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## **Flattering to Deceive: Why People Misunderstand Benevolent Sexism**

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**Abstract**

Perceptions of warmth play a central role in social cognition. Seven studies use observational, correlational, and experimental methods to examine its role in concealing the functions of benevolent sexism (BS). Together, Studies 1 ( $n = 297$ ), 2 ( $n = 252$ ), and 3 ( $n = 219$ ) indicated that although women recall experiencing benevolent (vs. hostile) sexism more often, they protest it less often, because they see it as warm. In Studies 4 ( $n = 296$ ) and 5 ( $n = 361$ ), describing men as high in BS caused them (via warmth) to be seen as lower in hostile sexism (HS) and more supportive of gender equality. In Study 6 ( $n = 283$ ) these findings were replicated and extended, revealing misunderstanding of relationships between BS and a wide array of its correlates. In Study 7 ( $n = 211$ ), men experimentally described as harboring warm (vs. cold) attitudes toward women were perceived as higher in BS but lower in known correlates of BS. These findings demonstrate that the warm affective tone of BS, particularly when displayed by men, masks its ideological functions.

*Keywords:* gender, benevolent sexism, valence, warmth, protest

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It proves difficult to abandon the trappings of an ideological system that so delicately obscures the raw pursuit of your own group's interests.

Jackman, 1994, p. 295

Recent years have seen the rise of grassroots movements against sexual harassment, assault, overtly sexist remarks, and discrimination against women, including #MeToo (Lawton, 2017) and the Everyday Sexism Project (Bates, 2012). These movements have been hailed as important steps toward equality in gender relations. Nonetheless, progress is slower than might be expected, given that for decades, gender equality has been pursued by governments, NGOs, and thousands of activists, and enshrined as a principle of international law (OECD, 2017). This warrants further inquiry into the psychological processes that cause deep-seated gender inequities to be legitimized and held in place.

A pivotal insight from Glick and Fiske (1996, 2001) has shed light on the stubborn persistence of gender equality. Specifically, it is held in place by a sexist ideological system that does not simply revile and denigrate women, but also reveres women as uniquely moral, sensitive, refined, and indispensable for men's happiness and authenticity. Crucially, this system also suggests that men should adore women and make material sacrifices to protect and support them. Research indicates that this warm, affectionate aspect of sexism makes women's overall standing and treatment more palatable to them, undermining their motivation to improve their social and economic position (Connelly & Heesacker, 2012; Glick & Fiske, 2001; Hammond & Sibley, 2011; Jackman, 1994). It is also positively correlated with misogyny and acts in concert with it as a carrot-and-stick, honey-and-vinegar system of social control (Glick & Fiske, 1996, 2001, 2011; Jost & Kay, 2005).

In the present article, we examine two perspectives in the literature on the appeal of this warm aspect of sexism to women. One is that it is part of a more-or-less knowing bargain

or com-promise, in which women accept the compensatory benefits of this aspect of sexism, even though they may be aware that it is sexist and that it ultimately maintains their position in the gender hierarchy. Another is that this kind of sexism is more akin to a confidence trick, in which women are lured by its superficial positivity into seeing it as an antidote to misogyny and gender inequality. We report the results of seven studies, including one archival study and six experiments, demonstrating that the subjective warmth of benevolent sexism obscures its ideological functions and disarms efforts to challenge it. In the following pages, we review research on the ambivalent nature of sexism, research on lay people's understanding of sexism, and then outline why perceptions of warmth may play a key role in misunderstandings of sexism.

### Ambivalent Sexism Theory

In Ambivalent Sexism Theory (Glick & Fiske, 1996, 2011; Glick et al., 2000), sexism is comprised of hostile sexism (HS) and benevolent sexism (instructively abbreviated by Glick & Fiske, 1996, as BS). HS portrays women in misogynistic terms as manipulative, devious, and inferior to men. Men high in HS exhibit greater tolerance of sexual harassment (Russell & Trigg, 2004), have greater rape proclivity (Masser, Viki, & Power, 2006), and support sexist hiring policies (Masser & Abrams, 2004). In contrast, BS praises women as the kinder, more moral, and refined gender: traits that it portrays as essential for men's romantic fulfillment and happiness and deserving of men's protection and financial support.

