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Examining the Role of Ambivalent Sexism, Violations of Traditional Feminine Norms, and Provocation in Men's Aggression Toward Women and Female Intimate Partners

Claire Lisco

EXAMINING THE ROLE OF AMBIVALENT SEXISM, VIOLATIONS OF TRADITIONAL FEMININE NORMS, AND PROVOCATION IN MEN'S AGGRESSION TOWARD WOMEN AND FEMALE INTIMATE PARTNERS

By

CLAIRE G. LISCO

Under the Direction of Dominic J. Parrott, Ph.D.

ABSTRACT

The aim of the present study was to investigate the hypotheses that men's endorsement of hostile sexism (HS), but not benevolent sexism (BS), would be positively associated with their perpetration of laboratory physical aggression toward a female stranger who was perceived as low in her adherence to traditional feminine norms or their self-report of sexual and physical aggression toward a female intimate partner. Though these *apriori* hypotheses were not supported, exploratory analyses demonstrated that despite initial perceptions of a female as conforming to traditional feminine norms, receiving any provocation from that female elicited a significant increase in intensity of physical aggression following receipt of provocation from that female. These analyses similarly indicated that men's endorsement of HS was positively associated with their perpetration of laboratory physical aggression and self-report of sexual, but not physical, intimate partner aggression. Clinical theory- and research-based implications are discussed.

INDEX WORDS: Ambivalent sexism, Adherence to traditional gender roles, Provocation, Violence against women

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CLAIRE G. LISCO

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CLAIRE G. LISCO

Committee Chair: Dominic Parrott

Committee: Sarah Cook

Robert Latzman

Electronic Version Approved:

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1. INTRODUCTION

Research over the past several decades has demonstrated that intimate partner violence (IPV) is a relatively stable and unremitting public health concern. According to the CDC's National Center for Injury Prevention and Control (NCIPC, 2009), more than 25 million women experience nonconsensual sex or physical violence from intimate partners annually. Moreover, these statistics do not include the physical and sexual assaults that remain unreported. Although both men and women can be victims of IPV, 70% of the 2,340 intimate partner violence related deaths reported in 2007 were women (Bureau of Justice Statistics, 2009). Equally important, women's experiences of sexual and physical assault are not limited to intimate relationships. To illustrate, recent research using the National Violence Against Women Survey evidenced that 51% of reported sexual assaults and 17.5% of reported physical assaults were perpetrated by non-intimate partners, including strangers, acquaintances, and relatives (Chen & Ullman, 2010). Collectively, these data have provided the impetus for substantial research aimed at preventing and reducing male-to-female violence. To this end, the CDC's Injury Research Agenda, 2009-2018 (NCIPC, 2009) calls for examination of the interactive effects of multiple societal, community, relationship, and individual-level factors that influence men's violence against women as a tier one priority for future research endeavors and prevention efforts.

One important line of research in this effort has aimed to understand how sociocultural factors may inform individual-level determinants of men's violence against women (VAW). Numerous scholars suggest that a society's overarching cultural values and norms engender men's individual attitudes, personality characteristics, and behaviors that facilitate their VAW (Burt, 1980; Hall & Hirschman, 1991; Hall & Barongan 1997; Harway

& Biden, 1999; Malamuth, Sockloskie, Koss, & Tanaka, 1991). Most notably, research indicates that societal-level standards of *traditional masculinity* and *gender inequality* are associated with higher rates of VAW and attitudes that support VAW (Malamuth & Briere, 1986; Smith, 1990; Yodanis, 2004), including intimate partner violence and supporting attitudes (Archer, 2006; Coleman & Straus, 1986; Levinson, 1989; Yllo & Straus, 1984). However, societal-level norms of masculinity and gender inequality are internalized differently at the individual-level. Thus, there exists significant variability in the extent to which men endorse these societal norms. For instance, norm endorsement may evidence between-person variability (e.g., a man who endorses a given norm to a different extent than another man) as well as within-person variability (e.g., a man who endorses a given norm in one situation but does not endorse that norm in another situation).

In support of this view, an abundant literature exists that links men's aggression toward women with their endorsement of myriad individual-level variables associated with the overarching constructs of masculinity and gender inequality. For example, men who report higher levels of hostility toward women (Calhoun, Bernat, Clum, & Frame, 1997; Forbes, Adams-Curtis, Pakalka, & White, 2006; Robertson & Murachner, 2007), hypermasculinity (Mosher & Sirkin, 1984; Vass & Gold, 1995), and masculine gender role stress (Copenhaver, Lash, & Eisler, 2000; Eisler, Franchia, Moore, Honeycutt, & Rhatigan, 2000; Eisler & Skidmore, 1987; Eisler, Skidmore, & Ward, 1988) are also more likely to report higher levels of aggression toward women. Similarly, studies evidence a stronger relation between the endorsement of a given norm and aggression toward women in certain situations, such as in response to a gender-relevant threat or provocation (Anderson & Anderson, 2008; Franchia, Eisler, & Moore, 2001; Parrott & Zeichner, 2003; Vass & Gold,

1995), in response to violations of the female gender role (Forbes, Jobe, White, Bloesch, & Adams-Curtis, 2005; Reidy, Shirk, Sloan, & Zeichner, 2009), or when the perpetrator has been drinking alcohol (Abbey & McAuslan, 2004; Norris, George, Davis, Martell, & Leonesio, 1999). Collectively, these studies evidence that both between- and within-person differences in the endorsement of social norms should be considered when investigating individual-level determinants of men's aggression toward women.

Importantly, masculinity and gender inequality are not unidimensional constructs. For instance, pertinent theory suggests that masculinity is not monolithic; rather, multiple "masculinities" and dimensions of those masculinities exist which are differentially associated with violence (for a review, see Connell, 2005). One such multifaceted construct of masculinity identified by researchers is hegemonic masculine gender role beliefs, which reflect men's adherence to three distinct dimensions: (a) status, (b) toughness, and (c) antifemininity (Thompson & Pleck, 1986). Likewise, sexism is not unidimensional. For instance, sexism has been defined as a form of prejudice with multiple dimensions, including (1) hostility toward women and the acceptance of traditional roles for women (Spence & Helmreich, 1972), and (2) both positive and negative evaluations of women (Glick & Fiske, 1996; Glick & Fiske, 1997; Eagly & Mladinic, 1989). In support of this view, a meta-analysis demonstrated that the overarching sexism construct – termed traditional sex-role ideology – was comprised of several related, yet conceptually distinct, sexist beliefs, such as sex-role stereotyping, psychological maltreatment of women, attitudes towards women's roles, husband's patriarchal beliefs, and sex role egalitarianism (for a review, see Stith, Smith, Penn, Ward, & Tritt, 2004).

This literature indicates that a mix of related, but conceptually distinct, variables are employed to study the relation between sexism and men's aggression toward women. This has important implications for understanding and advancing this line of research. For example, extant research shows that one component of sexism – men's traditional attitudes toward women's roles – is positively associated with their aggression toward women (Crossman, Stith, & Bender, 1990; Hillier & Foddy, 1993; Smith, 1990; Sugarman & Hotaling, 1989). However, other research shows that men's traditional attitudes toward women's roles are negatively associated with their aggression toward women (Bookwala, Frieze, Smith, & Ryan, 1992; Rosenbaum, 1986). These contradictory findings suggest that the relation between sexism and men's aggression toward women may be better understood by considering between-person differences on multiple dimensions of sexism. In addition, these findings suggest that the situational context may be critical to determining whether men's endorsement of a given sexist norm is associated with their aggression. Unfortunately, the extant literature is limited in these two key areas: (1) most conceptual and operational definitions of sexism do not capture the multidimensional nature of the construct, most notably men's possible *dichotomous views toward women*, and (2) the preponderance of research that invokes such definitions do not examine the extent to which situational factors influence the likelihood of men's aggression toward women.

Ambivalent sexism theory provides a framework to address these limitations by advancing an individual-level variable – *ambivalent sexism* – that accounts for men's dichotomous views toward women (Glick & Fiske, 1996). Ambivalent sexism theory has garnered support as a parsimonious explanatory framework for men's acceptance of physical and sexual aggression toward women; however, empirical support for men's actual

enactment of aggression is sparse. As such, the purpose of the proposed study is to use ambivalent sexism theory to examine the conditions in which men's dichotomous sexist attitudes facilitate aggressive behavior toward a female in a laboratory-based setting. The following review will (1) introduce an existing theoretical framework of aggressive behavior that accounts for individual and situational determinants of aggression, *the general aggression model* (GAM; Anderson & Bushman, 2002), (2) review a theory of men's development and expression of both positive and negative attitudes toward women, *ambivalent sexism theory*, and (3) integrate the framework of the GAM and ambivalent sexism theory. Integration of these two theories will facilitate a review of existing empirical support for the association between ambivalent sexism and VAW. These data represent the empirical foundation and impetus for the proposed study's aim, which is to identify the situations in which distinct sexist attitudes facilitate aggression against women.

1.1.General Agression Model

The GAM provides a parsimonious and heuristic explanatory framework of the various causes and motivations for aggressive behavior (for an extensive review and empirical support, see Anderson & Bushman, 2002). The GAM has three components: *inputs, routes, and outcomes* (see Figure 1). Input variables consist of person factors and situational factors. Specifically, features of the person (e.g., attitudes) interact with features of the situation (e.g., provocation) to determine the likelihood of an aggressive response. Together, these inputs facilitate aggression through three distinct but interconnected *routes*. These routes define a person's internal state and consist of affect (e.g., angry feelings), cognition (e.g., hostile thoughts), and physiological arousal (e.g., increased heart rate). These three routes are interconnected within an associative network. Thus, the activation of one

route heightens the activation of another route. Directly after activation of one or more routes, an individual appraises the situation before an aggressive or non-aggressive behavioral response is made. Appraisals of the situation are influenced by the relative activation of these three routes. If no time or resources are available, the process of *immediate appraisal* leads to an automatic response. If time and cognitive resources are available, the process of *reappraisal* leads to a thoughtful action. During this time, an individual is able to consider salient features of the situation, various causes for the event, and the significance of one outcome over another. The reappraisal process is important in that increased awareness of provocative cues or positive outcomes of aggression are likely to increase the chances of an aggressive response.

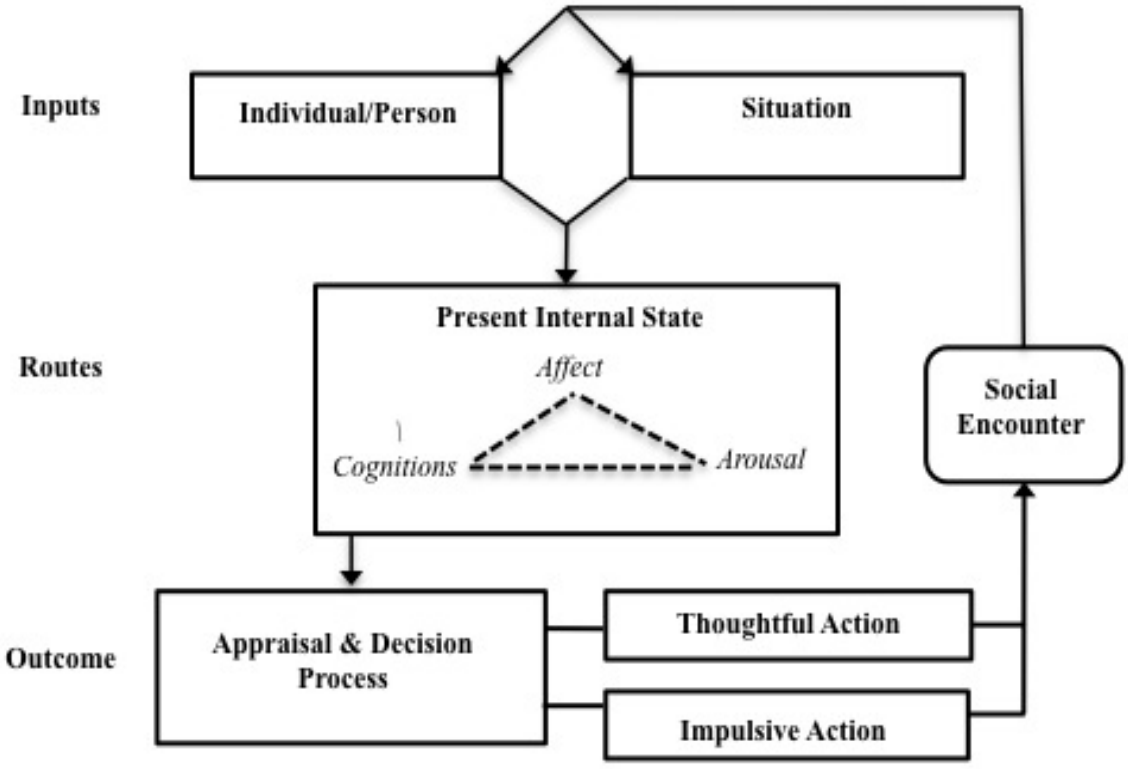

Figure 1. The General Aggression Model.

1.2. Ambivalent Sexism Theory

Glick & Fiske (1996) developed the construct of *ambivalent sexism* and an instrument to measure this construct (the Ambivalent Sexism Inventory) to account for men's coexisting negative and positive evaluations of women. Ambivalent sexism theory provides a conceptual framework for understanding (1) how societal-level beliefs about women may "trickle down" to inform individual-level attitudes, and (2) how these attitudes function to facilitate VAW based on the situational context. According to ambivalent sexism theory, societal-level paternalism and gender differentiation justifies and perpetuates male dominance and stereotypical gender roles, respectively. However, heterosexuality makes undeniable men's dependence on women for sexual reproductive purposes (Glick & Fiske, 1997; Glick et al., 2000). As such, ambivalent sexism is the product of men's conflicting ideologies between their desire for power and control over women and their understanding that women are necessary for reproductive success. Accordingly, two individual-level components of ambivalent sexism are derived from these conflicting social constructs. *Hostile sexism* reflects men's negative evaluations of and antipathy toward women who are perceived as low in their adherence to traditional female gender roles (i.e., "non-traditional" women). In contrast, *benevolent sexism* reflects men's positive evaluations of and chivalry toward women who are perceived as high in their adherence to traditional female gender roles (i.e., "traditional" women).

The opposing valences that comprise ambivalent sexism, which is defined as men's endorsement of both hostile and benevolent sexism, are theorized to serve as complementary ideologies. In particular, men learn to categorize women into subtypes of "good" and "bad" based on their perceptions of women's conformity or lack of conformity to traditional gender

roles (Glick, Diebold, Bailey-Werner, & Zhu, 1997; Glick & Fiske, 2001). According to ambivalent sexism theory, women are perceived as either "non-traditional female subtypes" (e.g., career women, feminists, seductresses) or "traditional" female subtypes (e.g., housewives, mothers, and romantic objects) (Glick & Fiske, 2001). Other conceptualizations of femininity support this view (Mahalik et al., 2005). Accordingly, hostile sexism operates to punish "bad" women who threaten men's power and/or violate traditional gender roles, whereas benevolent sexism operates to reward "good" women who submit to men's superiority and conform to traditional gender roles. Indeed, Glick & Fiske (2001) argue that "when evaluating a specific target…ambivalent sexists are likely to be either hostile or benevolent, depending on whether or not the situation or the target activates HS [hostile sexism] or BS [benevolent sexism]" (p. 131).

1.3. Understanding Ambivalent Sexism Theory Within the Conceptual Lens of the GAM

Extant literature has established a clear link between men's misogynistic attitudes and their perpetration of VAW. However, most studies do not capture men's *dichotomous attitudes toward women* and simultaneously examine how contextual factors influence the link between these attitudes and VAW. To address these limitations and advance this literature, it is necessary to integrate the theoretical frameworks of ambivalent sexism theory and the general aggression model. Thus, the following sections will organize past research pertinent to ambivalent sexism theory within the theoretical framework of the general aggression model (Anderson & Bushman, 2002). First, an integration of these two theories will be provided. Next, research that supports the association between ambivalent sexism and men's acceptance and perpetration of aggression toward women will be reviewed and

interpreted within this integrative framework. Finally, based on this review, methodological considerations for future research will be addressed that build upon identified limitations of past research.

1.3.1. Theoretical integration

Within the framework of the GAM, ambivalent sexism – and more specifically hostile sexism and benevolent sexism – may be conceptualized as a feature of the person. While myriad features of the situation may be considered, ambivalent sexism theory emphasizes two: women's adherence to feminine norms (i.e., traditional vs. non-traditional women) and provocation. Men's endorsement of hostile and benevolent sexism is purportedly activated depending upon cues of the target or situation (Glick & Fiske, 1997). The GAM posits that the appraisal of a situation is the ultimate determinant of an aggressive outcome; however, it relies on the collective content of three interconnected routes: cognitions, affect, and arousal. Moreover, the content of the three routes will be affected differentially based on the interactive effect of the previously reviewed Person x Situation inputs.

