was conducted by regressing (a) SDO onto HS ($\beta = .584, p < .01$); (b) aggression onto HS ($b = .486, p < .05$); and (c) aggression onto SDO and HS (b for HS = $.022ns$; b for SDO = $.43p < .01$). Because both logistic and linear regression equations were estimated in the mediation model, the resulting coefficients were derived by multiplying the original coefficient by the standard deviation of the predictor variable in the equation and then dividing by the standard deviation of the outcome variable. This

procedure was conducted to allow for comparison between logistic and linear scales (Mackinnon & Dwyer, 1993). Resulting coefficients were subjected to a formal test of the indirect mediation effect (Sobel, 1982) which confirmed that the relationship between aggressive responding and Hostile Sexism was mediated by Social Dominance Orientation ($z= 2.92$, $p =.004$; see Figure 2).

Figure 2
Mediating Effect of Social Dominance Orientation on the relationship between Hostile Sexism and Laboratory Aggression



Note $*p < .05$, $**p < .01$, ns = nonsignificant p -value; HS = Hostile Sexism; SDO = Social Dominance Orientation; Shock = participants opting to deliver any level of shock during the Response Choice Aggression Paradigm (RCAP)

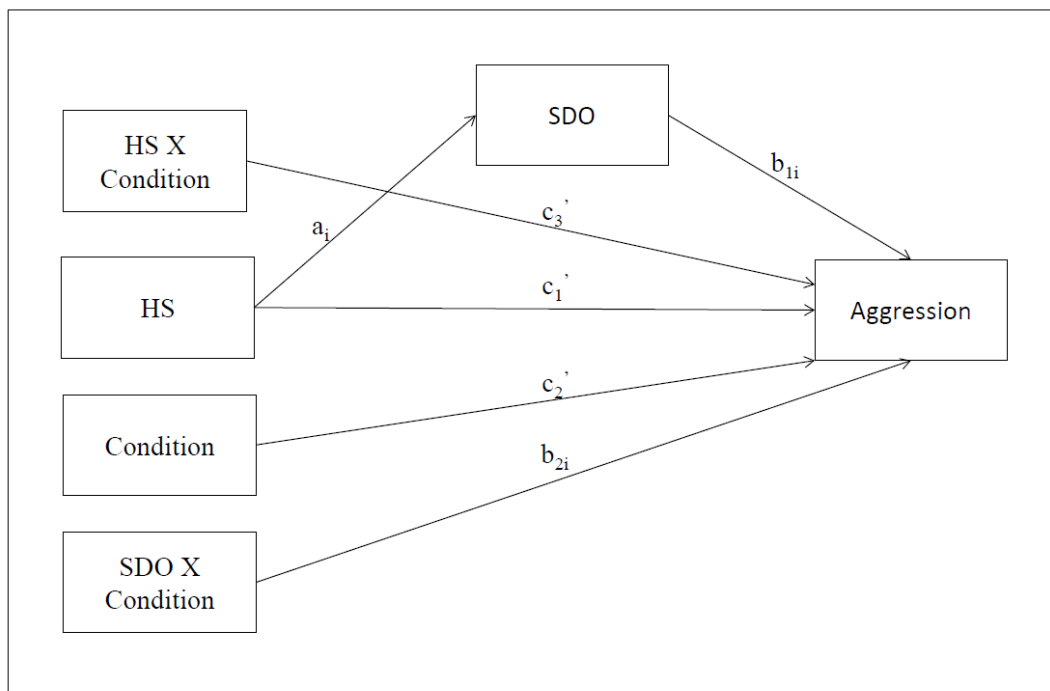
Contrary to hypotheses, the associations among HS, SDO, and self-reported physical, sexual, and psychological aggression failed to meet the necessary conditions of mediation when subjected to logistic regression analyses. Neither the hypothesized mediator (SDO) nor the independent variable (HS) emerged as significant predictors of self-reported sexual aggression (b for HS = .177, *ns*; b for SDO = .006, *ns*). Although, HS emerged as a significant predictor of self-reported physical aggression (b = .565, $p < .05$, OR = 1.760) such that every unit increase in a participant's HS score increased their likelihood of having reported a history of physical aggression by a factor of 1.760, the hypothesized mediator SDO did not emerge as a significant predictor of self-report physical aggression (b = .016, *ns*). Conversely, SDO, but not the hypothesized independent variable HS (b = .299, *ns*), significantly predicted self-report psychological aggression (b = .028, $p < .01$, OR = 1.029) such that a unit increase in SDO rendered a participant 1.029 times more likely of having reported engaging in psychological aggression against a partner.