Although BS embodies warm feelings toward women, it has been shown to undermine women and gender equality in several ways. It represents a pejorative view of women as the fairer but weaker sex (Glick & Fiske, 2001). Many studies show that it is positively associated with HS at both the individual and cultural level (Glick et al., 2000), and a range of outcomes that undermine women's interests. For example, women's exposure to

BS can lower women's cognitive performance (Dardenne, Dumont, & Bollier, 2007; Vescio, Gervais, Snyder, & Hoover, 2005), and increase their self-objectification and body dissatisfaction (Calogero & Jost, 2011; Forbes, Doroszewicz, Card, & Adams-Curtis, 2004). BS implies that gender relations are fair and legitimate (Glick & Fiske, 2001; Jost & Banaji, 1994; Jost & Kay, 2005), and deters women from seeking to change them (Becker & Wright, 2011; Jost & Kay, 2005). Endorsement of BS also predicts attitudes that serve to limit women's autonomy during pregnancy, including willingness to prevent women from making choices that participants think might be risky for the fetus (Murphy, Sutton, Douglas & McClellan, 2011; Sutton, Douglas, & McClellan, 2011), and opposition to abortion (Huang, Davies, Sibley, & Osborne, 2016; Osborne & Davies, 2012). BS makes traditional gender roles (e.g., housewife, mother) appealing for women, and rewards conformity to traditional gender expectations (Cikara, Lee, Fiske, & Glick, 2009; Glick, Diebold, Bailey-Werner, & Zhu, 1997; Glick & Fiske, 2001).

Two key perspectives have been advanced to explain *how* benevolent sexism (BS) serves to reduce women's resistance to the status quo. One perspective can be described as the knowing bargain hypothesis, whereby women may be aware of their sub-ordinate position, and so accept BS as a means to benefit from men's chivalry while being protected from their hostility (Glick & Fiske, 1996). This interpretation suggests that women effectively give up on the aspiration to achieve perfect gender equality but accept BS as compensation for their subordinate position. This hypothesis has received indirect support. For example, women's endorsement of BS is higher in countries in which men endorse HS and higher in countries with more gender inequality (Glick et al., 2000), consistent with the notion that they see BS as offering some protection from men's hostility. BS is also associated with women's sexual self-objectification and appearance modification (make-up, cosmetic surgery), consistent with the idea that BS motivates women to obtain benefits from

men through intimacy (Calogero & Jost, 2011). Thus, it appears that women might understand at least some of the implications of BS and, therefore knowingly accept the ideology because they believe it will offer them some compensation.

An alternative hypothesis is that BS is a form of false consciousness for women and is endorsed by them even though—or because—they do not grasp its implications. In unequal social systems, a *false consciousness* is assumed by the subordinated group to make hostile or unfair treatment palatable (Jost & Banaji, 1994). Thus, BS may operate similar to other legitimizing ideologies that mask prejudice and inequality through deceptive moral justifications of the status quo justifications that portray the interests of dominant and subordinated groups as bound together (Mill, 1869/1970). Indeed, researchers have suggested that BS functions as a form of false consciousness for women, allowing them to maintain positive group-based esteem and explain gender-based inequality (Becker, 2008, 2010; Jackman, 1994, 2005; Marx & Engels, 2017). In this way, Rudman and Fetterolf (2014) describe BS as “insidious” (p. 276) and an ideology that “continues to hide under the veil of chivalry” (p. 283). Kilianski and Rudman (1998) describe the positive relation between BS and HS, in particular, as “counterintuitive” (p. 334).