For instance, among ambivalent sexist men, salient violations of the female gender role by a non-traditional woman (i.e., situational cue) will interact with hostile sexism (i.e., person factor) to elicit feelings of negative affect, hostile cognitions, and physiological arousal. Moreover, memories linked with hostile cognitions in response to a non-traditional woman may heighten activation of gender-related scripts and schemas (e.g., past retaliation) that facilitate aggression. Unlike hostile sexism, benevolent sexism reflects men's positive evaluations of the traditional woman. Thus, salient violations of the female gender role by a non-traditional woman will not interact with benevolent sexism or elicit associated

aggression-related internal states. Route activation related to hostile sexism is posited to provide aggression-promoting content for appraisal and decision processes and, as a result, increase the likelihood of subsequent aggressive action. Importantly, ambivalent sexist men who interact with women who conform to traditional gender roles should not experience increased negative affect, hostile cognitions, or arousal. As a result, ambivalent sexism should not be associated with an increased propensity for aggression in these situations.

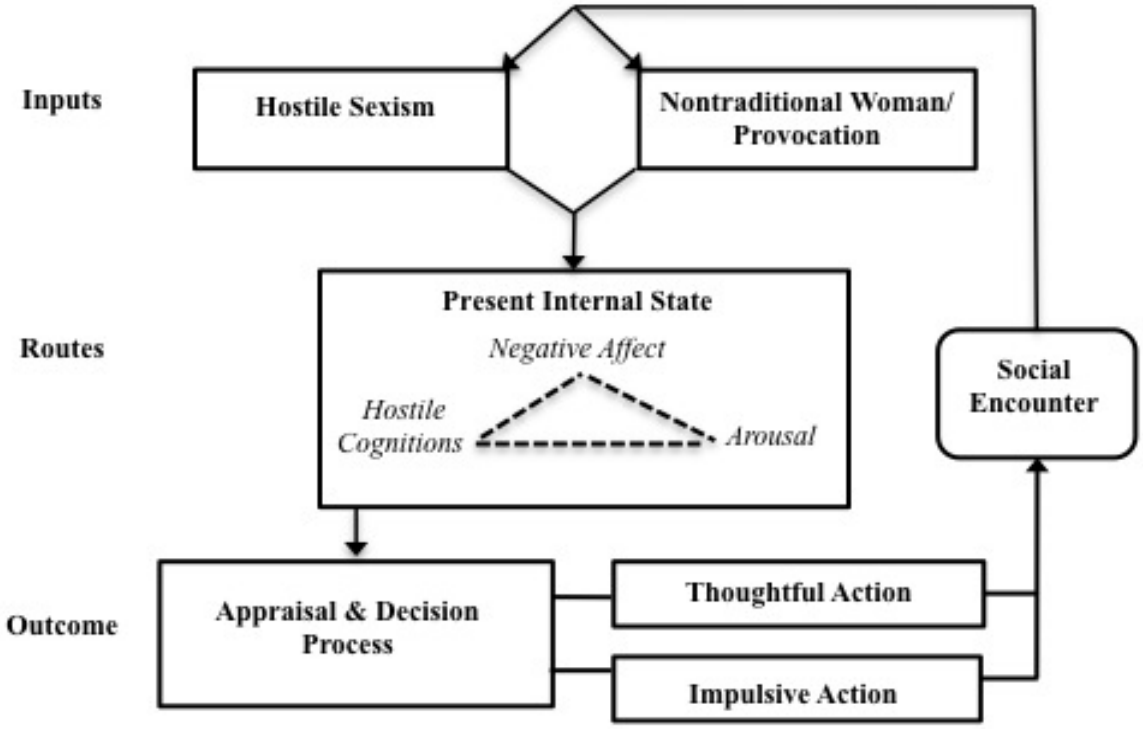

Figure 2. Theoretical Integration of GAM and Ambivalent Sexism Theory

1.3.2. Empirical support for ambivalent sexism theory: Person factors

Numerous scholars have examined the associations between hostile and benevolent sexism and evaluations of men's aggression toward women. In particular, an extensive

literature has directly examined the association between hostile sexism and men's evaluations of male-to-female *sexual assault*. These studies have linked hostile sexism with men's self-reported propensity to behave like the assailant in male-to-female sexual assault scenarios (Abrams, Viki, Masser, & Bohner, 2003; Masser, Viki, & Power, 2006; Viki, Choro, & Abrams, 2006), men's minimization of rape and excusing the perpetrator of rape (Yamawaki, 2007; Yamawaki, Darby, & Quieroz, 2007), and men's self-reported sexual harassment of women (Begany & Milburn, 2002; Russell & Trigg, 2004). Additionally, men's endorsement of hostile sexism has been positively associated with their retrospective self-reports of sexual coercion toward female intimate partners (Forbes et al., 2004; Parrott et al., 2012) and toward women in general (Forbes & Adams-Curtis, 2001).

A less extensive literature exists on hostile sexist men's evaluations of male-to-female *physical assault*. Research has demonstrated that hostile sexism is positively associated with the minimization of domestic violence (Yamawaki, Ostenson & Brown, 2009) and attitudes that support wife abuse (Archer, 2006; Glick, Sakalli-Ugurlu, Ferreira, & Aguiar de Souza, 2002; Sakalli, 2001). Additionally, men who endorse hostile sexism also endorse men's right to get even with a woman in a physical assault scenario in response to that woman's sexual betrayal (Forbes et al., 2005).

Benevolent sexism has been most commonly linked with a tendency to blame the female victim in both physical (Yamawaki, Ostenson & Brown, 2009) and sexual assault scenarios (Abrams, Viki, Masser, & Bohner, 2003; Durán, Moya, Megias, & Viki, 2010; Viki & Abrams, 2002; Yamawaki, 2007; Yamawaki et al., 2007). Furthermore, research shows that controlling for the relation between hostile and benevolent sexism curtails any significant relation between benevolent sexism and the acceptance of male-to-female sexual

or physical assault (e.g., Masser et al., 2006; Glick et al., 2002). To explain this finding, researchers postulate that benevolent sexism is more subtle than hostile sexism in that it does not play a direct role in men's self-reported acceptance of male-to-female violence. Rather, benevolent sexism serves to perpetuate the belief that women must have done something wrong (i.e., victim blame) in scenarios where they are victims of physical and sexual assault (Glick & Fiske, 2001). Taken together, these data indicate that benevolent sexism does not independently increase men's risk of aggression toward women.

1.3.3. Empirical support for ambivalent sexism theory: Person X Situation factors

As previously reviewed, ambivalent sexism is posited to facilitate aggression under conditions in which salient violations of the female gender role by a non-traditional woman (i.e., situational cue) interact with hostile sexism (i.e., person factor). In support of these proposed effects, empirical evidence shows that men's physical aggression toward women is positively associated with violations of the female gender role (Dobash & Dobash, 1979; Reidy, Shirk, Sloan, & Zeichner, 2009; Stark & Flitcraft, 1996). Furthermore, research evidences that men view male-to-female aggression as more justifiable when women are perceived as provoking the perpetrator (Hillier & Foddy, 1993; Pierce & Harris, 1993). Working within this framework, several studies have examined the interactive effects of person factors (e.g., hostile sexism) and situational factors (e.g., manipulations of female adherence to traditional femininity) on aggression-related dependent variables.

Sibley & Wilson (2004) asked men to read a vignette of a male-female sexual interaction, which manipulated negative and positive sexual female subtypes. The negative sexual female subtype was described as having past sexual relations with several men, while the positive sexual female subtype reportedly did not enjoy casual flings with men. Both

women were described as having consumed alcohol and subsequently declined a man's sexual advancements. Men were instructed to rate the woman in the scenario on revised items from the Ambivalent Sexism Inventory's hostile sexism subscale (e.g., "Once a woman like Kate gets a man to commit to her, she will usually try to put him on a tight leash") and benevolent sexism subscale (e.g., "Women like Kate have a quality of purity that few men possess"). Results indicated that men who were exposed to the *sexually promiscuous* (i.e., non-traditional) female reported evaluations consistent with hostile sexism, whereas men who were exposed to the *sexually pure or chaste* (i.e., traditional) female reported evaluations consistent with benevolent sexism. Though aggression was not assessed, these data demonstrate that manipulations of a female's adherence to traditional femininity differentially activate hostile and benevolent sexism.

Female targets have also been depicted as sexually promiscuous by committing acts of *sexual betrayal*. For example, Forbes and colleagues (2005) described a woman as committing a sexual or nonsexual betrayal, followed by a subsequent physical assault of that woman by her boyfriend. Men were more likely to consent to the perpetrator hitting or getting even when the female target was described as committing a sexual betrayal relative to committing a nonsexual betrayal. More specifically, hostile sexism was uniquely associated with "getting even" or an "angry breakup" following the sexual betrayal, whereas benevolent sexism was unrelated to any of the outcome variables. These findings suggest that hostile sexism interacts with violations of the female gender role (i.e., sexual infidelity) to elicit hostile cognitions and attributions related to sexual dominance motives. Unfortunately, physical aggression was not assessed in this study. However, consistent with the GAM, it is

reasonable to posit that men who reported high, relative to low, levels of hostile sexism would also have been more aggressive within this situational context.

Masser and colleagues (2006) manipulated the female target type by first presenting male participants with descriptions of either a non-traditional woman, defined by her pursuit of an equal rights career, or a traditional woman, defined by her pursuit of a career in a family oriented organization. Next, a manipulation check was administered, in which men's perception of the female's conformity (or lack of conformity) to traditional gender roles was confirmed. The manipulation check was followed by the presentation of a sexual assault scenario in which both the traditional and non-traditional woman were raped after inviting a new friend whom they met that night to their home and subsequently saying "no" to his desire to have sex. Results indicated that hostile sexism was positively associated with men's reported propensity to behave like the assailant in the sexual assault scenario for *both* the non-traditional and traditional woman. The authors postulated that hostile sexists' initial perception of the traditional woman as "gender conforming" *may have shifted* to "gender nonconforming" following her invitation of a man whom she just met to her home. As such, these null findings are thought to be due to hostile sexist men's lack of differentiation between the two women in the vignettes. These findings are interesting for several reasons. From a methodological standpoint, they show that research designs should carefully define the characteristics and behaviors of perceived traditional and non-traditional women and include manipulation checks at multiple time points in order to more accurately capture men's perceptions. From a conceptual standpoint, these data suggest that women who are initially perceived as "traditional" may be subsequently perceived to be "non-traditional"

after engaging in a behavior that violates traditional norms. As such, these women may also become high-risk targets for hostile sexist men's aggression.

Yamawaki and colleagues (2009) administered men a vignette that depicted a woman who violated her traditional female gender role by neglecting duties as a housewife and caretaker of children. Specifically, she was described as partying all night while her husband was at home doing chores and taking care of the kids. After her return home, she reportedly smelled like alcohol, at which point her husband hit her. Men's endorsement of hostile sexism was positively associated with their minimization of the man's physical aggression. While there was no control condition with a traditional female target, these results lend support to the idea that provocation via the violation of a woman's traditional role as a caretaker activates the expression of hostile sexism.

1.3.4. Summary, methodological considerations, and future directions

This pattern of findings lends support to the conceptual integration of ambivalent sexism theory and the GAM. Importantly, these data suggest that men who endorse hostile sexism (i.e., person factor) perceive a woman's behavior as non-traditional, and thus provocative, based on multiple situational cues (e.g., sexual promiscuity, lack of submissiveness, neglect in caretaking and maintaining the home). In turn, the interaction of hostile sexist attitudes and these situational cues are posited to facilitate the actual enactment of aggression toward women. As postulated by the GAM, this interactive effect is mediated by the elicitation of angry affect, hostile cognition, and arousal; however, research to date has yet to directly test this mechanism. It is also important to note that men's perception of women as non-traditional does not consistently activate aggression-related internal states in men who report high levels of benevolent sexism. Indeed, existing research consistently fails

to evidence a relation between benevolent sexism and acceptance or perpetration of aggression toward women.

The preceding review also illustrates several limitations of research that invokes ambivalent sexism theory to study men's aggression toward women. First, these studies demonstrate the importance of research designs that carefully define the characteristics and behaviors of perceived traditional and non-traditional women. Thus, future studies must strive to define traditional and non-traditional women according to theoretically based norms of femininity. Moreover, the inclusion of manipulation checks is critical to ensuring that men view women as researchers intend (i.e., as either traditional or non-traditional). Second, the majority of the research on ambivalent sexism and male-to-female aggression has used vignettes to examine how hostile and benevolent sexism relate to men's perceptions of a male-to-female aggression (e.g., acceptance of aggression, likelihood to behave similarly). Thus, a paucity of research exists that assesses *actual reports* of violence (e.g., Forbes et al., 2004; Parrott et al., 2012). Notably, studies have assessed retrospectively men's self-reported male-to-female violence. However, this assessment strategy does not allow for the manipulation of the female target as traditional or non-traditional. Thus, cross-sectional, retrospective designs are unable to test a critical theoretical tenant of ambivalent sexism theory, which posits that activation of hostile sexism via interaction with a non-traditional female promotes men's aggression toward that female. Indeed, to date, no study has examined the effect of hostile and benevolent sexism on actual physical violence toward a traditional or non-traditional female in an experimental laboratory setting.

1.4.Overview of the Proposed Study and Hypotheses

The overarching goal of the present study is to conduct the first systematic test of ambivalent sexism theory in relation to men's aggression against women in a laboratory setting. Specifically, the present study aims to address the aforementioned limitations by examining the interactive effects of hostile and benevolent sexism, exposure to a traditional or non-traditional woman, and escalating physical provocation from that woman on men's actual enactment of aggression in the laboratory. As reviewed, hostile sexism, but not benevolent sexism, is positively associated with the acceptance of male-to-female physical assault (Glick et al., 2002; Sakalli, 2001; Yamawaki et al., 2009); however, these studies did not control for the female target's adherence to traditional feminine norms. One logical extension of this line of research is to examine this association within a laboratory setting, which allows for a well-controlled manipulation of a traditional versus non-traditional woman. Indeed, a laboratory setting affords the ability to comprehensively address many of the noted limitations of past research, namely the absence of the following: (a) carefully defined characteristics and behaviors of the perceived "traditional" or "non-traditional" woman, and (b) manipulation checks immediately before and after experimental manipulations of the woman in the situation as traditional or non-traditional.

Furthermore, no existing approach has examined hostile sexists' reactions to escalating levels of physical provocation from a traditional or non-traditional woman. Based on the integration of ambivalent sexism theory (Glick & Fiske, 1996;1997) and the GAM (Anderson and Busman, 2002), hostile sexist attitudes are posited to facilitate aggression under conditions in which a woman is perceived as violating feminine norms (i.e., non-traditional). No such relation is expected under conditions in which a woman is perceived as

conforming to feminine norms (i.e., traditional). However, data from the previous review suggests that women who are initially perceived as "traditional" may be subsequently perceived to be "non-traditional" after behaving in ways that violate traditional norms (Forbes et al., 2005; Yamawaki et al., 2009). As such, is it posited that hostile sexist men's initial perception of a woman as conforming to feminine norms (i.e., traditional) will be superseded by the perception of that woman as violating these norms (i.e., non-traditional) following the receipt of her escalating levels of physical provocation. These predictions address the first aim of the present study, which is to empirically evaluate the conditions in which men's endorsement of hostile sexism will facilitate aggression toward a female (see Hypotheses 1 and 2).

The second aim of the present study is to address the paucity of research on hostile sexist men's retrospective reports of aggression toward female intimate partners. Specifically, this aim examines the association between hostile sexism and men's self-report of sexual and physical aggression toward female intimate partners within the last year (see Hypotheses 3 and 4). In conjunction with Aim 1, these data will inform future research using ambivalent sexism theory to examine the scope of hostile sexist men's aggression toward women (i.e., toward female intimate partners and/or toward female strangers).

Participants were recruited for a two-part study. In Session 1, participants completed a battery of self-report questionnaires that assess key study variables (e.g., hostile sexism, benevolent sexism, perpetration of intimate partner aggression during the past year). In Session 2, which occurred on a separate day, participants were randomly assigned to compete in a laboratory aggression task against a confederate who is depicted as a traditional or non-traditional woman. During the aggression task, the female confederate *provoked the male*

participant via electric shocks in an escalating fashion that corresponds to three levels of provocation (i.e., no provocation, low provocation, high provocation). In line with the reviewed literature, several hypotheses were advanced:

Hypothesis 1. Controlling for benevolent sexism, men's endorsement of hostile sexism will be positively associated with physical aggression toward the non-traditional, but not the traditional, female opponent in the no provocation and low provocation conditions. Men's endorsement of hostile sexism will be positively associated with physical aggression toward both the traditional and non-traditional female opponents in the high provocation condition. Though there was no control condition, hypothesis 1 is based on previous research that suggests that a female initially perceived as high in her adherence to traditional feminine norms may subsequently be perceived as low in her adherence following that female's provocation (e.g., Yamawaki et al., 2009).