Although Benevolent Sexism (BS) emerged as a significant predictor of SDO ($\beta = .223$, $p < .01$, $R^2 = .05$) in independent regression analyses, BS failed to significantly predict the likelihood of a participant engaging in laboratory aggression (b = .029, *ns*). Due to the nonsignificant path linking BS to laboratory aggression, the data did not support a mediating effect. Furthermore the failure of BS to predict self-reported sexual aggression (b = -.047, *ns*), psychological aggression (b = .184, *ns*), or physical aggression (b = .198, *ns*) in logistic regression analyses, rendered further path examination irrelevant as a violation of the first condition (a) of Baron and Kenny's guidelines.

Moderated Mediation Analysis

In light of the emergence of a significant mediating effect of SDO on the association between HS and laboratory aggression, this model was subjected to a moderated mediation analysis. This analysis was undertaken in keeping with the hypothesis that the degree to which SDO would proffer a mediating effect would vary as a condition of the experimental condition to which the participant was randomly assigned (i.e., RSO: restricted sociosexual orientation; USO: unrestricted sociosexual orientation). In other words, it was expected that men in the USO condition would evince greater levels of laboratory aggression through SDO than those assigned to the RSO condition. This hypothesis was tested by an SPSS macro designed to assess the proposed moderated mediation relationship (Preacher, Rucker, & Hayes, 2007). In order to demonstrate the occurrence of moderated mediation, a significant SDO by opponent interaction effect must be significant in the dependent variable model, while an HS by condition interaction should not be (see figure 3). That is to say, when the path emerging from regressing aggression on the term comprising the interaction of SDO and Opponent Condition effects is taken into account, the direct interaction path (i.e. calculated by regressing aggression on the HS X Opponent Condition term) should be rendered nonsignificant. However, given the nonsignificant SDO by condition interaction in the dependent variable model ($t = -.7418$, *ns*) a moderated mediation effect was not supported by the data.

Figure 3
Mathematical Model of Hypothesized Moderated-Mediation effect of Opponent Condition on Aggression through Social Dominance Orientation



Note: HS= *Hostile Sexism*; SDO= *Social Dominance Orientation*; Aggression= *standardized mean shock intensity, duration, and frequency*

CHAPTER 4

DISCUSSION

The current study sought to replicate previous findings regarding associations among a multidimensional model of sexism (i.e., Ambivalent Sexism Theory: Glick & Fiske, 1996) and ideological attitudes. Moreover, it intended to expand upon previous research by examining how sexism and individual differences such as Right Wing Authoritarianism and Social Dominance Orientation might potentiate men's perpetration of aggression against women. An examination of both attitudes towards women and ideologies of power in a model of men's aggression against women was guided by Johnson's theoretical distinction of Patriarchal Terrorism from Common Couple Violence. An examination of this nature was undertaken so that the theoretical and descriptive evidence of the existence of a subset of intimate partner violence characterized by patriarchal ideology could be bolstered by empirical scrutiny. In keeping with this goal, the current study was the first to extend associations among ambivalent sexism, ideological attitudes, and female-directed aggression beyond self-report data to include evidence gathered from a behavioral laboratory paradigm. Moreover, the enhanced methodological control afforded by a laboratory setting permitted for the experimental manipulation of a key dispositional characteristic through which gender stereotypes are based (i.e., opponent sociosexuality).