This perspective also draws some indirect support from existing research. Like other legitimizing ideologies associated with false consciousness, BS reduces women’s negative affective and dissonance reactions to their unequal status and treatment (Connelly & Heesacker, 2012; Napier, Thorisdottir, & Jost, 2010). Further, when directly told about the consequences of BS, women recognize it as a form of sexism (Swim, Hyers, Cohen, & Ferguson, 2001), endorse BS less, and rate benevolent sexists as less attractive (Becker & Swim, 2012). This evidence lends some support to the hypothesis that BS is not part of a knowing bargain, but rather is fundamentally a deception, relying on false consciousness to disarm and stifle resistance.

Which of these perspectives is most accurate has important implications not only for theoretical conceptualizations of sexism but also for those who desire to challenge sexism and gender inequality. For example, if the false consciousness but not the knowing bargain hypothesis holds true, gender equality activists may find it useful to raise consciousness about BS (Becker, Zawadzki, & Shields, 2014). Arguably, it also has implications for the ultimate legitimacy of sexism and gender inequality; at least for those who believe that social arrangements should be characterized by some kind of informed consent (Kant, 1797/1999; Rawls, 1971/1999). However, to date, few studies have examined how well people understand BS and its correlates and consequences.

### **Perceptions of HS and BS**

The knowing-bargain and false-consciousness hypotheses for BS differ on one key empirical point: whether people understand the consequences of BS. Considerably more research has been conducted on the relationships between BS and other variables (the objective functions of BS), than on how people perceive those relationships (its subjectively perceived functions). Most of the latter research has focused on two key issues: whether people recognize BS as a form of sexism, and whether they appreciate that it is compatible and positively correlated with HS.

In the first studies to address people's understanding of ambivalent sexism, women were presented with dating profiles of men who expressed HS or BS attitudes, and were asked to report how likely it was that the profiles described the same man (Kilianski & Rudman, 1998). Participants considered it unlikely that hostile and benevolent profiles belonged to the same person, suggesting people perceive that BS and HS are antagonistic to each other. Consistent with these findings, Barreto and Ellemers (2005) found that participants liked benevolent sexists more, and subsequently viewed them as less sexist, than hostile sexists. Taken together, these findings suggest that people see HS and BS as divergent

attitudes, and that observers evaluate HS but not BS as sexist. However, neither study directly measured the perceived correlation between HS and BS, nor tested the role of warmth in the perceived association between HS and BS.

Other studies have indicated that women really do understand the connection between HS and BS. In a modified replication of Kilianski and Rudman's (1998) work, Bohner, Ahlborn, and Steiner (2010) asked women to rate the typicality of dating profiles, including the profile of an ambivalent sexist (high in both HS and BS). In contrast to previous findings, women perceived the ambivalent sexist to be most typical. This result clearly shows that people think HS and BS can coexist and even that they commonly coexist within the same person. However, it does not establish that people think that HS and BS are positively related. Because people tend to think that men are high in both HS and BS (Sibley et al., 2009), they are likely to think the ambivalent sexist profile is common even if they do not perceive any correlation between the two aspects of sexism. Bohner and colleagues did not test this possibility, and obtained no measure of the perceived relation between HS and BS.

More recently, Rudman and Fetterolf (2014) assessed the perceived relation between BS and HS by asking participants to indicate others' levels of the two aspects of sexism. They found that ratings of men's and women's BS and HS were negatively correlated. This provides the strongest evidence yet that there is an "illusion of antagonism" (p. 276) between HS and BS. However, Rudman and Fetterolf's study did not include mediators or moderators to enable identification of psychological mechanism. Further, it used a correlational design and, therefore, stops short (strictly speaking) of establishing that people infer that BS and HS are antagonistic to each other. Stronger inferences could be drawn from evidence that protagonists experimentally described as high (vs. low) in one type of sexism are perceived as low (high) in the other.

With the exception of Rudman and Fetterolf (2014), studies examining people's ability to understand BS have focused on male protagonists. This emphasis is in keeping with the special ideological significance of men's endorsement of BS: that is, to support and protect women. Findings indicate that men who display BS are rated favorably (e.g., Barreto & Ellemers, 2005; Good & Rudman, 2010; Viki, Abrams, & Hutchison, 2003). Men who offer benevolent justifications for restrictions on women's behavior are seen as kind and caring toward women (Moya, Glick, Expósito, De Lemus, & Hart, 2007). In contrast, men who express hostile sexist attitudes are more readily identified as sexists (Barreto & Ellemers, 2005; Swim, Mallett, Russo-Devosa, & Strangor, 2005).