Hypothesis 2. Controlling for hostile sexism, men's endorsement of benevolent sexism will not be associated with levels of physical aggression toward the female opponent, regardless of provocation level or opponent type.

Hypothesis 3. Consistent with past research (e.g., Parrott et al., 2012),, men's endorsement of hostile sexism (controlling for benevolent sexism) will be positively associated with their self-report of sexual and physical aggression toward female intimate partners.

Hypothesis 4. Men's endorsement of benevolent sexism (controlling for hostile sexism, will not be associated with their self-report of sexual and physical aggression toward female intimate partners.

2. METHOD

2.1.Participants and Recruitment

Male participants (n = 150) were recruited through Georgia State University's undergraduate research pool for a two-part study entitled "Examining the Effects of Personality, Competition, and Career Goals." Participants were informed that they would be required to complete a battery of questionnaires (Session 1) and participate in a separate experimental session (Session 2) and that they would be compensated one credit per session. Following their completion of the questionnaire battery, participants confirmed the time and date for their participation in Session 2. Pertinent to ambivalent sexism theory, the present study focuses on male-to-female aggression. As a result, female participants were not included. In addition, the present study is grounded in the examination of a construct that reflects a heterosexual proxy for men and women's relationships (Glick & Fiske, 1997). Accordingly, the final sample for the experimental portion of the study only included male participants who self-identified as heterosexual and who were between 18 and 35 years of age.

All participants were permitted to complete Session 2 of the study, but as noted above, were removed for data analytic purposes if they were not between the ages of 18 and 35 or did not self-identify as heterosexual. Of the 150 participants who completed Session 1, nine withdrew prior to completing Session 2, either because they had earned enough research participation credits or because they were no longer interested in participating in the study. In addition, 11 participants did not show up for Session 2 and did not respond to the experimenter's option to reschedule a Session 2 appointment. Finally, computer programming malfunctions occurred prior to or during the Session 2 experiment for six

participants, and thus they were given credit for their time and removed from analysis. This left a sample of 124 participants who returned and completed Session 2. Of these participants, eight were not between the ages of 18 and 35, three did not self-identify as heterosexual, and four were not deceived (see *Results, Manipulation Check*). This left a final sample of 109 eligible heterosexual men between the ages of 18 and 35 (Age: $M = 19.98$, $SD = 2.91$) who completed both Session 1 and Session 2 of the study. The racial composition of this final experimental sample consisted of 32.7% African Americans, 35.5% Caucasians, 24.3% Asians, and 7.5% who identified with another racial description. Ninety-five percent of participants had never been married, and the mean years of education was 14.67 years ($SD = 2.22$). In addition, 64 of the 109 participants who completed both Session 1 and Session 2 reported that they had been in a heterosexual intimate relationship during the past year. This study was approved by the university's Institutional Review Board.

2.2.Experimental Design

The present study included one between-subjects categorical predictor variable (female opponent condition), one within-subjects categorical predictor variable (provocation), and two between-subjects continuous predictor variables (hostile sexism, benevolent sexism). Participants were randomly assigned to a female opponent condition (i.e., traditional female opponent, non-traditional female opponent). Participants experienced all three levels of provocation via the receipt of electric shocks (i.e., no provocation, low provocation, high provocation), thus making it a repeated measure.

2.3.Materials

2.3.1. Demographic Form

This form assessed participants' age, ethnic background, race, self-identified sexual orientation, highest level of education, and income level.

2.3.2. Ambivalent Sexism Inventory (ASI; Glick & Fiske, 1996)

The ASI was administered to assess hostile and benevolent sexism. This 22-item measure is composed of two subscales, *hostile sexism* and *benevolent sexism*. The hostile sexism subscale consists of 11-items that assess antipathy toward women (e.g., "Women seek to gain power by getting control over men", "Once a woman gets a man to commit to her, she usually tries to put him on a tight leash"). The benevolent sexism subscale consists of 11-items that assess subjectively positive, yet patriarchal, views of women (e.g., "A *good* woman should be put on a pedestal by her man", "Women should be cherished and protected by men"). For all items, participants are instructed to indicate on a 6-point scale the extent to which they agree with each item. Responses range from 0 (disagree strongly) to 5 (strongly agree), with higher scores indicative of higher levels of hostile or benevolent sexism. The ASI has strong internal consistency with alphas ranging from .83 to .92, has been validated across 19 nations, and has shown to be both a relevant and representative measure of men's dichotomous attitudes toward women (Glick et al., 2000). Importantly, both subscales can be scored separately to obtain distinct measures of hostile and benevolent sexism (Glick & Fiske, 1996; 1997). The present sample demonstrated comparable alpha reliability coefficients of .75 and .81 for the hostile sexism and benevolent sexism subscales, respectively.

2.3.3. Buss-Perry Aggression Questionnaire (BAQ; Buss & Perry, 1992)

The BAQ was administered to include as a covariate to control for general hostility in the relation between hostile and benevolent sexism and aggression. This 29-item measure is composed of four subscales, *physical aggression, verbal aggression, anger, and hostility*, and items include a 5-point scale from 1 (extremely uncharacteristic of me) to 5 (extremely characteristic of me). The present study used the 8-item hostility subscale that assesses trait hostility (e.g., "I wonder why sometimes I feel so bitter about things"). The BAQ has strong internal consistency with alphas ranging from .72 to .89 across subscales and the total scale score.

2.3.4. Revised Conflict Tactics Scale (CTS-2; Straus, Hamby, Bony-McCoy, & Sugarman, 1996)

The CTS-2 is a 78-item widely used and well-validated self-report instrument that measures the frequency of aggression within intimate relationships. Participants are instructed to indicate on a 7-point scale how many times they have engaged in various aggressive behaviors toward their intimate partner over the past year. Responses range from 0 (never) to 6 (more than 20 times). The CTS-2 permits examination of the frequency of different types of aggressive acts, such as *physical assault* (e.g., "Have you twisted your partner's arm or hair?") and *sexual coercion* (e.g., "Have you insisted on sex when your partner did not want to [but did not use physical force]?", "Have you used force [like hitting, holding down, or using a weapon] to make your partner have sex?"). In the present study, the CTS-2 was used to assess the frequency of men's perpetration of physical aggression and sexual coercion toward an intimate partner during the past year.

2.3.5. Sexual Coercion in Intimate Relationships Scale (SCIRS; Shackelford & Goetz, 2004; 2010)

The SCIRS is a 34-item self-report instrument that measures the frequency and severity of different forms of sexual coercion within intimate relationships. Participants are instructed to indicate on a 6-point scale how many times they have engaged in various sexually coercive acts toward their intimate partner in the past month. Responses range from 0 (act did not occur in the past month) to 5 (act occurred 11 or more times in the past month). The SCIRS is a versatile measure that may be adapted for individual use. First, it may be used to assess either men's or women's victimization experiences from or perpetration of sexually coercive acts toward intimate partners. Second, it was originally designed to assess sexual coercion within intimate relationships within the last month but may also be adjusted to assess a longer period of time (e.g., to assess the success of a treatment or intervention program). Third, it may be adapted for use as an interview tool. For the present study, the SCIRS was used as a self-report measure to assess men's perpetration of sexually coercive acts toward intimate partners *during the past year*.

The SCRIS permits examination of different types of sexually coercive acts, such as *resource manipulation/violence* (e.g., "I withheld benefits that my partner depends on to get her to have sex with me"; "I threatened violence against my partner if she did not have sex with me"), *commitment manipulation* (e.g., "I hinted that if my partner were truly committed to me she would have sex with me"; "I pressured my partner to have sex with me against her will"), and *defection threat* (e.g., "I threatened to have sex with another woman if my partner did not have sex with me"; "I hinted I may pursue a long-term relationship with another woman if my partner did not have sex with me"). The SCIRS demonstrates strong internal

consistency for men's self-reports of perpetration of sexually coercive acts toward intimate partners, with an alpha of .95 on the total score (Goetz & Shackelford, 2009; Shackelford & Goetz, 2004) and alphas ranging from .87 to .95 on each subscale (Shackelford & Goetz, 2004). The present sample demonstrated a comparable alpha reliability coefficient of .90 for the total score, which was used in the present study's analyses.

2.3.6. Conformity to Feminine Norms Inventory (CFNI; Mahalik et al., 2005)

The CFNI is an 84-item self-report measure that assesses attitudes, beliefs, and behaviors associated with traditional female gender roles in the dominant culture of the U.S. It is composed of eight subscales corresponding to distinct feminine norms including *nice in relationships* (e.g., "It is important to let people know they are special"), *thinness* (e.g., "I would be happier if I was thin"), *modesty* (e.g., "I feel uncomfortable being singled out for praise"), *domestic* (e.g., "I do all of the cleaning, cooking, and decorating where I live"), *care for children* (e.g., "Taking care of children is extremely fulfilling"), *romantic relationship* (e.g., "Whether I am in one or not, romantic relationships are often on my mind"), *sexual fidelity* (e.g., "I would only have sex if I was in a committed relationship like marriage"), and *invest in appearance* (e.g., "It is important to look physically attractive in public"). Participants are instructed to indicate on a 4-point scale ranging from 0 (strongly disagree) to 3 (strongly agree) the extent to which they agree with each statement, with higher scores indicative of more conformity to traditional feminine norms. The CFNI demonstrates strong internal consistency with an alpha of .88 on the total conformity score and alphas ranging from .82 to .92 on each subscale (Mahalik et al., 2005).

In the present study, a modified 8-item scale was derived from the CFNI. During Session 2, this 8-item version of the CFNI was administered as two separate manipulation

checks of participants' perception of the female opponent's degree of conformity to dominant feminine norms in the current U.S. culture. It was first administered prior to the aggression task (and thus prior to participants' receipt of any provocation from the female opponent), and was subsequently administered immediately upon completing the aggression task (and thus after participants' receipt of high levels of provocation from the female opponent). This modified 8-item scale contains the strongest loading item from each of the eight distinct norms assessed by the CFNI. Two exceptions were made in order to include items that most accurately correspond to the experimental manipulation of the traditional or non-traditional woman depicted in the video seen by participants (see opponent manipulation below). These exceptions include (1) the *domestic* scale, where the item "I do all of the cooking, cleaning, and decorating where I live" substituted the item "I clean my home on a regular basis" and (2) the *care for children* scale, where the item "Taking care of children is extremely fulfilling" substituted the item "I like to be around children." All items were modified such that participants rated their opponent's conformity to feminine norms (e.g., "My opponent believes having a romantic relationship is essential in life"). The use of the 8-item CFNI manipulation check is generally consistent with the study's cover story (i.e., "The Relationship Between Personality, Competition, and Career Success") and corresponds to the female opponent experimental manipulation (i.e., traditional or non-traditional). The present sample demonstrated acceptable alpha reliability coefficients using the modified version of the 8-item pre- and post-CFNI of .71 and .70, respectively.

2.3.7. Response-choice aggression paradigm (RCAP; Zeichner, Frey, Parrott, & Butryn, 1999; Zeichner, Parrott, & Frey, 2003)

The RCAP is a laboratory aggression paradigm used to assess direct physical aggression. The hardware for the task was developed by Coulbourn Instruments (Allentown, PA) and the computer software was developed by Vibranz Creative Group (Lexington, KY). In the RCAP, participants are told that they are competing against an opponent in an adjacent room on a reaction time task. As a part of the competition, participants have a choice of 10 different shock intensities to administer to their opponent at the end of each trial for a duration of their choosing. The fictitious opponent is afforded the same choice.

Participants are seated at a table in a small room and their opponent is ostensibly seated in an adjacent room. On the table facing participants is a computer screen and keyboard. Red adhesive labels marked "1" through "10" are attached to the number keys running across the top of the keyboard. Participants receive visual feedback on the computer monitor indicating whether they "won" or "lost" the trial as well as the shock level selected and received. The keyboard and monitor are connected to a computer located in an adjacent room out of the participant's view. The RCAP differs from other aggression paradigms (e.g., the Taylor Aggression Paradigm; Taylor, 1967) in that it gives participants the option to refrain from administering shocks in addition to retaliating against their opponent. In addition, participants have the option to administer a shock regardless of whether or not they win or lose a trial. This additional response option allows for greater *external validity* of a laboratory aggression paradigm (i.e., the ability to refrain from retaliating against provocation as is the case in "real word" scenarios), while still preserving an *internally valid* measure of physical aggression (i.e., administration of electric shocks to another person). Of

importance to the present study, the RCAP's option to participants – and ostensibly the opponent – to refrain from administering any shocks allows for the inclusion of a *no provocation* condition. In contrast, because the traditional Taylor Aggression Paradigm (Taylor, 1967) requires participants to administer a shock following every winning trial, a *no provocation* condition is not feasible. Inclusion of a no provocation condition with the RCAP has been successfully implemented in past research (e.g., Reidy, Zeichner, & Martinez, 2008; Reidy, Zeichner, & Seibert, 2011).

Four aggression indices were derived from the RCAP. The first two indices – *shock intensity* and *proportion of highest shock* – reflect participants' aggression across all trials. Shock intensity, or the mean shock intensity for trials in which the participant administers a shock, represents an active and direct form of aggression. *Proportion of highest shock*, or the number of times the highest available shock (i.e., a "10") is selected relative to the number of trials in which a shock is selected, represents the tendency to display extreme levels of aggression. The second two indices – *flashpoint latency* and *flashpoint intensity* – reflect participants' expression of aggression upon first entering the aggressive interaction (i.e., "*flashpoint aggression"*). Flashpoint latency represents the number of trials that expire before the participant administers a first shock. Flashpoint intensity represents the intensity of the first shock the participant selects. The RCAP and other similar shock-based laboratory paradigms have been repeatedly shown to be *safe and valid* measures of aggressive behavior (e.g., Anderson & Bushman, 1997; Giancola & Parrott, 2008; Pihl, Zacchia, & Zeichner, 1981).

2.4.Opponent Manipulation

In order to convince participants that they were competing against a traditional or non-traditional female opponent, they completed a demographic interview that was ostensibly videotaped by the experimenter. Participants were told that they would be asked several demographic questions (e.g., "What is your age?", "What is your major?"). They were also told they would be asked questions related to personal attitudes and opinions, such as modesty, nurturing, romantic ideals, and career aspirations, for the purpose of giving their opponent a better idea of who they are competing against. Likewise, participants were told that they will be able to view their opponents' answers. In actuality, participants viewed a pre-recorded videotape that portrayed their female opponent endorsing beliefs and attitudes consistent with a traditional or non-traditional woman of the same race. Given that the present study recruited a sample of young adult men between the ages of 18 and 35, the female confederates recruited also appeared to be a young adult within a similar age range to avoid potential confounding age effects.

The experimenter asked participants the same nine questions as the female confederate, which corresponded to the eight subscales of the CFNI (Mahalik et al., 2005). A full list of the confederate's scripted responses while portraying the traditional (T) versus non-traditional (NT) woman can be found in Appendix D. Examples of differential responses to the questions "How important is fidelity?" and "What are your ultimate career goals?" are as follows, respectively: (a) *"Honestly there is so much casual sex and cheating in our society, I think people weren't meant to be with just one person"* (NT) and *"I'd say it's extremely important. There is no excuse for cheating on someone. I never have and I never will"* (T) and (b) *"I want to go corporate law. Ultimately, I want to make partner in a big firm"* (NT)

and *"I'll probably teach until I get married and then stay at home with my kids"* (T). A similar deception procedure has been successfully implemented in the past via audiotape response (Reidy et al., 2009).

2.5.Procedure

Participants participated in the study on two separate days. For Session 1, participants reported to a university classroom or the research laboratory. Upon arrival, participants were greeted by an experimenter and provided informed consent. Participants were then given a packet of questionnaires with a manila envelope. All information obtained from participants remained confidential, with the exception that between Session 1 and Session 2 participants' names and data were linked via an experimental ID number. This was accomplished by labeling each questionnaire packet and manila envelope with a participant number. Upon completion of their questionnaire packet, participants placed their questionnaire packet inside the manila envelope and handed it to the experimenter. At this time, the experimenter confirmed the participant's appointment date and time for Session 2 and recorded their name, experimental ID number, and appointment time on the subject data key. Participants were then thanked for their time and their subsequent appointment for Session 2 was confirmed. The subject data key was shredded weekly, and any participant who had not completed the study had his information transferred to the next week's Subject Data key.