It was expected that findings would emerge that are similar to those of previous studies examining the role of antipathetic attitudes towards women in male perpetrated aggression, as well as elucidate the role played by female stereotype violations in increasing risk for victimization. Specifically, it was believed that the role of female stereotypes would be

observable via manipulation of sociosexual orientation female subtypes. Although some hypotheses were supported, results of the current study also revealed null and novel patterns in aggressive behavior, specifically highlighting the unique role of Social Dominance Orientation as a pertinent mechanism for hostile aggression. Additionally, the effects of opponent sociosexuality did not seem to differentially impact aggression with respect to laboratory indices, suggesting the nonessential quality of this factor in explaining patriarchal aggression.

First, consistent with hypotheses, a positive correlation was found between ideological attitudes and both indices of Ambivalent Sexism (i.e., Benevolent and Hostile). The moderate associations emerging from the present data replicate the strength and direction of correlations documented in previous literature (e.g., Christopher & Mull, 2006; Feather & Mckee, 2012). These associations suggest that men endorsing greater value of authoritarian conventionalism and those endorsing a greater preference for inequality among social groups also express more sexist attitudes, regardless of whether the content of those attitudinal sets are benevolent or hostile.

Incremental analyses of variance elucidated associations among ideological attitudes and sexism further. For these data, Right Wing Authoritarianism accounted for variance in both Hostile and Benevolent Sexism above and beyond variance accounted for by Social Dominance Orientation, while Social Dominance Orientation only demonstrated incremental predictive utility in explaining the differences between subjects' Hostile Sexism scores, not their Benevolent Sexism scores. Given that Social Dominance Orientation does not seem to differentiate attitudinal subtypes, the present findings complement the work of Sussenback and Bohner (2011), which showed that RWA but not SDO, explained unique variance in acceptance of myths supportive of rape when controlling for other measures of intolerant belief systems.

This lack of significance may be consistent with Social Dominance Theory. Given the theoretical prediction (see Sidanius & Pratto, 1999) that SDO beliefs are activated in the face of intergroup inequalities in status and powers, it is possible that men who endorse Hostile Sexism categorize all women into an undifferentiated subordinate out-group given their orientation to hierarchical social organization. That is, the men higher on hostile sexism endorsed higher SDO beliefs as relevant to all women, rather than engaging in any subtyping process. Conversely, data from the current study indicate that men's paternalistic attitudes towards women (i.e., Benevolent Sexism) are better accounted for from an authoritarian, conventionalism perspective (i.e., RWA). Logic guided by theory undergirding Right Wing Authoritarianism (Duckitt & Sibley, 2010) suggests that benevolence should be reserved for a particular subset of women (i.e., traditional women) and hostility directed at another (i.e., nontraditional women) as opposed to the Social Dominance perspective that posits a monolithic attitudinal factor for all women. Therefore, in the current study, the finding that RWA explained unique variance in both Hostile and Benevolent Sexism scores lends empirical support to these theoretical assumptions.

Hypothesized relations between ideological attitudes and laboratory aggression were partially supported. Contrary to expectations, RWA failed to differentiate men who shocked from those who did not behave aggressively in any way during the laboratory aggression paradigm, nor did it predict the level of aggression exhibited by those who did chose to shock. Although men high in RWA are expected to adhere to social conventions and norms and respond with punitive hostility to those who deviate from norms (Altemeyer, 1998), these data suggest that a causal link between conventional attitudes and aggressive behavior is far from axiomatic.

The complexity of associations among attitudes and behavior was developed further by a consideration of Social Dominance Orientation. While SDO emerged as a predictor of RCAP

aggression, this ideological attitude also failed to predict variance above and beyond the distinction of who shocked from those who refrained from aggressive behavior entirely. In other words, SDO differentiated those who shocked from those who did not but failed to predict level of aggressive behavior once shocks were administered.