Thus far, then, research has established that people do not always understand the relationship between HS and BS correctly (Glick & Fiske, 2001; Jackman, 1994; Rudman & Fetterolf, 2014), although there are some contrary findings (Bohner et al., 2010). Theory suggests that people are especially unlikely to understand this relationship when it is displayed by men. Men who sign up to BS are indispensable for the legitimacy of the wider gender system, and are likely to be valorized as self-sacrificing providers and protectors (Glick & Fiske, 2001; Jackman, 1994, 2005). This suggests that when it is displayed by men, BS may be especially likely to be perceived as a straightforwardly altruistic and beneficial attitude. In turn, this suggests that perceptions of warmth may play a special role in the misunderstanding of BS.

### **The Role of Warmth**

It is clear that people, and in particular men, who express HS and BS attitudes are evaluated differently. We argue that the departure in affective tone between HS and BS may account for the assumed negative association between the two forms of sexism, a position that has yet to be directly tested. Consistent with Heider's (1958) balance theory, people's

preference for perceptual clarity (i.e., the Gestalt principle of *prägnanz*; Rock & Palmer, 1990) and univalent attitudes toward others (Crandall, Silvia, N'Gbala, Tsang, & Dawson, 2007; Heider, 1958) may lead people to adopt positive metaperceptions of benevolent forms of sexism and attribute more positive valence to benevolent sexist men's attitudes toward women (Barreto & Ellemers, 2005; Moya et al., 2007; Swim et al., 2005).

This positive metaperception of BS may benefit heavily from the fundamental role of warmth in people's evaluative judgments (Asch, 1946). Warmth communicates unique information about a person's character—sociability, kindness, and humanity—whereas coldness signals selfishness, pessimism, and apathy (Fiske, Cuddy, Glick, & Xu, 2002; Rosenberg, Nelson, & Vivekananthan, 1968). Moreover, people who display or communicate warmth are perceived as amiable, benign, and likable (Barreto & Ellemers, 2005; Crandall et al., 2007; Kelley, 1950; Silvia, 2005). It is possible then that people who display BS may generate a *halo effect* (Thorndike, 1920) that extends to influence predictions about a wide array of their attitudes, behaviors, and character traits.

In most contemporary research on social cognition, warmth as a central trait is not considered in isolation, but rather in tandem with competence. Indeed, warmth and competence are considered the “Big Two” dimensions in person perception (Paulhus & Trapnell, 2008). Competence indicates agency, assertiveness, and the ability to carry out those intentions (Abele & Wojciszke, 2014). Competence may also be important for explaining whether people understand BS; however, we focus on warmth because it is considered more central to social cognition (Wojciszke & Abele, 2008; Wojciszke, Abele, & Barylka, 2009). Specifically, research has shown that warmth is judged before competence (Hack, Goodwin, & Fiske, 2013), exerts a greater influence on affective reactions to others, is perceived as more useful in predicting others' behavior (Abele & Wojciszke, 2007; De Bruin & Van Lange, 1999; Kenworthy & Tausch, 2008), and predicts approach tendencies (Abele

& Bruckmüller, 2011; Fiske, Cuddy, & Glick, 2007; Wojciszke & Abele, 2008). Moreover, greater warmth is inferred from behavior that benefits others (not the self), akin to paternalism, and liking is determined by warmth (Barreto & Ellemers, 2005; Cislak & Wojciszke, 2008; Good & Rudman, 2010; Russell & Fiske, 2008), lending indirect support to the possibility that warmth is central to perceptions of sexism.