For Session 2, participants were met in the 7th floor lobby of the Urban Life Building and were escorted to an experimental room where the aggression task took place (a room separate from where participants may have completed Session 1). Once seated in the experimental room, participants were provided with informed consent and an overview of study procedures. In order to disguise the task as a measure of aggression, participants were

given a fictitious cover story. They were told that the study's purpose was to examine the relation between personality, competition, and career success and that, as a part of this examination, they would compete in a competitive reaction time task against another participant in the study. Next, participants' demographic interview was ostensibly recorded, and they received instructions regarding the reaction time task. Following these instructions, participants were informed that there would be a 2-3 minute waiting period in which their opponent ostensibly completed her demographic interview and receive the same instructions.

Next, participants' pain thresholds were assessed in order to determine the intensity parameters for the shocks they are to receive. The experimenter attached a shock electrode to the participants' index and middle finger of their nondominant hand in preparation for a pain threshold assessment. Participants were instructed to inform the experimenter of when the shocks are first "detectable" and when they reach a "painful" level. The experimenter then went into the control room and immediately conducted the pain assessment. To reinforce participants' belief that they would be competing against another individual, participants were informed that the pain threshold of their opponent would be assessed prior to determining their own pain threshold. Participants were also informed that they would be able to hear their opponent's responses over an intercom and that their opponent would be able to hear their responses as well. In actuality, an audiotape was played in which the voice of the confederate depicted in the pre-recorded videotape was used to document her escalating pain experience in establishing her pain threshold. This entire pain threshold procedure lasted approximately 2-3 minutes. Following this procedure, participants viewed the previously described videotape depicting their female opponent as either traditional or non-traditional (see Appendix D). To ensure success of this manipulation, the CFNI

manipulation check was administered to participants immediately after they viewed the videotape.

The aggression task commenced immediately after participants completed the manipulation check. For each trial, the words "Get Ready" appeared on the screen. Shortly thereafter, the words "Press the Spacebar" appeared at which time participants were informed to to press, and hold down, the spacebar. Following this, the words "Release the Spacebar" appeared at which time they were informed to lift their fingers off of the spacebar as quickly as possible. A "win" was be signaled by the words *"You Won. Both of you may now give a shock."* and a "loss" was signaled by the words *"You Lost. Both of you may now give a shock."* Participants were informed that they had a choice of 10 different shock intensities to administer after each trial for a duration of their choosing. Participants were also informed that they could elect to not shock their opponent. However, participants were told that shock button "1" would deliver a low intensity shock best characterized as "very mild" and "definitely not painful." Following each trial, a specially designed "volt meter" and the illumination of one of the 10 "shock lights" [ranging from 1 (low) to 10 (high)] on the computer screen signaled to the participant the shock that he or the opponent selected.

The entire procedure consisted of three successive blocks of trials (no provocation, low provocation, high provocation) designed to give the appearance of an increasingly provoking aggressive interaction. All shocks delivered to participants followed a losing trial, were one second in duration, and ranged from 55% (a "1"), 60% (a "2"), 95% (a "9"), and 100% (a "10") of the highest tolerated shock intensity. Each block of trials consisted of 12 trials (six wins and six losses). Thus, there was a total of 36 trials. In the first block (no provocation), participants did not receive any shocks from their fictitious female opponent. In

the second block (low provocation), participants received shock intensities of "1" and "2." In the third block (high provocation), participants received shock intensities of "9" and "10". Again, in actuality, reaction time was not measured and the competitive task was used to lead participants to believe that they engaged in an adversarial interaction with a female. A randomly generated win/loss sequence was predetermined and incorporated into the computer program that executed the task. All participants received the same sequence of shocks. The computer controlled the initiation of trials, administration of shocks to participants, and recording of their responses.

Upon completion of the aggression task, participants completed the CFNI manipulation check a second time. Administration of a second manipulation check was used to determine whether participants' perception of their female opponent as traditional or non-traditional changed as a result of receiving escalating levels of provocation from her. Next, participants were debriefed and any questions were asked at this time regarding the study's aims (see debriefing and credit allocation).

2.6.Debriefing and Credit Allocation

Participants then received a thorough verbal and written debriefing at the end of the study that included contact information of the laboratory director. They were told that their female opponent was fictitious, that they did not administer electric shocks to her or receive electric shocks from her, and that the experimenter controlled the administration of shocks with a laboratory computer program. To minimize participants' distress of being deceived by manipulations, they were told that 95% of the participants in these types of projects are similarly deceived. At this time, any questions and concerns were answered, followed by administration of a post-debriefing questionnaire that assessed multiple indicators of distress.

After checking all items on the post-debriefing questionnaire, participants were granted class credit for participation, thanked for their time, and escorted to the lobby to leave.

3. RESULTS

3.1.Preliminary Analyses

3.1.1. Opponent manipulation check

In order for aggression data to be valid, it must be demonstrated that participants believed that they were competing against a live individual on a "reaction time" task and that this task was not a measure of aggression. This was determined by the administration of a brief interview prior to debriefing which asks participants: (1) whether or not they thought the task was a good measure of reaction time, (2) what their overall "impression" of their opponent was during the study, and (3) whether they thought their opponent was "reasonable." Participants were excluded from data analyses if they indicated that they did not believe the opponent was real, thought the task was a measure of aggression, or was controlled by the experimenter. Only four participants (two in the traditional and two in the non-traditional female opponent condition) reported that they did not believe they were competing against another person, and as a result were removed from analyses using the RCAP.

In addition to the broader deception involving the "reaction time" task, the opponent manipulation was designed to facilitate participants' pre-RCAP perception of the female opponent as low (i.e., non-traditional) or high (i.e., traditional) in her conformity to traditional feminine norms. In addition, the sequence of provocation during the RCAP was designed to shift participants' post-RCAP perceptions of the traditional female opponent.

Thus, participants were expected to perceive the traditional female opponent as less conforming to feminine norms following the RCAP relative to prior to the RCAP. No such shift in perception of the non-traditional female opponent was expected.

To confirm these expectations, a 2 (Female Opponent Condition: Traditional, Non-traditional) x 2 (Time: Pre-RCAP, Post-RCAP) mixed model ANOVA was conducted with time as a within-subject variable and the CFNI scores as the dependent variable. This analysis detected a significant main effect for female opponent condition ($F(1,107) = 327.57$, $p < .001$), whereby the traditional female opponent was perceived to more strongly endorse traditional feminine norms ($M = 29.93$, $SD = 3.39$) relative to the non-traditional female opponent ($M = 17.04$, $SD = 4.29$). In contrast, this analysis did not detect a significant main effect for time or a Condition x Time interaction. Table 1 depicts participants' perceptions of the traditional and non-traditional opponent's conformity to feminine norms at each time point. Contrary to expectations, these descriptive data illustrate that for participants high in hostile sexism, initial perceptions of their opponent's conformity to feminine norms – which was consistent with the opponent manipulation – remained stable after completing the RCAP.

Table 1

Participants' Perceptions of Female Confederate's Conformity to Feminine Norms Pre- and Post-RCAP

Time and Condition	*M*	*SD*	*N*
Pre-RCAP			
Traditional	0.10	3.27	51
Non-traditional	6.81	4.29	58
Post-RCAP			
Traditional	9.26	3.59	—
Non-traditional	7.26	4.29	—

Note. $N = 94$.

3.1.2. Analysis of provoked non-aggressors

The RCAP's no-shock response option affords the ability to conceptualize profiles of "aggressors" based upon if and when participants decide to enter an aggressive interaction. Such distinctions allow for a closer examination of the moderating role of exposure to situational provocation on the relation between individual characteristics and aggressive behavior. The following three aggression profiles have been advanced based on the point at which participants enter (or not) an interaction with escalating levels of provocation: (1) *provoked non-aggressors*, which reflect men who refrain from aggressive behavior despite situational exposure to provocation, (2) *unprovoked aggressors*, which reflect men who engage in aggressive behavior without exposure to situational provocation, and (3) *provoked aggressors,* which reflect men who engage in aggressive behavior following exposure to situational provocation (e.g., Reidy et al., 2008). The response style of provoked non-

aggressors reflects the equivalent of "walking away" from an aggressive interaction and is conceptualized to represent a subset of men who never "entered" the interaction with the female confederate. In the present study, 15 men were deemed provoked non-aggressors because they refrained from administering a shock during the 36 trials of the RCAP. As such, these participants were selected out prior to conducting analyses with the RCAP dependent measures. This left a final sample of 94 men who were included in the RCAP analyses reported below. A series of chi-square analyses were performed to determine whether the proportion of aggressive responders differed between the two experimental groups. Analyses did not detect any differences between these groups condition ($F(1,92) = 2.7$, $p = .10$), (see Table 2 for frequency counts of shockers and non-shockers by female opponent condition).

Table 2

Number of Participants Who Shocked on the RCAP

Opponent Condition	*Did Participant Shock?*		*N*
	Yes	No	
Traditional	41	10	51
Non-traditional	53	5	58
Total Shockers/Non-shockers	94	15	109

Note. $N = 109$.

3.1.3. Descriptive statistics

Descriptive statistics and bivariate correlations for pertinent study variables were computed for the experimental sample ($N = 94$) and the subset of that sample that reported being in an intimate relationship during the past year ($N = 64$). These data are displayed in Tables 3 and 4, respectively. Consistent with previous literature (for a review, see Glick et al., 2000), a significant positive association was evidenced between hostile sexism and benevolent sexism. However, computation of the variance inflation factor (VIF) and tolerance confirmed that multicollinearity was not an issue in these data (i.e., VIF < 10; Tolerance >.10). Importantly, random assignment was used to ensure equal distribution of pertinent variables across experimental groups (i.e., female opponent condition). To confirm this assumption, a series of one-way ANOVAs was conducted with demographic variables (e.g., age, years of education, and SES) and study variables (e.g., hostile sexism, benevolent sexism, frequency of sexual and physical assault) as the dependent variables. No significant effects were detected. Additionally, a series of chi-square analyses were conducted to

examine the distribution of categorical demographic variables (e.g., race, marital status) across the two female opponent conditions. No significant effects were detected.

Table 3

Descriptive Statistics and Intercorrelations for Key Variables (Physical Aggression Toward a Female Stranger Using Full RCAP Sample

	Descriptives			Correlations					
Variable	*M*	*SD*	range	1.	2.	3.	4.	5.	6.
1. HS	28.01	8.40	6-46	—	.32**	.14	.06	-.10	.14
2. BS	31.56	8.14	4-52	—	—	.002	-.09	-.09	.01
3. Avg SI	11.84	5.68	1-28.33	—	—	—	.80**	-.40**	.64**
4. EA	0.44	0.48	0-2.72	—	—	—	—	-.12	.60**
5. FP Aggression	5.33	7.55	1-32	—	—	—	—	—	-.07
6. FP Intensity	3.12	2.58	1-10	—	—	—	—	—	—

Note. n = 94. HS = Hostile sexism; BS = Benevolent sexism; Avg SI = Average Shock Intensity; EA = Extreme Aggression; ** p = < .001 and * p < .05.

Table 4

Descriptive Statistics and Intercorrelations for Key Variables (Intimate Partner Aggression Among Men Who Reported a Relationship Within the Past Year

	Descriptives			Correlations				
Variable	*M*	*SD*	range	1.	2.	3.	4.	5.
1. HS	26.77	8.37	6-46	—	.50**	.08	.05	.07
2. BS	31.70	9.31	4-52	—	—	-.03	.02	-.02
3. CTS-2-PA	6.78	12.35	0-59	—	—	—	.45**	.14
4. CTS-2-SA	5.52	9.4	0-37	—	—	—	—	.40**
5. SCIRS-SA	5.34	20.13	0-140	—	—	—	—	—

Note. n = 64. HS = Hostile sexism; BS = Benevolent sexism; CTS-2-PA = CTS-2 Intimate partner physical aggression; CTS-2 SA= Intimate partner sexual coercion; SCIRS-SA = Intimate partner sexual coercion; ** p = < .001 and * p < .05.

3.2.Overview of Analytic Plan

3.2.1. Centering and coding of predictor variables

Dummy coding was used to standardize female opponent condition (Aiken & West, 1991). Furthermore, continuous predictor variables (i.e., hostile sexism, benevolent sexism) were mean centered by subtracting the mean score of the variable from the raw score of the variable. According to Aiken and West (1991), mean centering first-order continuous variables is advantageous for both statistical and substantive reasons. Most importantly, this procedure reduces multicollinearity between interaction terms and their constituent lower-order terms and improves the interpretability of regression equations. Furthermore, the computation of interactions with raw scores yields incorrect regression coefficients because

they are not scale invariant. Interaction terms were calculated by obtaining cross-products of pertinent first-order variables. Regression coefficients for simple effects were tested to determine whether they were significantly different from zero (Cohen, Cohen, West, & Aiken, 2003). When using this procedure, it is important to interpret the unstandardized, and not the standardized, regression solution. As such, all parameter estimates for interaction effects were reported as unstandardized *b*s. In contrast, estimates of main effects and simple slopes were reported as standardized *β*s.

3.2.2. Sum/difference regression analyses

Due to the fact that provocation is a repeated-measure (i.e., no provocation, low provocation, high provocation), the sum/difference regression method was used. This technique was chosen because it allows for regression analyses to examine interaction terms involving repeated-measures variables (Judd, Kenny, & McClelland, 2001). Without the use of this method, separate models would need to be created for each level of provocation and would not allow for the testing of interaction terms for this variable. As such, four new dependent variables were created: one which constitutes the sum of the no, low, and high provocation responses (DV1 = none + low + high), one which reflects the contrast between no and low provocation (DV2 = low – none), one which reflects the contrast between no and high provocation (DV3 = high – no), and one which reflects the contrast between low and high provocation (DV4 = high – low). The regression model was then computed four separate times for each created DV as the criterion variable. The coefficients for the DV1 model represent all of the "between" effects and the coefficients for the DV2, DV3, and DV4 models represent all of the "within" effects. The coefficient for the intercepts of the DV2, DV3, and

DV4 models represent the main effects of provocation for the no-low, no-high, and low-high provocation contrasts, respectively.

3.2.3. Hierarchal model

In order to evaluate the independent and interactive effects of hostile or benevolent sexism, provocation, and female opponent condition on men's physical aggression, separate hierarchical regression models were computed with *shock intensity* and *extreme aggression* as criterion variables. See Table 5 for an example of the four regression models and steps that were conducted for either hostile or benevolent sexism and shock intensity and extreme aggression. In addition, separate hierarchical regression models were computed with *flashpoint latency* and *flashpoint intensity* as criterion variables. Because these criterion variables were not assessed at all three levels of provocation, the aforementioned Sum/Difference method was not employed. In all models, Step 1 involved the entry of the control variable (either hostile or benevolent sexism), Step 2 involved the entry of the two predictor variables (hostile or benevolent sexism, condition), and Step 3 involved the entry of the pertinent interaction term.

Results are reported in two sections below for the main and interactive effects of female opponent condition, provocation (i.e., no, low, and high levels), and either hostile or benevolent sexism as the predictor variable (controlling for the other) on RCAP dependent measures of average shock intensity and extreme aggression (see Tables 6-9 for regression tables). Results for the main and interactive effects of female opponent condition and either hostile or benevolent sexism as the predictor variable (controlling for the other) on RCAP dependent measures of flashpoint aggression and flashpoint intensity are reported separately below (see Tables 10 and 11 regression tables).

Table 5 *Regression Models for Variables Predicting Average Shock Intensity and Extreme Aggression Using the Sum/Difference Regression Method*

Model 1	Model 2	Model 3	Model 4
DV1: none + low + high	DV2: low – none	DV3: high – none	DV4: high – low
Step 1: BAQ: Hostility, Benevolent Sexism	Step 1: BAQ: Hostility, Benevolent Sexism	Step 1: BAQ: Hostility, Benevolent Sexism	Step 1: BAQ: Hostility, Benevolent Sexism
Step 2: Hostile Sexism, Female Opponent Condition	Step 2: Hostile Sexism, Female Opponent Condition	Step 2: Hostile Sexism, Female Opponent Condition	Step 2: Hostile Sexism , Female Opponent Condition
Step 3: Hostile Sexism X Female Opponent Condition	Step 3: Hostile Sexism X Female Opponent Condition	Step 3: Hostile Sexism X Female Opponent Condition	Step 3: Hostile Sexism X Female Opponent Condition

3.3.Effects of Hostile Sexism, Female Opponent Condition, and Provocation on Men's Laboratory-Based Aggression Toward Women

3.3.1. Average shock intensity and extreme aggression

Step 2 of the between (i.e., DV1) and within (i.e., DV2, DV3, and DV4) effects models was not significant for average shock intensity [$F(2, 91) = 0.04 – 1.28$ and $R^2 = .001 – 0.041$] or extreme aggression [$F(2, 91) = 0.22 – 0.66$ and $R^2 = 0.01 – 0.02$] as the criterion variable. Main effects for hostile sexism or female opponent condition were not detected in Step 2 of the between effects model. In contrast, the main effect of provocation on average shock intensity was significant within models that contrasted low with no levels provocation (DV2: $b = .83$, $p = .02$), high with no levels of provocation (DV3: $b = 3.37$, $p < .001$), and high with low levels of provocation (DV4: $b = 2.54$, $p < .001$). The main effect of provocation on extreme aggression was significant for the high vs. no provocation contrast (DV3: $b = .24$, $p < .001$) and the high vs. low provocation contrast (DV4: $b = .21$, $p < .001$), but not for the low vs. no provocation contrast (DV2: $b = .02$, $p = .44$).