Given the pattern of findings delineated above, paired with the distribution of RCAP responses in the current study, the distinction between “shockers” and “nonshockers” warrants further discussion. Although the RCAP differs from the Taylor Aggression Paradigm (TAP: Taylor, 1967) in providing the participant a “no shock” option in each trial of the competition, no study to date has attempted to characterize participants who consistently invoke this choice from those who do not. Such a distinction is particularly relevant in light of prescribed gender norms prohibiting social displays of aggression against women (Basow, Cahill, Phelan, Longshore, & McGillicuddy-DeLisi, 2007; Taylor & Sorenson, 2005) and benevolent sexism, which encourages men’s protection of women (Glick & Fiske, 1996). Data from the present investigation suggest that an individual’s preference for inequality among groups (i.e., SDO) may be a potent risk factor for enacting aggression against women, even if such a behavior requires the antisocial violation of gender norms. However, it does not appear that authoritarian conventionalism (i.e., RWA) evinces such an influence on men’s female-directed aggression.

Building on the theoretical assumption that ideological variables act as superordinate antecedents to prejudice (Sussenbach & Bohner, 2011), it was hypothesized that ideological attitudes would act as the most proximal explanatory mechanism of patriarchal aggression in this study and mediate the relationship between sexism and aggression. A mediation model of this type was supported for differentiating men in the sample who chose to shock an ostensible female opponent from those who exercised behavioral restraint. Although a positive loglinear

relationship was found between Hostile Sexism and the categorization of a participant as a shocker vs. nonshocker, the indirect effect of Hostile Sexism through SDO fully accounted for the association between sexism and aggression. That is, the association between men's expression of antipathy towards women and their decision to shock a female opponent in this sample was fully explained by their preference for inequality among social groups. This finding provides further support for the unique and potent risk for perpetration of female directed aggression posed by an orientation towards hierarchical power relations and echoes longstanding feminist theories of IPV and patriarchal terrorism that position issues of power, control, and dominance as the explanatory engine of female-directed aggression (e.g., Brownmiller, 1975; Johnson, 1995; DeKeseredy & Dragiewicz, 2007)

Regarding female sociosexual subtypes, data in the present investigation failed to replicate hierarchy-enhancing effects of sexist responses to promiscuous versus chaste women observed in previous literature (e.g., Fowers & Fowers, 2010). In light of the nonsignificant opponent condition main effects and interaction models, the outcomes regarding ideological attitudes described above appear to be independent of the sociosexual orientation exhibited by the participant's ostensible opponent. It is likely that the lack of significant opponent condition findings in the present investigation is a function of theoretical factors, methodological features of the study, or a combination of the two. For example, gendered stereotypes attribute passive communality to women and agentic aggressive roles to men (Eagly & Steffen, 1984); however, throughout the course of the laboratory paradigm, men in the current study received a series of shocks at varying levels of intensity from their ostensibly female opponents regardless of their manipulated sociosexual orientation. As such, it is possible that men perceived women in both opponent conditions as deviant given their violation from prosocial female gender norms.

Because benevolent restraint is theorized to be reserved only for those women who uphold traditional feminine roles (Glick & Fiske, 1996) and may be swiftly replaced with hostility and aggression in the face of challenges to the status quo of norms upholding gendered hierarchy (Rudman & Glick, 2008), it is possible that men's aggressive responses to their female opponents were influenced by the pattern of female aggression, which was held constant across opponent conditions. Opponent aggression may have been a salient enough cue of female nonconformity to dampen the effect of sociosexual orientation to the degree that its effect was rendered indiscernible.