### The Present Research

Previous research has shown that BS plays an important role in legitimizing gender inequality and disarming challenges to it. It is less clear whether and why people fail to understand these ideological functions. Neither it is clear what social consequences might follow from misunderstandings of BS. The present studies were conducted to address these issues. In Study 1, we used content analysis to examine the frequency of reports of BS relative to HS on a high-profile anti-sexism Web site. In Study 2, we directly asked women to recall how often they had experienced, and how often they had protested, instances of BS and HS. In Study 3, we tested a model of women's confrontation of sexist treatment as a function of the type of sexism. In Study 4, we tested the role of warmth in the belief that BS is negatively related to HS. In addition, we examined the role of warmth in the perceived relationship between BS and other gender ideologies. In Study 5, we conducted a conceptual replication of Study 4 by examining the illusion of antagonism between HS and BS for female protagonist as well as male protagonists. In Study 6, we manipulated protagonists' BS and examined people's understanding of a wide variety of its correlates. In Studies 2–6, we measured protagonists' warmth and tested whether it was implicated in the hypothesized effects. In Study 7, we manipulated protagonists' warmth to examine its causal role.

#### **Study 1: “Everyday Sexism” Is Seldom BS**

The Everyday Sexism Project is an online crowd-sharing platform set up by British journalist Laura Bates (2012), and operates across 24 countries with 50,000 users. Women post their experiences of sexism on the platform, which is open to the public. The Web site provides a space for recognizing sexism when it occurs, confronting sexism safely, and generating sufficient collective energy and action around the issue.

One primary obstacle to challenging sexism is failing to recognize sexism when it occurs, and as we have seen, BS is particularly difficult to recognize (Becker et al., 2014). Becker and Swim ([2011](#)) found that women's ability to recognize BS as sexism was improved by informing them about its prevalence and effects—information that may be gleaned from this platform through exposure to other women's experiences of sexism. Moreover, Becker and Swim found that women were better able to recognize BS after keeping a diary whereby they logged instances of sexist behavior in their own lives. Because the Everyday Sexism Project effectively crowdsources the diarizing of experiences of sexist treatment, and offers an outlet for the public to learn about the prevalence, various forms, and consequences of sexism, this platform ought to help people recognize BS for what it is.

Another obstacle to challenging sexism is the social costs to people who do so (Czopp & Monteith, 2003). Some research indicates that women who challenge BS may elicit particularly adverse reactions (Becker, Glick, Ilic, & Bohner, 2011). Because the Everyday Sexism Project anonymizes posts, normalizes opposition to sexism, does not allow trolling, and does not require women to confront perpetrators of sexism directly, it protects women from some of the social costs that might otherwise be incurred.

A third obstacle to challenging BS in particular is that it does not necessarily produce sufficiently immediate or intense experiences of anger to motivate women to action (Salomon, Burgess, & Bosson, 2015). However, the sheer volume of posts on the Everyday

Sexism Project, and the apparent ubiquity of sexism it uncovers, has the potential to generate the collective anger required for collective action—and potentially also the collective identity and efficacy to go along with it (Pruchniewska, 2016). Although there has been some scholarly analysis of the platform in gender, media, and social studies (Drüeke & Zobl, 2016; Whitley & Page, 2015), the contents of the Web site have not been systematically examined with a social psychological lens.

In the present study, we report a content analysis of posts to the Everyday Sexism Project. To our knowledge, the present study is the first observational examination of women's (and girls') responses to sexist treatment. If women do not recognize or object to BS because of its warmth, it follows that women will be less likely to report it, compared with other forms of sexism. Accordingly, we analyzed posts based on whether they reported instances of treatment consistent with BS, HS, or generic gender discrimination and stereotyping. We predicted that fewer posts would record instances of benevolent treatment, compared with hostile or other types of sexist treatment.

## Method

The sample was composed of randomly selected text entries ( $N = 297$ ) from the Everyday Sexism Web site, including tweets originally posted on Twitter, but which appeared on the Everyday Sexism Web site. Sampling was restricted to entries posted on the English language versions of the Web site from January 2013 through December 2014.