Step 3 of the between (i.e., DV1) and within (i.e., DV2, DV3, and DV4) effects models was not significant for average shock intensity [$F(3, 90) = 0.08 – 0.99$ and $R^2 = .004 – 0.042$] or extreme aggression [$F(3, 90) = 0.22 – 0.79$ and $R^2 = 0.22 – 0.79$ and $0.01 – 0.03$, respectively] as the criterion variable. No significant interactions were detected within any of the models.

3.3.2. Flashpoint latency and intensity

Step 2 was not significant for models with flashpoint aggression [$F(2, 91) = .42$ and $R^2 = .01$] or flashpoint intensity [$F(2, 91) = .99$ and $R^2 = .03$] as the criterion variable. No significant main effects of hostile sexism or female opponent condition were detected within either of these models. Step 3 was also not significant for models with flashpoint aggression [$F(3, 90) = .92$ and $R^2 = .04$] or flashpoint intensity [$F(3, 90) = .79$ and $R^2 = .03$] as the criterion variable. No higher order interactions were detected.

3.3.3. Summary

These results did not provide support for Hypothesis 1, which posited that men's endorsement of hostile sexism would be associated with (1) higher levels of aggression toward the non-traditional, relative to the traditional, female opponent in the no and low provocation conditions, (2) higher levels of aggression toward both the traditional and non-traditional woman in the high provocation condition, or (3) quicker flashpoints (i.e., flashpoint latency) as well as more intense flashpoints (i.e., flashpoint intensity) when competing against the non-traditional, relative to the traditional, female opponent[1].

3.4. Effects of Benevolent Sexism, Female Opponent Condition, and Provocation on Men's Laboratory-Based Aggression Toward Women

3.4.1. Average shock intensity and extreme aggression

Step 2 of the between (i.e., DV1) and within (i.e., DV2, DV3, and DV4) effects models that examined benevolent sexism as the predictor variable was not significant with average intensity [$F(2, 91) = 0.30 – 1.24$ and $R^2 = .01 – 0.05$] or extreme aggression [$F(2, 91) = 0.22 – 0.66$ and $R^2 = 0.007 – 0.03$] as the criterion variable. Main effects for benevolent sexism or female opponent condition were not detected. In contrast, the main effect of provocation on shock intensity was significant within models that contrasted low with no levels provocation (DV2: $b = .85$, $p = .014$), high with no levels of provocation (DV3: $b = 3.34$, $p < .001$), and high with low levels of provocation (DV4: $b = 2.50$, $p < .001$). The main effect of provocation on extreme aggression was significant for the high vs. no provocation contrast (DV3: $b = .24$, $p < .001$) and the high vs. low levels of provocation contrast (DV4: $b = .22$, $p < .001$), but not for the low vs. no provocation contrast (DV2: $b = .02$, $p = .44$).

Step 3 the between (i.e., DV1) and within (i.e., DV2, DV3, and DV4) effects models was not significant for average shock intensity [$F(3, 90) = 0.08 – 0.99$ and $R^2 = .004 – 0.042$] or extreme aggression [$F(3, 90) = 0.21 – 0.79$ and $R^2 = 0.01 – 0.03$] as the criterion variable. No significant interactions were detected within any of the models.

3.4.2. Flashpoint latency and intensity

Step 2 was not significant for models with flashpoint aggression [$F(2, 91) = .42$ and $R^2 = .01$] or flashpoint intensity [$F(2, 91) = .99$ and $R^2 = .03$] as the criterion variable. No significant main effects of benevolent sexism or female opponent condition were detected

within either of these models. Step 3 was also not significant for models with flashpoint aggression [$F(3, 90) = .32$ and $R^2 = .01$] or flashpoint intensity [$F(3, 90) = .88$ and $R^2 = .04$] as the criterion variable. No higher order interactions were detected[1].

3.4.3. Summary

These results provided support for Hypothesis 2, which posited that men's endorsement of benevolent sexism would not be associated with levels of physical aggression toward the female opponent or quicker or more intense flashpoints, regardless of provocation level or female opponent condition.

Table 6

Regression Models for Effects of Hostile Sexism, Female Opponent Condition, and Provocation on Average Shock Intensity

Models	DV1			DV2			DV3			DV4		
	b	SE	*p*	*b*	SE	*p*	*b*	SE	*p*	*b*	SE	*p*
Step 1												
BS	.01	.59	.98	-.01	.22	.68	.002	.04	.97	.01	.03	.69
Step 2												
BS	-.03	.08	.66	-.01	.03	.68	.01	.04	.88	.02	.03	.58
HS	.10	.08	.18	.02	.03	.45	-.01	.04	.75	-.03	.03	.30
Opponent	.29	1.21	.81	-.82	.45	.07	-.09	.64	.89	.74	.52	.16
Step 3												
BS	-.04	.08	.65	-.01	.03	.70	.01	.04	.86	.02	.03	.58
HS	.13	.12	.26	.01	.04	.86	-.03	.06	.59	-.04	.05	.41
Opponent	.26	1.21	.83	-.82	.45	.07	-.07	.64	.91	.74	.52	.16
HS X Opponent	-.05	.15	.72	.02	.06	.70	.03	.08	.66	.01	.06	.84

Note. N = 94. HS = Hostile sexism, BS = Benevolent sexism. Opponent = Female Opponent Condition. DV1 = no + low + high provocation, DV2 = low – no provocation, DV3 = high – no provocation), DV4 = high – low provocation.

Table 7

Regression Models for Effects of Hostile Sexism, Female Opponent Condition, and Provocation on Extreme Aggression

Models	DV1			DV2			DV3			DV4		
	b	SE	*p*	*b*	SE	*p*	*b*	SE	*p*	*b*	SE	*p*
Step 1												
BS	.01	.01	.41	.00	.00	.52	.00	.00	.94	-.00	.00	.64
Step 2												
BS	-.01	.01	.27	.00	.00	.59	.00	.00	.87	-.00	.00	.85
HS	.01	.01	.40	.00	.00	.71	.00	.00	.33	-.00	.00	.26
Opponent	.06	.10	.59	-.01	.04	.71	.04	.06	.53	.05	.06	.42
Step 3												
BS	-.01	.01	.29	.00	.00	.61	.00	.00	.84	.00	.00	.90
HS	-.00	.01	.82	.00	.00	.58	-.01	.01	.20	-.01	.00	.12
Opponent	.06	.10	.55	-.02	.04	.70	.04	.06	.50	.05	.06	.38
HS X Opponent	.01	.01	.32	-.00	.01	.68	.01	.01	.38	.01	.01	.28

Note. N = 94. HS = Hostile sexism, BS = Benevolent sexism. Opponent = Female Opponent Condition. DV1 = no + low + high provocation, DV2 = low – no provocation, DV3 = high – no provocation), DV4 = high – low provocation.

Table 8

Regression Models for Effects of Benevolent Sexism, Opponent Condition, and Provocation on Average Shock Intensity

Models	DV1			DV2			DV3			DV4		
	b	SE	*p*	*b*	SE	*p*	*b*	SE	*p*	*b*	SE	*p*
Step 1												
HS	.09	.07	.18	.10	.03	.71	-.01	.04	.78	-.02	.03	.49
Step 2												
HS	.10	.75	.18	.02	.03	.45	-.01	.04	.75	-.03	.03	.29
BS	-.03	.08	.66	-.01	.03	.68	.01	.04	.88	.02	.03	.58
Opponent	.29	1.2	.81	-.83	.45	.07	-.09	.64	.89	.74	.52	.16
Step 3												
HS	.10	.08	.18	.02	.03	.45	-.01	.04	.79	-.03	.03	.32
BS	-.01	.12	.95	-.01	.05	.83	-.05	.06	.48	-.04	.05	.50
Opponent	.27	1.23	.82	-.83	.45	.07	-.06	.64	.89	.76	.52	.14
BS X Opponent	-.04	.15	.79	-.00	.06	.95	.08	.08	.30	.09	.07	.18

Note. N = 94. HS = Hostile sexism, BS = Benevolent sexism. Opponent = Female Opponent Condition. DV1 = no + low + high provocation, DV2 = low – no provocation, DV3 = high – no provocation), DV4 = high – low provocation.

Table 9

Regression Models for Effects of Benevolent Sexism, Female Opponent Condition, and Provocation on Extreme Aggression

Models	DV1			DV2			DV3			DV4		
	b	SE	*p*	*b*	SE	*p*	*b*	SE	*p*	*b*	SE	*p*
Step 1												
HS	.00	.00	.54	.00	.00	.61	-.00	.00	.38	-.00	.00	.23
Step 2												
HS	.01	.01	.40	.00	.00	.71	.00	.00	.33	.00	.00	.26
BS	-.01	.01	.27	.00	.59	.71	.00	.00	.87	-.00	.00	.85
Opponent	.06	.10	.59	-.01	.04	.71	.04	.06	.53	.05	.06	.42
Step 3												
HS	.01	.01	.43	.00	.00	.74	-.00	.00	.34	-.00	.00	.28
BS	.00	.01	.87	.00	.00	.43	-.01	.01	.65	-.01	.00	.35
Opponent	.05	.10	.62	-.02	.04	.70	.04	.06	.51	.05	.06	.39
BS X Opponent	-.01	.01	.26	-.00	.01	.56	.01	.01	.47	.01	.01	.30

Note. $N = 94$. HS = Hostile sexism, BS = Benevolent sexism. Opponent = Female Opponent Condition. DV1 = no + low + high provocation, DV2 = low – no provocation, DV3 = high – no provocation), DV4 = high – low provocation.

Table 10

Summary of Hierarchical Regression Analyses for the Associations Between Hostile Sexism, Female Opponent Condition, Flashpoint Latency, and Flashpoint Intensity

Models	*b*	*β*	*t*	*p*	R^2
Flashpoint Latency					
Step 1					.01
BS	-.08	-.07	-.09	.41	
Step 2					.01
BS	-.06	-.07	-.59	.56	
HS	-.07	-.08	-.73	.47	
Opponent					.04
Step 3	-.05	-.06	-.51	.61	
BS	-.26	-.29	-1.66	.10	
HS					
HS X Opponent	.30	.30	1.5	.13	
Flashpoint Intensity					
Step 1					.01
BS	.00	.01	.06	.95	
Step 2					.18
BS	-.02	-.05	-.47	.64	
HS	.05	.15	1.31	.19	
Opponent					.19
Step 3	-.02	-.05	-.44	.66	

BS	.03	.08	.48	.63
HS				
HS X Opponent	.03	.08	.46	.65

Note. N = 94. HS = Hostile sexism, BS = Benevolent sexism. Opponent = Female Opponent Condition.

Table 11

Summary of Hierarchical Regression Analyses for the Associations Between Benevolent Sexism, Female Opponent Condition, Flashpoint Latency, and Flashpoint Intensity

Models	*b*	*β*	*t*	*p*	R^2
Flashpoint Latency					
Step 1					
BS	-.09	-.10	-.10	.36	.01
Step 2					
BS	-.07	-.08	-.73	. 47	.01
HS	-.06	.10	-.59	.16	.01
Opponent					
Step 3	-.07	-.08	-.71	.48	
BS	-.08	-.09	-.52	.60	
HS					
HS X Opponent	.04	.03	.19	.85	
Flashpoint Intensity					
Step 1					
BS	.04	.14	1.4	.17	.02
Step 2					
BS	.04	.15	1.3	.19	.03
HS	-.02	.04	-.47	.64	.04
Opponent					

Step 3	.04	.14	1.27	.21
BS	.02	.06	.28	.77
HS				
HS X Opponent	-.05	-.13	-.76	.45

Note. $N = 94$. HS = Hostile sexism, BS = Benevolent sexism. Opponent = Female Opponent Condition.

3.5.Frequencies of Flashpoint Aggression Under No, Low, and High Levels of Provocation and by Female Opponent Condition

A frequency count of men who entered the aggressive interaction under no, low, and high levels of provocation was computed across the entire sample and within each level of the female opponent condition (see Figures 1 and 2). As previously reported, 15 participants (Traditional: $N = 10$; Non-traditional: $N = 5$) did not enter the aggressive interaction across the 36 trials. Among participants who chose to enter the aggressive interaction, 78% entered under no levels of provocation ($N = 74$), 17% entered under low levels of provocation ($N = 17$), and 4.3% entered under high levels of provocation ($N = 4$). Notably, 62% of participants who entered the aggressive interaction under no levels of provocation (N = 58) administered a shock to the female opponent during the first trial. When taking into account the female opponent condition, results indicated that a higher number of participants entered the aggressive interaction under no levels of provocation (i.e., *unprovoked aggressors*) when competing against the non-traditional ($N = 44$), relative to traditional ($N = 30$), female opponent. Under low levels of provocation, the number of participants who administered their first shock was higher when competing against the traditional ($N = 10$), relative to the non-traditional ($N = 5$), female opponent. The four participants who entered the aggressive interaction under high levels of provocation all competed against the non-traditional female opponent.

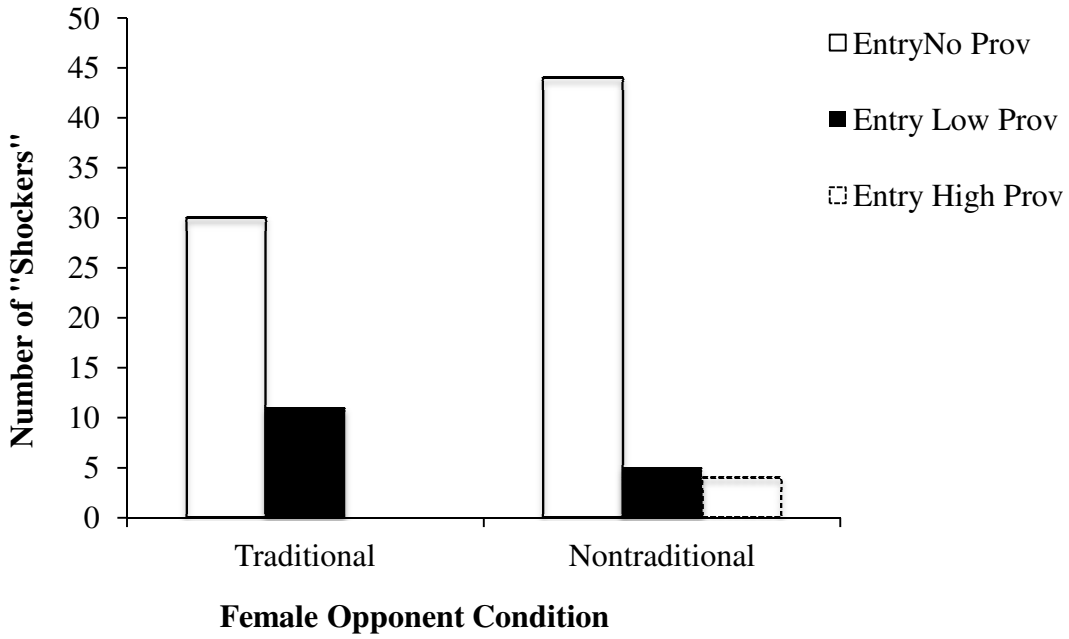

Figure 3. Frequency of Flashpoint Aggression Across No, Low, and High Levels of Provocation By Female Opponent Condition