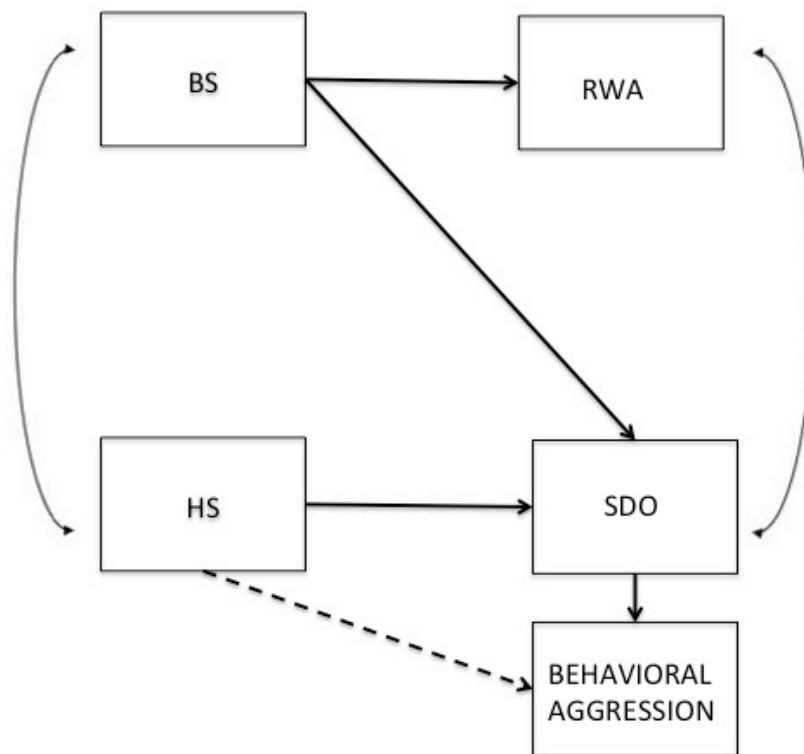
Another explanation for unobserved experimental manipulation effects may be specific to the sample of collegiate men in a southeastern state university. Although the manipulation of sociosexuality employed in this investigation was modeled on an extant paradigm devised by Sibley and Wilson (2004), it is possible that the ostensible female opponent in the unrestricted sociosexual orientation (USO) experimental condition, failed to convey attitudes or behaviors that deviated substantially from female behavior considered normative by men in this sample. Indeed, past epidemiological investigations of alcohol use and engagement in risky sexual behavior by men and women on a large state university campus have revealed gender symmetry in such behavior (e.g., Carroll & Carroll, 1995). As such, although men were able to correctly classify their opponent based on manipulated condition factors, these differences may not have been sufficiently deviant to pique the cognitive mechanisms sufficient for resolving sexist ambivalence and to, in turn, motivate aggressive behavior.

Regarding the emergence of ideological risk factors for men's self-reported aggression against women, no relationships were found for sexual or physical aggression scales; however, SDO emerged as a significant predictor of psychological aggression, suggesting that an

orientation toward hierarchical social organizations increases the likelihood of engaging in insulting, manipulative, and belittling behavior towards one's partner. Similar to the pattern of findings emerging in regards to laboratory aggression, RWA did not confer predictive utility in accounting for men's self-reported aggression on any scale.

In terms of relations between sexism and self-report aggression, it is notable that men's hostile sexism scores predicted self-reported physical aggression, while benevolent sexism failed to predict aggression in this study. Given the moderate within sample correlation between hostile and benevolent sexism and the theoretical assumption that men's "subjectively positive and negative attitudes reflected complementary and mutually reinforcing ideologies" (Glick & Fiske, 2011, p. 532), it is important to further elucidate how a model of female-directed aggression that includes Hostile Sexism and Social Dominance Orientation may be uniquely differentiated from associated benevolent and authoritarian paths in which risk for intimate partner violence perpetration appears to be absent. Furthermore, explication of the nature of potential interactions between these dual paths (see Duckitt & Sibley, 2010 for a dual process model of ideology and prejudice to which aggression could be added as the penultimate outcome of predictive interest) may be of particular value given data from the current study indicative of a predictive linear relationship between benevolent sexism and SDO scores. Although data from the current investigation suggest an empirical framework guiding a multidimensional model of patriarchal aggression (see figure 4) further model specification and evaluation techniques are warranted to determine the empirical plausibility of such a model.