**Materials and procedure.** The present sample of extracts was downloaded from the Everyday Sexism Web site by the first author. Given the large number of text entries on the Everyday Sexism Web site and the functionally basic user interface of the Web site it was unfeasible to download all text entries on the Web site and then randomly sample from these as is common practice in qualitative content analysis (Krippendorff, 2004; White & Marsh,

2006). Instead, two-three extracts per browser page were randomly selected and copied into a Microsoft Excel file. An initial sample of 300 (150 each from the years 2013 and 2014) extracts was collected, with six cases later merged with other cases as the same author was identified and cases were therefore not independent. There is little consensus in the literature on adequate sample size for content analysis (Kolbe & Burnett, 1991; Neuendorf, 2017), but we did include entries from all majority English speaking countries featured on the Web site in an attempt to make the sample representative.

The first author and a research assistant coded the sample of extracts. The research assistant was provided with a coding scheme and trained to use the system before data coding. The coding scheme provided definitions of HS and BS from Glick and Fiske (1996), and examples of hostile and benevolent sexist treatment of women adapted from Becker and Swim (2011). The behaviors described on the Everyday Sexism Project posts were coded as reflective of *HS* if they referred to explicitly gendered violence, harassment, insults, slurs, and negative comments about women consistent with stereotypes explicitly embraced by HS, including the view that women are manipulative, and use sexuality and feminism to control men. Behaviors were coded as reflective of *BS* if they referred to unsolicited and/or patronizing help, paternalistically justified restrictions on choice, and verbalizations of stereotypes explicitly embraced by BS including the view that women are especially moral, and worthy of protection. Instances of gender discrimination (e.g., being ignored, patronized or excluded) and stereotyping that could not be clearly identified as motivated by hostile or benevolent ideologies were coded as *general sexism (GS)*. Examples of behaviors coded as BS were “Guys that come in to pick up their items from my oilfield warehouse say that they can get the stuff and I shouldn’t help so I don’t hurt myself” Instances of sexism coded as HS included “Wolf whistled and told I was a nice piece of meat. . . .” Instances coded as GS included “When talking to some 5 year olds - I told them that I was going to be a doctor.”

They danced around saying ‘Girls can’t be doctors’ laughing their heads off. It was pretty cute, and pretty depressing.” If a coder felt that an entry contained more than one type of sexism (e.g., HS and BS, or HS and GS) they could select both categories. Further, if the coder felt an entry could not be coded, it was marked as unable to code, which occurred in instances where the presence of a male voice was clear in the entry or the extract did not describe sexism. Interrater reliability was adequate ( $\kappa > .65$ ; Krippendorff, 2004). For HS,  $\kappa = .75$ , 95% confidence interval (CI) [0.65, 0.85],  $p < .001$ , BS,  $\kappa = .68$ , 95% CI [0.46, 0.89],  $p < .001$ , and GS,  $\kappa = .72$ , 95% CI [0.62, 0.84],  $p < .001$ . Extracts that were rated as unable to code by either rater (n 49) were removed, leaving a final sample of 248 extracts. For further details of the coding scheme and its development see the [online supplementary material](#).

## Results

Descriptive analysis revealed varying categories of sexist treatment: Most of the extracts described hostile sexism ( $n = 176$ , 71%), with fewer describing instances of general sexism ( $n = 55$ , 22.2%), benevolent sexism ( $n = 8$ , 3.2%), ambivalent sexism (presence of HS and BS;  $n = 5$ , 2%), and hostile-discrimination (presence of HS and GS;  $n = 4$ , 1.6%). In addition, men were identified as the perpetrators most frequently ( $n = 206$ , 83%), compared to women ( $n = 16$ , 6.5%), or gender-unspecified perpetrators ( $n = 26$ , 10.5%).

To make direct comparisons between categories, a series of one-sample Chi-square tests were conducted. Note that some cases were excluded because they mentioned more than one kind of sexist treatment. This included five cases (2%) that indicated both HS and BS, and four cases (1.6%) that mentioned both HS and GS. The first Chi-square test compared BS and HS, then BS and GS, and finally HS and GS. As expected (see Figure 1), BS was described significantly less often than HS,  $\chi^2(1) = 153.39$ ,  $p < .001$ , and GS,  $\chi^2(1) = 35.06$ ,  $p < .001$ . Similarly, GS was described significantly less often than HS,  $\chi^2(1) = 63.38$ ,

$p < .001$ . These findings suggest that women report benevolent forms of sexist treatment less often than hostile forms or more general sexism.