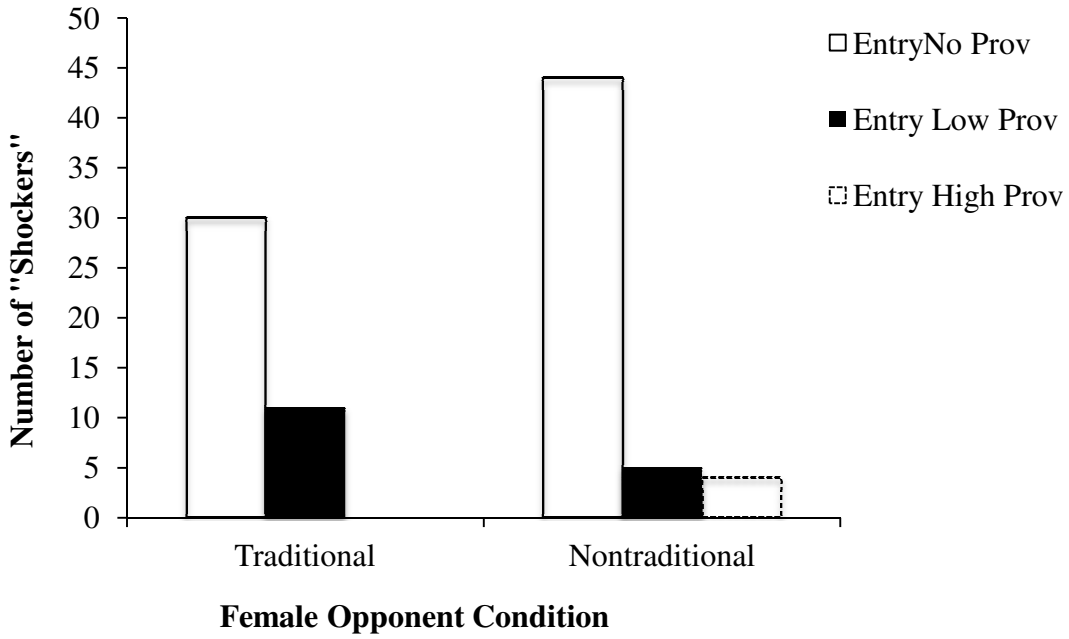

Figure 4. Frequency of Flashpoint Aggression Across No, Low, and High Levels of Provocation By Female Opponent Condition

3.6.Effects of Hostile Sexism, Benevolent Sexism, and Men's Self-Reported Perpetration of Intimate Partner Aggression

Six separate linear regression models were conducted to test Hypotheses 3 and 4, which sought to examine the partial correlations of hostile sexism and benevolent sexism and self-reported sexual and physical aggression as indicated on the CTS-2 and SCIRS. The total score of the SCIRS and the Sexual Coercion and Physical Aggression subscales of the CTS-2 were each regressed separately onto hostile sexism or benevolent sexism (controlling for the other). This resulted in six full models, each comprising hostile and benevolent sexism as the predictor or control variables. No significant partial correlations were detected within any of the models. These results did not support Hypothesis 3, which posited men's endorsement of

hostile sexism would be positively associated with their self-report of sexual and physical aggression toward female intimate partners. In contrast, results were consistent with Hypothesis 4, which posited that men's endorsement of benevolent sexism would not be associated with their self-report of sexual or physical aggression toward female intimate partners[1]. Models were also conducted which examined minor versus severe sexual and physical aggression (CTS-2 subscales), which also did not detect any significant partial correlations between hostile or benevolent sexism and minor or severe sexual or physical aggression toward female intimate partners.

3.7.Exploratory Analyses

As previously reviewed, hostile sexism, but not benevolent sexism, is positively associated with the minimization and acceptance of male-to-female physical assault within vignettes depicting a physical assault scenario in which a female victim is described as violating traditional feminine norms (Forbes et al., 2005; Yamawaki et al., 2009). The present study sought to extend this line of research via well-controlled manipulations of a traditional versus non-traditional woman within an experimental laboratory setting. Contrary to hypotheses, results did not support the hypothesized Hostile Sexism X Female Opponent Type X Provocation interaction.

Nevertheless, inspection of all 2- and 3-way interaction effects revealed that the Female Opponent Condition X Provocation (low vs. no contrast) interaction with average shock intensity as the criterion variable was marginally significant for models with hostile sexism *and* benevolent sexism as the predictor variable (DV2: $\beta = -.19$, $p = .07$). Given this finding, as well as the theoretical link between hostile sexism and physical aggression toward women, two sets of exploratory analyses were employed and results of these analyses are reviewed

below. The first analysis sought to explicate the Female Opponent Condition x Provocation interaction. The second analysis examined the interactive effects of hostile and benevolent sexism on physical aggression across all levels of provocation or and without controlling for the female opponent manipulation.

3.7.1. Female Opponent Condition X Provocation

Explication of the Female Opponent Condition X Provocation interaction revealed that men who competed against the traditional female opponent administered significantly higher shocks under low (M = 3.27, SD =2.00), relative to no (M = 2.44, SD = 2.30), provocation, [$F(1,39) = 4.90$, $p = .03$]. In contrast, men who completed against the non-traditional female opponent did not administer significantly different levels of shock under low (M = 2.90, SD = 2.50), relative to no (M = 2.94, SD = 3.00), provocation [$F(1,51) = .004$, $p = .95$]. Thus, results suggest that the traditional female opponent elicited a significant increase in aggression following participants' receipt of provocation from that female, and perhaps suggest that men viewed her as less "traditional" after she ostensibly administered shocks.

3.7.2. Hostile Sexism X Benevolent Sexism

The second set of exploratory analyses examined the interactive effects of hostile and benevolent sexism on men's average shock intensity, extreme aggression, and flashpoint aggression and intensity toward a female opponent. These analyses did not control for the manipulation of the female's adherence to traditional feminine norms and averaged aggression scores across all three levels of provocation. In addition, these exploratory analyses examined the basic interactive effects of hostile and benevolent sexism on men's self-report minor and severe sexual or physical aggression toward female intimate partners

within the past year using the CTS-2 subscales. This analytic approach is justified by pertinent theory. Ambivalent sexism theory posits that the opposing valences that comprise ambivalent sexism (i.e., men's endorsement of both hostile and benevolent sexism) serve as complementary ideologies. As such, examining their interaction effect allows for the examination of aggression among men who endorse sexist views that are both positive and negative in valence, representative of *ambivalent sexists* (i.e., high hostile and benevolent sexism), as well as men who endorse views that are neither positive or negative in valence, representative of *"non-sexist"* individuals (i.e., low hostile and benevolent sexism). Additionally, such analyses afford the ability to distinguish between men who endorse sexist views that are predominantly positive (e.g., chivalry and adoration toward women) or negative (e.g., general antipathy toward women) in valence (i.e., high hostile sexism, low benevolent sexism and low hostile sexism, high benevolent sexism, respectively).

As reviewed, a copious literature exists that links men's aggression toward women with their endorsement of hostility toward women (Calhoun, Bernat, Clum, & Frame, 1997; Forbes, Adams-Curtis, Pakalka, & White, 2006; Robertson & Murachner, 2007), a construct similarly reflective of a general antipathy toward women regardless of the adherence to female gender roles. As such, it was hypothesized that hostile sexism would be more positively associated with men's physical aggression toward a female stranger in a laboratory setting and men's self-report of sexual and physical aggression toward female intimate partners among men low, relative to high, in their endorsement of benevolent sexism.

Hierarchical linear regression analyses were indicated to test for the hypothesized moderation effects (Aiken &West, 1991; Cohen, Cohen, West, & Aiken, 2003). Main effects for hostile and benevolent sexism were entered in Step 1 and the respective Hostile Sexism x

Benevolent Sexism interaction term was entered in Step 2. For the experimental data (N = 94), this resulted in four full models (one for each RCAP dependent variable) each comprised of three variables. For the survey data variables (N = 64), this resulted four full models, in which the minor and severe subscales of the Sexual Coercion or the Physical Aggression Total subscales of the CTS-2 were each regressed separately onto hostile sexism, benevolent sexism, and their respective interaction term. Results are reported separately below for models with average shock intensity, extreme aggression, and flashpoint aggression and intensity as the criterion variable and with minor and severe sexual or physical aggression (CTS-2) as the criterion variables.

3.7.2.1.Average Shock Intensity

In Step 1, the model was not significant, $F(2, 91) = 0.30$, $p = .75$, $R^2 = .006$. In Step 2, the model was not significant, $F(3, 90) = 1.91$, $p = .13$, $R^2 = .06$. The interaction effect between hostile and benevolent sexism was significant ($b = -.005$, $p = .03$). As can be seen in Figure 3, explication of this interaction was consistent with hypotheses and evidenced that the association between hostile sexism and average shock intensity was significant and positive for men who endorsed low levels of benevolent sexism ($\beta = .25$, $p = .057$) relative to high levels of benevolent sexism ($\beta = -.11$, $p = .35$).

3.7.2.2.Extreme Aggression

In Step 1, the model was not significant, $F(2, 91) = 0.30$, $p = .47$, $R^2 = .02$. In Step 2, the model was not significant, $F(3, 90) = 1.5$, $p = .22$, $R^2 = .05$. The interaction effect between hostile and benevolent sexism was marginally significant ($b = -.001$, $p = .09$). Explication of this interaction was consistent with hypotheses and evidenced that the association between hostile sexism and extreme aggression was significant and positive for

men who endorsed low levels of benevolent sexism (β = .23, p = .085) relative to high levels of benevolent sexism (β = -.17, p = 65).

3.7.2.3.Flashpoint Aggression and Intensity

Step 1 of the model for flashpoint aggression was not significant, $F(2, 91) = 0.58$, p = .56, R^2 = .01. In Step 2, the model was not significant, $F(3, 90) = .59$, p = .62, R^2 = .02. Similarly, Step 1 of the model for flashpoint intensity was not significant, $F(2, 91) = .04$, p = .36, R^2 = .02. In Step 2, the model was not significant, $F(3, 90) = .73$, p = .54, R^2 = .02. No main effects or interaction effects were detected in models with flashpoint aggression or intensity.

3.7.2.4.Sexual Aggression Toward Intimate Partners

In Step 1, no significant effects were detected in the models with minor sexual aggression [Step 1: $F(2,61) = 0.414$, p = .66, R^2 = .01; Step 2: $F(3, 60) = 1.79$, p = .16, R^2 = .04] or severe sexual aggression as the criterion variables [Step 1: $F(2,61) = 0.90$, p = .41, R^2 = .03; Step 2: $F(3, 60) = .77$, p = .52, R^2 = .04]. No main effects were detected in any of these models. However, the interaction effect between hostile and benevolent sexism was significant for minor sexual coercion (b = -.03, p = .038). As can be seen in Figure 5, explication of this interaction evidenced that the association between men's endorsement of hostile sexism and their perpetration of minor sexual aggression toward female intimate partners was significantly more positive for men who endorsed low levels of benevolent sexism (β = .31, p = .066) relative to high levels of benevolent sexism (β = -.12, p = .515). No such interactive effect was detected in models with severe sexual aggression as the criterion variable.

3.7.2.5.Physical Aggression Toward Intimate Partners

No significant effects were detected in the model with minor physical aggression [Step 1: $F(2,61) = 0.62$, $p = .54$, $R^2 = .02$; Step 2: $F(3, 60) = 1.18$, $p = .32$, $R^2 = .06$] or with severe physical aggression as the criterion variables [Step 1: $F(2,61) = 0.12$, $p = .89$, $R^2 = .004$; Step 2: $F(3, 60) = .66$, $p = .58$, $R^2 = .03$]. In addition, no main or interaction effects were detected in Step 1 or Step 2 of these models.

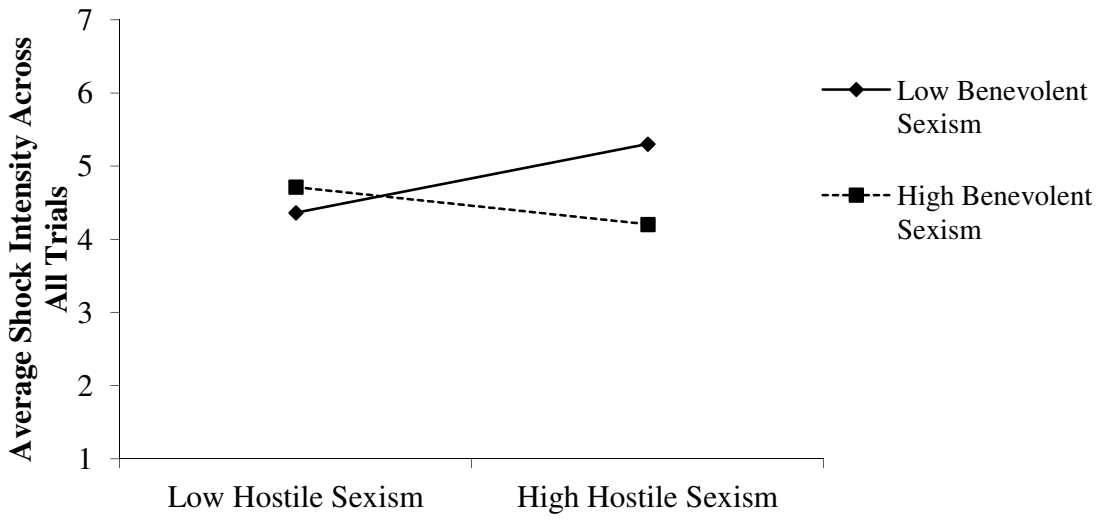

Figure 5. *Average Shock Intensity Across No, Low, and High Provocation Levels as a Function of Hostile and Benevolent Sexism*

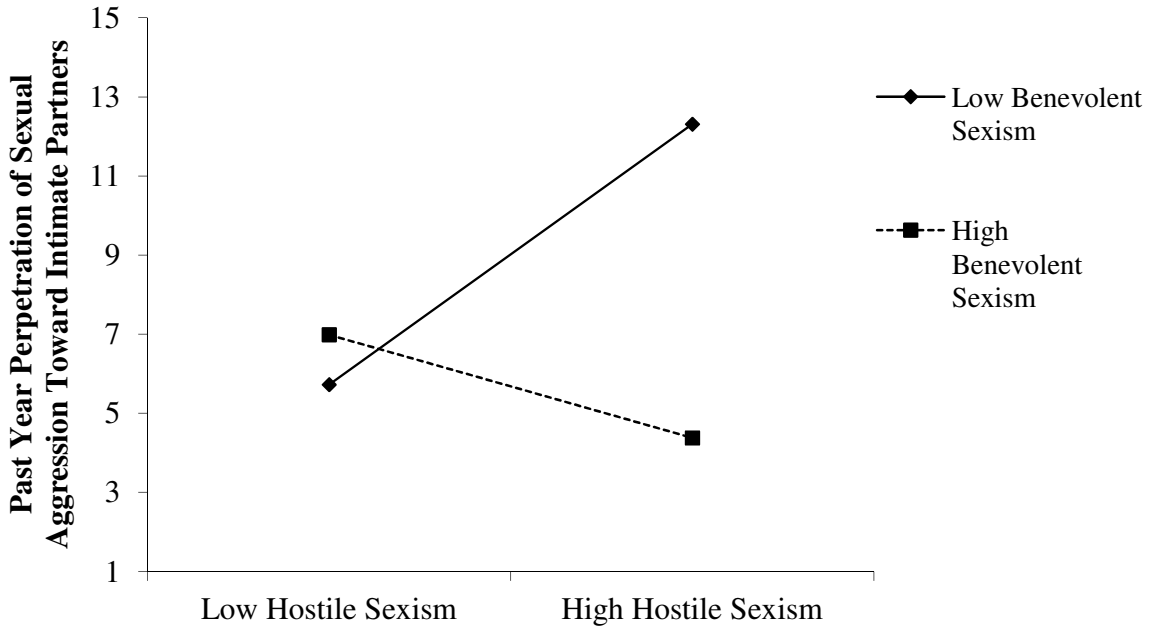

Figure 6. *Past Year Perpetration of Minor Sexual Aggression as a Function of Hostile and Benevolent Sexism*

4. DISCUSSION

The present study provides the first known systematic test of ambivalent sexism theory in relation to men's direct physical aggression against women in a laboratory setting. As reviewed, extant research indicates that hostile sexism, but not benevolent sexism, is positively associated with the minimization and acceptance of male-to-female physical assault in response to violations of the traditional feminine norms (Forbes et al., 2005; Yamawaki et al., 2009). However, such studies have not utilized experimental methodologies to allow for well-controlled manipulations of the female target's adherence to traditional feminine norms. Moreover, no existing approach has examined hostile and benevolent sexists' reactions to escalating levels of physical provocation from a female who is depicted as high or low in her adherence to traditional feminine norms. As such, the present study

advanced this line of research by examining the interactive effects of hostile and benevolent sexism, exposure to well-controlled manipulations of a traditional or non-traditional woman, and escalating physical provocation from that woman on men's actual enactment of aggression in the laboratory.

Results did not support the hypothesis that hostile sexism is positively associated with (1) physical aggression toward a non-traditional, but not a traditional, female in response to receiving no provocation and low provocation from that female and (2) physical aggression toward both a traditional and non-traditional female in response to high provocation from that female. Likewise, results were also inconsistent with the hypothesis that hostile, but not benevolent, sexism would be positively associated with quicker flashpoints (i.e., flashpoint latency) as well as more intense flashpoints (i.e., flashpoint intensity) when interacting with a non-traditional female, relative to a traditional female. In contrast, results supported the hypothesis that benevolent sexism would be unrelated to levels of physical aggression toward a female or quicker or more intense flashpoints, regardless of interacting with a traditional or non-traditional female or the level of provocation received from that female.