Figure 4
Data Driven Model Modifications of Patriarchal Aggression



HS= Hostile Sexism; BS= Benevolent Sexism; SDO= Social Dominance Orientation; RWA= Right Wing Authoritarianism

Study Limitations. Several limitations of this study merit comment. Although the goal of the present investigation was an examination of the interactive effect of individual and situational variables on aggressive behavior in order to explore the empirical tenability of a model of patriarchal aggression, as a chief outcome variable of interest, the RCAP failed to directly tap the context of participant's intimate opposite sex relationships. Rather, the current study emphasized internal validity by utilizing a behavioral aggression paradigm in which men competed with women with whom no previous relationship was established. Moreover, more proximate mediators of the effect of ideology and sexism on aggression (e.g., cognitive, affective, and arousal routes) were not directly measured.

Epidemiological data suggests that a woman who has experienced violence in her life has most likely suffered it at the hands of her intimate partner (Watts & Zimmerman, 2002), as such, investigation of proximate physiological and affective variables in intimate dyads is a next necessary step in this line of research, as research designs of this nature may help to clarify the relationship between specific internal state routes and appraisal processes as they play out in the lived experience of intimate relationships. Additionally, recent investigations, employing structural equation modeling, have attempted to causally link personality factors (i.e., agreeableness, openness, conscientiousness, neuroticism, extraversion) with ideological attitudes to predict prejudice. For example, Ekehammar et al. (2004) demonstrated that although Big 5 personality traits proffered no direct effect on a latent generalized prejudice factor, an indirect effect was transmitted through RWA and SDO, where RWA seemed to reflect personality aspects to a greater extent than SDO. As such, direct assessment of normative personality traits should be undertaken in future investigations aimed at the prediction of hierarchy enhancing behaviors such as intimate partner violence in order to further elucidate the role of normative

dispositional dimensions in a comprehensive structural model of IPV.

Lastly, given the carefully controlled conditions of this laboratory study, generalization into the real world is uncertain. Participants in this study were a relatively homogenous sample of men. Thus, caution should be exercised in generalizing findings outside the population of Caucasian, high-school graduates, enrolled in a southeastern university. The external validity of future studies would be further bolstered by the inclusion of a noncollegiate sample with a greater diversity across ethnicity, race, and class, because these variables are relevant to the formation of contextual appraisals in social interactions.

Conclusion. The results of the present study provide interesting new data on the effects of perpetrator sexism and ideological attitudes on female directed aggression, with particular implications for the potentiating role of Hostile Sexism through Social Dominance Orientation. While the explanatory pathway revealed in these data highlight the link between hostile attitudes and aggressive behavior, the current study also reveals a closely associated linear relationship between Benevolent Sexism and Social Dominance Orientation. Taken as a whole, these data support continued study of sexism within the context of ideological attitudes that confer increased risk for the perpetration of men's aggression against women.

Above and beyond such immediate implications, the study findings also contribute to the larger goal of utilizing empirically informed theory to design intervention efforts aimed at the eradication of intimate partner violence. An empirical model of patriarchal aggression, with its emphasis on attitudes towards subordinate groups and ideologies of power, lends itself towards interventions that occur at the level of group dynamics rather than at the individual. Norm based interventions, therefore, may be particularly well suited to ameliorate the set of aggression potentiating mechanisms elucidated in this examination. Indeed, Kilmartin and colleagues have

demonstrated the efficacy of a brief intervention to reduce male sexism via presentations that provide feedback on discrepancies between actual and perceived norms within social groups (2008). Given the particular subset of norms and ideologies implicated in the perpetration of female directed aggression in the current investigation, these data may inform norm intervention efforts of the sort proposed by Kilmartin to specifically target and defuse the systemic attitudes and ideologies undergirding the structural dynamics of endemic violence against women.

CHAPTER 5

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