## Discussion

Study 1 indicated that women are less likely to go online to report their experiences of BS compared with HS or GS (e.g., gender discrimination and stereotyping). These findings are consistent with our overarching thesis that BS presents traditional gender roles and their associated inequalities less harshly, which may obscure the sexist nature of the treatment, and make it seem less offensive (Jackman, 1994). The results also suggest the utility of initiatives such as Everyday Sexism Project might be constrained by the relative rarity with which women recognize and confront BS.

Although the present study provides unique observational in-sight into the frequency with which women describe different kinds of sexism, it has two key limitations. Critically for our thesis, the extracts did not allow for the possibility to code for perceived trait warmth or attitudinal warmth to women and, therefore, the role of warmth can only be inferred. Also, the data cannot exclude the possibility that women describe benevolent treatment less often because they experience it less often. We address these limitations in Study 2 by asking women how often they have experienced either BS or HS interactions with men, and directly measuring the perceived warmth toward women of these men. We also asked women how often they protested such experiences.

### **Study 2: Experiences of Sexism Are Experiences of Benevolent Sexism**

Study 1 demonstrated that women go online to protest fewer experiences of BS than HS. Yet, it is unclear whether this effect is explained by differences in the frequency of BS and HS, or differences in the desire to protest them. In this second study, we asked women how often they had experienced various hostile or benevolent behaviors from men, and the

perceived warmth of those men and their attitudes toward women. We also asked women how often they had responded to these behaviors by complaining about them to family and friends, sharing them online (e.g., social media/blogs) or confronting the perpetrators. We expected that women would report experiencing BS more than HS, because it is endorsed more than HS (Glick et al., 2000), is more normatively acceptable (Barreto & Ellemers, 2005), and plays an important role in the day-to-day texture and long-term course of heterosexual relationships (Hammond & Overall, 2017). In contrast and in keeping with our thesis, we predicted that women would report protesting HS more often than BS. Further, we predicted an indirect effect by which reporting instances of BS (compared with HS) could be statistically accounted for by the greater warmth of its perpetrators.

## Participants

Participants were 252 British Women ( $M_{age} = 38.73$ ,  $SD = 11.79$ ), recruited via online crowdsourcing platform Prolific Academic. Sensitivity analyses indicated that this sample could detect an effect size of  $\eta^2_p = 0.03$  with 80% power and alpha of .05. Participants were predominantly White British (94.4%), Black British (2.4%), Asian British (1.2%), and other ethnicities (2.0%). Participants were compensated for their time based on Prolific Academic pay standards (min. £6 per hour).

## Materials and procedure.

Participants were randomly assigned to one of two groups, in which they were asked to recall the frequency of experiencing three sexist interactions with men that were either BS (e.g., “Had men try to help you because of your gender (e.g. by offering to carry bags),” or HS (e.g., “Been the target of offensive behavior from men because of your gender (e.g. name calling or jokes).” See Procedure in the [online supplementary material](#) for all example interactions. The Frequency of Sexism responses were our dependent variable and were

recorded for three different time periods (e.g., in the “last week,” “last month,” and “last 12 months”), on a scale from *never* (scored as 1), *1–2 times* (scored as 2), *3–4 times* (scored as 3), *5–10 times* (scored as 4), and *more than 10 times* (scored as 5). Example interactions were adapted from the Study 1 coding scheme and Becker and Swim (2011). All items across the three time periods were averaged to create a composite score, with higher scores indicating a greater mean frequency of sexist experiences. Participants were then asked to rate the interactions on the two additional dependent measures in a random order

**Warmth.** Participants were asked to rate the trait warmth e.g. “In your experience, how much do you like men who behave in the following ways:” (1 = *Dislike*, 7 = *Like*), and the attitudinal warmth e.g. “In your experience, how much do men who behave in the following ways like women:” (1 = *Dislike women*, 7 = *Like women*), for each of three example behaviors. These items were averaged to create a mean warmth score, with higher scores indicating greater perceived trait and attitudinal warmth (to women) of men who enact these behaviors<sup>1</sup> ( $\alpha = .92$ ; see Supplementary File for exploratory factor analyses).