The present study was also the first to employ the aforementioned experimental methods to assess laboratory-based aggression and simultaneously assess retrospective self-reports of *actual* perpetration of intimate partner physical or sexual aggression among men who endorse hostile and benevolent sexism. As with laboratory-based findings, the hypothesis that men's endorsement of hostile sexism (controlling for benevolent sexism) would be positively associated with their self-report of sexual and physical aggression toward their female intimate partners was not supported. In contrast, results were consistent with the hypothesis that men's endorsement of benevolent sexism (controlling for hostile sexism)

would not be associated with their self-report of sexual and physical assault toward female intimate partners.

Collectively, the lack of support for *a priori* hypotheses does not coincide with previous empirical research. First, laboratory-based results are inconsistent with vignette-based research that links hostile sexism, but not benevolent sexism, with the minimization and acceptance of male-to-female physical assault in response to violations of the traditional feminine norms (Forbes et al., 2005; Yamawaki et al., 2009). Nevertheless, it should be noted again that previous vignette-based studies did not control for the female's adherence to traditional feminine norms. That is, this study reflects the first laboratory-based test that uses well-controlled manipulations of the female target's adherence to traditional feminine norms. Moreover, it should be noted that small effect sizes were observed for the hypothesized two- and three- way interactions. As such, the lack of support for the present study's hypotheses may reflect the fact that the sample of 94 participants was underpowered to detect significant effects. Thus, future research to this end is needed before making any definitive conclusions based on these preliminary results. Second, survey-based results are inconsistent with extant research that links men's endorsement of hostile sexism with their retrospective self-reports of sexual coercion toward female intimate partners (Forbes et al., 2004; Parrott et al., 2012) and toward women in general (Forbes & Adams-Curtis, 2001). Given that so few studies have attempted to link ambivalent sexism and retrospective self-reports of actual intimate partner aggression perpetration, there remains a continued need to conduct research in this area.

Furthermore, laboratory-based findings are inconsistent with the proposed integration of the ambivalent sexism theory and the framework of the GAM. In particular, ambivalent

sexism theory purports that hostile and benevolent sexism are differentially activated depending upon cues of the target or situation, including salient violations of traditional feminine norms (Glick & Fiske, 1997). The GAM posits that the appraisal of such a situation is the ultimate determinant of an aggressive outcome. Taken together, an aggressive outcome should depend upon the extent to which exposure to salient violations of the female gender role by a non-traditional woman (i.e., situational cue) among hostile sexist men (i.e., individual factor) elicits the activation of gender-relevant scripts and schemas as well as feelings of negative affect, hostile cognitions, and physiological arousal. In keeping with these theories, it was hypothesized that manipulation of a female's conformity to traditional feminine norms would activate gender salient schemas, negative affect, and hostile cognitions associated with women among hostile sexist men. Activation of these internal processes was in turn hypothesized to provide aggression-promoting content for appraisal and decision processes. However, in the present study, hostile sexist men did not differ in their use of physical aggression toward a traditional and non-traditional female, regardless of the level of provocation received from that female. Implications regarding the lack of support for the present study's proposed hypotheses will be discussed further below (see "Research Implications").

Given the lack of support for laboratory-based *a priori* hypotheses and the integration of the GAM and ambivalent sexism theory, three sets of exploratory analyses were employed and are reviewed separately below. The first set sought to further elucidate the effect of a female's gender role conformity and provocation from that female on men's physical aggression toward that female, regardless of their endorsement of hostile and benevolent sexism. The second set sought to examine the interactive effects of hostile and benevolent

sexism on men's aggression toward a female stranger, independent from that female's adherence to traditional feminine norms or level of provocation received from that female. The final set of exploratory analyses similarly examined the interactive effect of hostile and benevolent sexism on men's self-report of sexual and physical aggression toward female intimate partners within the past year.

4.1.Female Adherence to Traditional Feminine Norms and Laboratory Aggression

Results of the first set of exploratory analyses indicated that men displayed a significantly higher level of physical aggression toward a traditional female when receiving low, relative to no, provocation, from that female. In contrast, no such difference was found for men's physical aggression toward a non-traditional female. This finding supports the notion that men view provocation by a female as inconsistent with traditional female norms. Indeed, despite initial perceptions of a female as conforming to traditional feminine norms, receiving any provocation from that female elicited a significant increase in physical aggression following receipt of provocation from that female. In addition, results demonstrated that a higher frequency of men entered the aggressive interaction without any provocation (i.e., *unprovoked aggressors*) when competing against a woman who was depicted as non-traditional, relative to traditional, in her gender role adherence. This finding suggests that men may have perceived the female's non-traditional identity to be provoking, despite the absence of physical provocation.

Importantly, these results are consistent with previous research that similarly indicates that (1) men's physical aggression toward women is positively associated with violations of traditional feminine norms (Dobash & Dobash, 1979; Reidy, Shirk, Sloan, & Zeichner, 2009; Stark & Flitcraft, 1996), and (2) men view male-to-female aggression as

more justifiable when women are perceived as provoking the perpetrator (Hillier & Foddy, 1993; Pierce & Harris, 1993). Taken together, findings emphasize that receiving any level of provocation from a female perhaps alters men's perceptions of that female's adherence to traditional feminine norms such that provocation is perceived as a violation of conventional feminine norms. Implications of these findings for future research are discussed in greater detail below.

4.2. Sexism and Laboratory-Based Aggression Toward Women and Intimate Partners

Results of the second set of laboratory-based exploratory analyses indicated that men's endorsement of hostile sexism was more positively associated with the intensity of physical aggression toward a female stranger among men who endorsed low, relative to high, levels of benevolent sexism. Likewise, findings evidenced a marginally significant interaction effect showing that men's endorsement of hostile sexism was more positively associated with extreme physical aggression toward a female stranger among men who endorsed low, relative to high, levels of benevolent sexism. In contrast to these findings, results from the third set of exploratory analyses indicated that men's endorsement of hostile sexism was not associated with their report of past year perpetration of minor or severe physical aggression toward their female intimate partners, regardless of their endorsement of benevolent sexism. However, men's endorsement of hostile sexism was positively associated with their report of past year perpetration of minor, but not severe, sexual aggression toward their female intimate partners.

These findings are consistent with research that links men's perpetration of aggression toward women with their endorsement of hostility toward women, a construct that

similarly reflects a general antipathy toward women regardless of their adherence to female gender roles. Specifically, research shows that men's endorsement of hostility toward women is positively associated with their perpetration of physical (Anderson & Anderson, 2008; Parrott & Zeichner, 2003; Robertson & Murachver, 2007) and sexual (Abbey, McAuslan, & Ross, 1998; Bookwala, Frieze, Smith, & Ryan, 1992; Holtzworth-Munroe, Bates, Smutzler, & Sandin, 1997; Parrott et al., 2012) aggression toward women. Specific to intimate partner aggression, research shows that men's endorsement of hostility toward women is positively associated with their perpetration of both physical (Robertson & Murachver, 2007) and sexual (Forbes, Adams-Curtis, & White, 2004) aggression toward female intimate partners, above and beyond other attitudinal risk factors relevant to the sexism construct (e.g., rape myth acceptance, sexist perceptions, attitudes condoning violence). Implications are further discussed below.

4.3.Research Implications

Collectively, results of the exploratory analyses shed light on the importance of how researchers utilize methodology to capture the construct of ambivalent sexism, and more broadly, how hostile and benevolent sexism relate to the study of gender role conformity, provocation, and aggression. In accordance with the GAM, results suggest that the extent to which men behave aggressively toward a female target and the severity and type of aggression perpetrated toward that female target may depend on several individual and situational characteristics. Indeed, primary hypotheses were not supported with regard to the prediction that hostile sexism would be independently and positively associated with men's perpetration of laboratory physical aggression and self-report of sexual or physical aggression toward female intimate partners. This may be due in part to the way in which the

present study's methodology and analytical approach.

In particular, planned analyses examined independent correlations between hostile and benevolent sexism (controlling for the other) and aggressive outcomes and did not support hypotheses. In contrast, exploratory analyses examined an interaction between hostile and benevolent sexism to capture the fact that these constructs theoretically coexist. To this end, findings supported a positive association between men's endorsement of hostile sexism and laboratory physical aggression toward a female stranger and sexual aggression toward a female intimate partner only when men also endorsed low, relative to high, levels of benevolent sexism. Thus, it is possible that strictly hostile sexist men (i.e., high hostile sexism and low benevolent sexism) reflect a similar subset of at risk men as those who strongly endorse general hostility toward women. In contrast to these strictly hostile sexist men, ambivalent sexist men (i.e., high hostile and benevolent sexism) may reflect a subset of men who are at risk for perpetrating aggression toward intimate partners or female strangers within specific situational contexts such as those that involve extreme violations of the traditional female gender role (e.g., lesbians, infidelity). More specifically, for ambivalent sexist men, perpetration of severe forms of aggression perpetration may depend upon the severity and type of provocation received from a female target and may be more likely within contexts involving female intimate partners, relative to female strangers.

There are also several explanations that may be advanced to explain the lack of support for hypotheses specific to interactions between hostile sexism, female adherence to traditional feminine norms, and level of provocation. First, based on the third set of exploratory analyses, it is possible that strictly hostile sexist men who do not possess the additional attitudinal beliefs associated with benevolent sexism may not meaningfully

distinguish between a female who conforms or does not conform to traditional feminine norms. To this end, pertinent theory suggests that from a developmental perspective younger men are socialized to view women as part of a larger out-group member, thus reinforcing sexist ideologies that may or may not lead to this outgroup member view in adulthood (deLemus, Moya, & Glick, 2010). Moreover, research shows that hostile sexism is linked with a broader social dominance orientation and associated cognitions specific to motivation for intergroup dominance, particularly dominance over women (Sibley, Wilson, & Duckitt, 2007). Thus, it is possible hostile sexist men may experience an activation of hostile cognitions, memories, and negative affect associated with interacting with women in general due to their social dominance motivations and that female's representation as a larger outgroup member independent of the men's relationship with the female target or that target's adherence to traditional feminine norms.

Taken together, examining the interactive effects of hostile and benevolent sexism, relative to examining their independent effects, may be crucial in determining how and when sexist ideologies facilitate aggression toward various female targets, particularly when experimental designs allow for manipulation of the situational context. Such an approach allows for the consideration of the role of men's endorsement of various levels of hostile and benevolent sexism on the type of aggression perpetrated based on the situational context. Most notably, this type of assessment would allow for the investigation of aggression likelihood specific to the nature of men's relationship with a female target and the impact of different situational contexts in their decision-making and appraisal processes.

Second, the lack of support for *a priori* hypotheses suggests that a closer investigation of men's gender role conformity may be called for. The GAM dictates that memories linked

with hostile cognitions in response to a non-traditional woman should heighten activation of gender-related scripts and schemas that facilitate aggression. Thus, the extent to which men experience the activation of aggression-promoting internal states (e.g., hostile cognitions, negative affect, gender-related scripts and schemas) in response to a female with a non-traditional or traditional identity may depend on the salience of their own identity as a non-traditional or traditional male. To this end, this activation may depend on the extent to which men also possess risk factors known to activate associative network processes specific to gender-related schemas in response to gender-salient situations that were not considered herein.

Indeed, numerous scholars have advanced men's adherence to traditional masculine norms as a risk for the perpetration of physical aggression toward intimate partners inasmuch as they also tend to experience negative affect and stress within contexts that challenge their adherence to these norms (Eisler, 1995; Moore & Stuart, 2005; O'Neil & Harway, 1997; Pleck, 1995). This view is grounded in research that indicates that men who strongly adhere to traditional norms of masculinity experience physiological arousal when a target's gender is made salient to match their respective gender roles (van Well, Kolk, &Klugkist, 2008). Supporting research indicates that men who endorse high, relative to low, levels of masculine gender role stress are more likely to feel threatened, use verbal aggression, experience negative affect (e.g., anger), and attribute negative intent to female intimate partners during gender-relevant conflict situations (Franchia, Eisler, & Moore, 2001; Moore & Stuart, 2004). Taken together, it is possible that men's own adherence to traditional masculine norms may increase the experience of stress in response to gender-relevant situations. Such stress-related negative affect and cognitions would activate salient gender scripts and schemas which

should, in turn, increase their likelihood to aggress toward women independent of their endorsement of constructs such as hostility toward women or hostile sexism. Thus, future research would benefit from accounting for men's adherence to traditional masculinity and how it impacts their perceptions of a female's gender role conformity among men who do and do not endorse hostile and benevolent sexism.

4.4.Limitations

The present study possesses some noteworthy limitations. First, there was no control condition with a female confederate who was neutral in her adherence to traditional feminine norms. As such, some of the conclusions made from the present study warrant future research that assesses men's physical aggression toward a gender neutral, traditional, and non-traditional female confederate. The addition of a neutral female confederate would allow for continued examination of the hypothesis that strictly hostile sexist men do not distinguish between female target types based on their conformity to feminine norms. Second, the present study used a cross-sectional design to assess men's past year history of physical and sexual aggression toward intimate partners; thus, features of the situation (e.g., exposure to female partner's violation of traditional feminine norms) or the associative network activation of negative affect, arousal, and cognition on days in which they reportedly perpetrated intimate partner sexual aggression were not assessed. Finally, the present study only assessed laboratory physical aggression and not laboratory sexual aggression. Recent research has linked men's endorsement of hostile sexism to men's perpetration of laboratory aggression toward a female stranger (Parrott et al., 2012). Thus, future research would benefit from assessing men's perpetration of sexual aggression toward a female stranger versus a female intimate partner using both experimental and survey-based methodologies.

Despite these limitations, the present study's methodology and results advance research that uses laboratory methodologies to study ambivalent sexism and adds to the limited number of studies that have assessed men's retrospective self-report of actual perpetration of aggression toward their female intimate partner.

4.5. Conclusions

Though hypotheses were not supported, the present study reflects the first systematic test of ambivalent sexism theory in relation to men's direct physical aggression against women in a laboratory setting. As such, both the lack of support for *a priori* hypothesis and results of exploratory analyses suggest that future research would benefit from further investigation that teases apart potential intersections between sexism, gender role adherence of both the perpetrator and target of aggression, and provocation from that target. In particular, future research is warranted that examines how these confluent factors may influence the likelihood of aggressive behavior, the nature of that aggressive behavior, and the outlet of that aggressive behavior (e.g., toward female strangers or intimate partners). Ultimately, the novel methodology and simultaneous assessment of self-reported aggression reflects one of the first steps toward developing multi-method research designs to examine a broader scope of hostile and benevolent sexist men's aggression toward women (i.e., toward female intimate partners and/or toward female strangers). Thus, future research employing ambivalent sexism theory may build upon the present study to examine the scope of hostile sexist men's self-report and actual enactment of sexual and physical aggression toward women (i.e., toward female intimate partners and/or toward female strangers.

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FOOTNOTES

[1] The present study included a measure of general dispositional hostility among initial bivariate correlations in order to include as a covariate in the event that that a significant positive association was found between hostile sexism and general hostility. As predicted, men's endorsement of dispositional hostility was positively correlated with their endorsement of hostile sexism. As such, general hostility was controlled for within analyses for experimental and survey data to ensure any effects found within these models was not better accounted for by men's dispositional hostility, relative to their endorsement of hostile sexism. Results showed no differences with dispositional hostility included in models across all criterion variables assessed.

APPENDIX A

Demographic Information

Demographics Form

Age: _____

Years of Education including kindergarten: _____

Marital Status (please check one)
__ Single (never married)
__ Married
__ Not married but living with intimate partner
__ Divorced
__ Widowed
__ Separated

How do you describe your ethnicity?
___ Hispanic or Latino
___ Non-Hispanic or Non-Latino

How do you describe your race?
___ American Indian or Alaska Native
___ Asian
___ Native Hawaiian or Other Pacific Islander
___ Black or African American
___ White
___ More Than One Race

Please indicate your sexual orientation: Heterosexual Homosexual Bisexual

YOUR average yearly income if you support yourself or your parents' average yearly income if they support you (please check one).

___ $0-$5,000
___ $5,000-$10,000
___ $10,000-$20,000
___ $20,000-$30,000
___ $30,000-$40,000
____ $40,000-$50,000
____ $50,000-$60,000
____ $60,000-$70,000
____ $70,000+

APPENDIX B

Ambivalent Sexism Inventory

ASI

Directions: Below is a series of statements concerning men and women and their relationships in contemporary society. Please indicate the degree to which you agree or disagree with each statement. There are no right or wrong answers. Do not leave any questions blank.

0 Disagree Strongly
1 Disagree Somewhat
2 Disagree Slightly
3 Agree Slightly
4 Agree Somewhat
5 Agree Strongly

1. No matter how accomplished he is, a man is not truly complete as a person unless he has the love of a woman.	0 1 2 3 4 5
2. Many women are actually seeking special favors, such as hiring policies that favor them over men, under the guise of asking for "equality."	0 1 2 3 4 5
3. In a disaster, women ought not necessarily to be rescued before men.	0 1 2 3 4 5
4. Most women interpret innocent remarks or acts as being sexist.	0 1 2 3 4 5
5. Women are too easily offended.	0 1 2 3 4 5
6. People are often truly happy in life without being romantically involved with a member of the other sex.	0 1 2 3 4 5
7. Feminists are not seeking for women to have more power than men.	0 1 2 3 4 5
8. Many women have a quality of purity that few men posses.	0 1 2 3 4 5
9. Women should be cherished and protected by men.	0 1 2 3 4 5
10. Most women fail to appreciate fully all that men do for them.	0 1 2 3 4 5
11. Women seek to gain power by getting control over men.	0 1 2 3 4 5
12. Every man ought to have a woman whom he adores.	0 1 2 3 4 5
13. Men are complete without women.	0 1 2 3 4 5
14. Women exaggerate problems they have at work.	0 1 2 3 4 5
15. Once a woman gets a man to commit to her, she usually tries to put him on a tight leash.	0 1 2 3 4 5
16. When women lose to men in a fair competition, they typically complain about being discriminated against.	0 1 2 3 4 5
17. A good woman should be set on a pedestal by her man.	0 1 2 3 4 5
18. There are actually very few women who get a kick out of teasing men by seeming sexually available and then refusing male advances.	0 1 2 3 4 5
19. Women, compared to men, tend to have a superior moral sensibility.	0 1 2 3 4 5
20. Men should be willing to sacrifice their own well being in order to provide financially for the women in their lives.	0 1 2 3 4 5
21. Feminists are making entirely reasonable demands of men.	0 1 2 3 4 5
22. Women, as compared to men, tend to have a more refined sense of culture and good taste.	0 1 2 3 4 5

APPENDIX C

The Revised Conflict Tactics Scale (CTS-2)

CTS 2

Have you been in an intimate relationship in the past year? **YES** **NO**

If NO: Please skip to the next questionnaire
If YES: Below is a list of some things partners do while they are arguing. Please indicate how often each happened.

How many times **in the past year**:
0 = Never in the past year
1 = Once in the past year
2 = Twice in the past year
3 = 3-5 times in the past year 4 = 6-10 times in the past year
5 = 11-20 times in the past year
6 = More than 20 times in the past year

1.	I showed my partner I cared even though we disagreed	0 1 2 3 4 5 6
2.	My partner showed care for me even though we disagreed	0 1 2 3 4 5 6
3.	I explained my side of a disagreement to my partner	0 1 2 3 4 5 6
4.	My partner explained his/her side of a disagreement to me	0 1 2 3 4 5 6
5.	I insulted or swore at my partner	0 1 2 3 4 5 6
6.	My partner insulted or swore at me	0 1 2 3 4 5 6
7.	I threw something at my partner that could hurt	0 1 2 3 4 5 6
8.	My partner threw something at me that could hurt	0 1 2 3 4 5 6
9.	I twisted my partner's arm or hair	0 1 2 3 4 5 6
10.	My partner twisted my arm or hair	0 1 2 3 4 5 6
11.	I had a sprain, bruise, or small cut because of a fight with my partner	0 1 2 3 4 5 6
12.	My partner had a sprain, bruise, or small cut because of a fight with me	0 1 2 3 4 5 6
13.	I showed respect for my partner's feelings about an issue	0 1 2 3 4 5 6
14.	My partner showed respect for my feelings about an issue	0 1 2 3 4 5 6
15.	I made my partner have sex without a condom	0 1 2 3 4 5 6
16.	My partner made me have sex without a condom	0 1 2 3 4 5 6
17.	I pushed or shoved my partner	0 1 2 3 4 5 6
18.	My partner pushed or shoved me	0 1 2 3 4 5 6
19.	I used force (like hitting, holding down, or using a weapon) to make my partner have oral or anal sex	0 1 2 3 4 5 6
20.	My partner used force (like hitting, holding down, or using a weapon) to make me have oral or anal sex	0 1 2 3 4 5 6
21.	I used a knife or gun on my partner	0 1 2 3 4 5 6
22.	My partner used a knife or gun on me	0 1 2 3 4 5 6
23.	I passed out from being hit on the head by my partner in a fight	0 1 2 3 4 5 6
24.	My partner passed out from being hit on the head in a fight with me	0 1 2 3 4 5 6
25.	I called my partner fat or ugly	0 1 2 3 4 5 6

26.	My partner called me fat or ugly	0 1 2 3 4 5 6
27.	I punched or hit my partner with something that could hurt	0 1 2 3 4 5 6
28.	My partner punched or hit me with something that could hurt	0 1 2 3 4 5 6
29.	I destroyed something belonging to my partner	0 1 2 3 4 5 6
30.	My partner destroyed something belonging to me	0 1 2 3 4 5 6
31.	I went to a doctor because of a fight with my partner	0 1 2 3 4 5 6
32.	My partner went to a doctor because of a fight with me	0 1 2 3 4 5 6
33.	I choked my partner	0 1 2 3 4 5 6
34.	My partner choked me	0 1 2 3 4 5 6
35.	I shouted or yelled at my partner	0 1 2 3 4 5 6
36.	My partner shouted or yelled at me	0 1 2 3 4 5 6
37.	I slammed my partner against a wall	0 1 2 3 4 5 6
38.	My partner slammed me against a wall	0 1 2 3 4 5 6
39.	I said I was sure we could work out a problem	0 1 2 3 4 5 6
40.	My partner was sure we could work it out	0 1 2 3 4 5 6
41.	I needed to see a doctor because of a fight with my partner, but didn't	0 1 2 3 4 5 6
42.	My partner needed to see a doctor because of a fight with me, but didn't	0 1 2 3 4 5 6
43.	I beat up my partner	0 1 2 3 4 5 6
44.	My partner beat me up	0 1 2 3 4 5 6
45.	I grabbed my partner	0 1 2 3 4 5 6
46.	My partner grabbed me	0 1 2 3 4 5 6
47.	I used force (like hitting, holding down, or using a weapon) to make my partner have sex	0 1 2 3 4 5 6
48.	My partner used force (like hitting, holding down, or using a weapon) to make me have sex	0 1 2 3 4 5 6
49.	I stomped out of the room or house or yard during a disagreement	0 1 2 3 4 5 6
50.	My partner stomped out of the room or house or yard during a disagreement	0 1 2 3 4 5 6
51.	I insisted on sex when my partner did not want to (but did not use physical force)	0 1 2 3 4 5 6
52.	My partner insisted on sex when I did not want to (but did not use physical force)	0 1 2 3 4 5 6
53.	I slapped my partner	0 1 2 3 4 5 6
54.	My partner slapped me	0 1 2 3 4 5 6
55.	I had a broken bone from a fight with my partner	0 1 2 3 4 5 6
56.	My partner had a broken bone from a fight with me	0 1 2 3 4 5
57.	I used threats to make my partner have oral or anal sex	0 1 2 3 4 5 6
58.	My partner used threats to make me have oral or anal sex	0 1 2 3 4 5 6
59.	I suggested a compromise to a disagreement	0 1 2 3 4 5 6
60.	My partner suggested a compromise to a disagreement	0 1 2 3 4 5 6
61.	I burned or scalded my partner on purpose	0 1 2 3 4 5 6
62.	My partner burned or scalded me on purpose	0 1 2 3 4 5 6
63.	I insisted my partner have oral or anal sex (but did not use phys cal force)	0 1 2 3 4 5 6

64.	My partner insisted I have oral or anal sex (but did not use physical force)	0 1 2 3 4 5 6
65.	I accused my partner of being a lousy lover	0 1 2 3 4 5 6
66.	My partner accused me of being a lousy lover	0 1 2 3 4 5 6
67.	I did something to spite my partner	0 1 2 3 5 6
68.	My partner did something to spite me	0 1 2 3 4 5 6
69.	I threatened to hit or throw something at my partner	0 1 2 3 4 5 6
70.	My partner threatened to hit or throw something at me	0 1 2 3 4 5 6
71.	I felt physical pain that still hurt the next day because of a fight with my partner	0 1 2 3 4 5 6
72.	My partner still felt physical pain the next day because of a fight we had	0 1 2 3 4 5 6
73.	I kicked my partner	0 1 2 3 4 5 6
74.	My partner kicked me	0 1 2 3 4 5 6
75.	I used threats to make my partner have sex	0 1 2 3 4 5 6
76.	My partner used threats to make me have sex	0 1 2 3 4 5 6
77.	I agreed to try a solution to a disagreement my partner suggested	0 1 2 3 4 5 6
78.	My partner agreed to try a solution to a disagreement that I suggested	0 1 2 3 4 5 6

APPENDIX D

Sexual Coercion in Intimate Relationships Scale (SCIRS)

Sexual Coercion in Intimate Relationships Scale

Instructions: Sexuality is an important part of romantic relationships and can sometimes be a source of conflict. Your honest responses to the following questions will contribute profoundly to what is known about sexuality in romantic relationships and may help couples improve the sexual aspects of their relationships. We appreciate that some of the questions may be uncomfortable for you to answer, but keep in mind that your responses will remain confidential.

Below is a list of acts that can occur in a romantic relationship. Please use the following scale to indicate HOW OFTEN in the *past ONE month* these acts have occurred in *your* current romantic relationship. Write the number that best represents your response in the blank space to the left of each act.

0 = Act *did NOT* occur in the past month
1 = Act occurred *1 time* in the past month
2 = Act occurred *2 times* in the past month
3 = Act occurred *3 to 5 times* in the past month
4 = Act occurred *6 to 10 times* in the past month
5 = Act occurred *11 OR MORE times* in the past month

____ 1. I *hinted* to my partner that I would withhold benefits that she depends on if she did not have sex with me.

____ 2. I *threatened* to my partner to withhold benefits that she depends on if she did not have sex with me.

____ 3. I withheld my partner's benefits that she depends on to get her to have sex with me.

____ 4. I *hinted* to my partner that I would give her gifts or other benefits if she had sex with me.

____ 5. I gave my partner gifts or other benefits so that she would feel obligated to have sex with me.

____ 6. I reminded my partner of gifts or other benefits I gave her so that she would feel obligated to have sex with me.

____ 7. I persisted in asking my partner to have sex with me, even though I knew that she did not want to.

____ 8. I pressured my partner to have sex with me against her will.

____ 9. I initiated sex with my partner when she was unaware (for example, she was asleep, drunk, or on medication) *and continued against her will*.

____ 10. I *threatened* to physically force my partner to have sex with me.

____ 11. I physically forced my partner to have sex with me.

____ 12. I made my partner feel obligated to have sex with me.

____ 13. I *hinted* that I would have sex with another woman if my partner did not have sex with me.

____ 14. I *threatened* to have sex with another woman if my partner did not have sex with me.

____ 15. I told my partner that other couples have sex more than we do, to make her feel like she should have sex with me.

____ 16. I *hinted* that I might pursue a long-term relationship with another woman if my partner did not have sex with me.

____ 17. I *threatened* my partner to pursue a long-term relationship with another woman if she did not have sex with me.

____ 18. I *hinted* to my partner that if she were truly committed to me she would have sex with me.

____ 19. I *told my partner* that if she were truly committed to me she would have sex with me.

____ 20. I *hinted* to my partner that if she loved me she would have sex with me.

____ 21. I *told my partner* that if she loved me she would have sex with me.

____ 22. I *threatened* violence against my partner if she did not have sex with me.

____ 23. I *threatened* violence against someone or something my partner cares about if she did not have sex with me.

____ 24. I *hinted* that other women were interested in a relationship with me, so that she would have sex with me.

____ 25. I *told my partner* that other women were interested in a relationship with me, so that she would have sex with me.

____ 26. I *hinted* to my partner that other women were interested in having sex with me, so that she would have sex with me.

____ 27. I *told my partner* that other women were interested in having sex with me, so that she would have sex with me.

____ 28. I *hinted* to my partner that other women were willing to have sex with me, so that she would have sex with me.

____ 29. I *told my partner* that other women were willing to have sex with me, so that she would have sex with me.

____ 30. I *hinted* that it was my partner's obligation or duty to have sex with me.

____ 31. I *told my partner* that it was her obligation or duty to have sex with me.

____ 32. I *hinted* to my partner that she was cheating on me, in an effort to get her to have sex with me.

____ 33. I *accused my partner* of cheating on me, in an effort to get her to have sex with me.

____ 34. My partner and I had sex, even though she did not want to.

APPENDIX E

Confederate's Scripted Responses to Gender Role Questions

Confederates' Scripted Responses to Gender Role Questions (Reidy et al., 2009)

Nine questions corresponding to subscales of the Conformity to Feminine Norms Inventory (Mahalik et al., 2005) will be posed to participants. This measure includes a modification from Reidy and collegues' original measure such that hypofeminine (HO) was changed to Non-traditional (NT) and hyperfeminine (HR) was changed to Traditional (T). The areas covered include (a) Nice in Relationships, (b) Thinness, (c) Modesty, (d) Career, (e) Care for Children, (f) Romantic Relationships, (g) Sexual Fidelity, (h) Investment in Appearance, and (i) an additional question about career goals. The following ostensible opponent responses will be presented to participants in the NT female opponent and T female opponent conditions.

1. How important is it to be nurturing and polite in relationships?

NT: In the real world, you can't always be polite. I'm strong and independent; I don't expect others to take care of me, so they shouldn't expect me to take care of them.

T: I like to take care of my friends and boyfriend. And I think you should always make an effort to be nice.

2. How important is appearance?

NT: There is way too much focus on how a woman is supposed to look instead of what she does. I don't really care what other people think of how I look.

T: It's important to look nice. It says a lot about a person if they don't put any effort into the way they look. I would never leave the house without looking in the mirror.

3. How important is it to be modest about your accomplishments?

NT: Why should I be modest? I've worked hard, and I'm proud of the things I've accomplished.

T: Nobody likes to be around cocky people. Especially if you are working with other people, you don't want to brag about how good you are because it might make them feel bad.

4. How important is it to be career focused?

NT: It's important for me to be focused because I'm going into a competitive field and intend to be successful. Everything I'm doing in school now is so I can get ahead later.

T: Even though I'm in school right now, I'd ideally like to be a stay-at-home mom. I think that housewives don't get enough credit; my mom was a stay-at-home mom, and she worked harder than most of my friends' parents.

5. How important is it to be a caregiver for children?

NT: I don't plan on having kids. As I was saying before, I'm focused on my career and I'm not willing to jeopardize that.

T: Like I was saying before, I want to stay home with my kids, so that I can be involved in everything. I kinda feel like my role is to be responsible for the kids, and my husband's job will be to support the family.

6. How important are romantic relationships?

NT: I date, but I'm not that girl who needs a boyfriend. I actually prefer being single.

T: It's important to me. I can't wait to be married.

7. How important is fidelity?

NT: Honestly, there is so much casual sex and cheating in our society, I think people weren't meant to be with just one person.

T: I'd say it's extremely important. There is no excuse for cheating on someone. I never have and I never will.

8. How important is it to be thin?

NT: As long as I'm healthy, I don't care about being thin.

T: Like I was saying earlier, my appearance is really important to me. As soon as I feel like I'm gaining weight, I'll go on a diet, and on days when I eat too much bad stuff, I'll do an extra long run.

9. What are your ultimate career goals?

NT: I want to do corporate law. Ultimately, I want to make partner in a big firm.

T: I'll probably teach until I get married and then stay at home with my kids.

APPENDIX F

Pre- and Post-Experimental Manipulation Check

CFNI

While we know that you have never met your opponent before (we randomly paired the two of you together for the study today), please rate the following items in terms of how well they describe your opponent.

0 Disagree Strongly
1 Disagree Somewhat
2 Disagree Slightly
3 Agree Slightly
4 Agree Somewhat
5 Agree Strongly

1. My opponent does all of the cleaning, cooking, and decorating where she lives.	0 1 2 3 4 5
2. My opponent believes taking care of children is extremely fulfilling.	0 1 2 3 4 5
3. My opponent would feel comfortable having casual sex. (R)	0 1 2 3 4 5
4. My opponent is not afraid of telling people about her achievements.	0 1 2 3 4 5
5. My opponent is always trying to lose weight.	0 1 2 3 4 5
6. My opponent regularly wears make-up.	0 1 2 3 4 5
7. My opponent would feel burdened if she had to maintain a lot of friendships. (R)	0 1 2 3 4 5
8. My opponent believes having a romantic relationship is essential in life.	0 1 2 3 4 5