**Protest Sexism.** Participants were asked how often have you “complained to people you know (e.g., friends, family)”, “complained online (e.g., on social media, blogs)” and “confronted men who” followed by the same three example behaviors. Responses were recorded for the same three time periods (in the last week, month, twelve months) from *never* (scored as 1) to *more than 10 times* (scored as 5).

**Data Preparation.** The individual Frequency of Sexism and Protesting Sexism scores were recoded to more accurately reflect the data labels from a 1-5 scale to a zero to 11 scale (i.e. *Never* = 0, *1-2 times* = 1.5, *3-4 times* = 3.5, *7-10 times* = 7.5, *10 or more times* = 11). In addition, prior to analysis the distribution of the data was investigated, and a strong

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<sup>1</sup> Although a person’s overall warmth and their warmth towards women can be separated conceptually, these items were positively correlated ( $r$  from .46 to .93) and comprised a reliable scale ( $\alpha = .92$ ). When the composite score is substituted for either the trait warmth or attitudinal warmth (to women) scores all analyses hold, except the indirect effect of Type of Sexism on protesting sexism by Confronting the Perpetrator via Attitudinal Warmth, *indirect b* = -0.15[-0.33, 0.01].

positive skew was observed for the frequency of sexism, warmth and protesting sexism dependent variables. To reduce the positive skew in our dependent variables a log transformation was used (i.e.  $\text{Log10}(?) + 1$ ; Howitt & Kramer, 2007). These log transformed variables were then used in data analysis.

## Results

### Frequency of sexist interactions.

Means and SDs are presented in Table 1. First, we conducted a one-way analysis of variance (ANOVA) to investigate differences in Frequency of Sexism experienced by women, as a function of the Type of Sexism (BS or HS). To investigate the influence of Type of Sexism on frequency of experiencing sexist interactions a mixed 2 (Type of Sexism: HS, BS) x 3 (Period of Sexism: Week, Month, Year) ANOVA was conducted with repeated measures on the last factor. There was no main effect of Type of sexism,  $F(1, 250) = 2.69, p = .102, \eta^2_p = .01$ . However, there was a significant main effect of Period of Sexism,  $F(1.52, 380.55)^2 = 410.19, p < .001, \eta^2_p = .62$ , with participants experiencing more sexism over the last year, relative to week or month. Further, this effect was qualified by a significant Type of Sexism x Period of Sexism interaction,  $F(1.52, 380.55) = 15.39, p < .001, \eta^2_p = .06$ . Simple effects showed BS ( $M = 0.59, SD = 0.33$ ) was experienced more than HS ( $M = 0.46, SD = 0.31$ ) over the last year  $F(1, 250) = 8.90, p = .003, \eta^2_p = .03$ , but not over the week or month time periods. Respectively:  $F(1, 250) = 0.28, p = .598, \eta^2_p = .00$  and  $F(1, 250) = 1.41, p = .236, \eta^2_p = .01$ . Given the presence of this unexpected interaction effect, we recalculated our Frequency of Sexism dependent variable to reflect a mean score for only the Year time period (i.e. “in the last twelve months”). Further, for parsimony between dependent variables and other significant effects of time that were present<sup>3</sup>, we recalculated all protest items to reflect

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<sup>2</sup> Greenhouse-Geisser correction was used in response to a significant Mauchly’s test of Sphericity.

<sup>3</sup> Other significant effects of Period of Sexism were found for protesting sexism by complaining to family/friends. A mixed 2 (Sexism: HS, BS) x 3 (Period of Sexism: Week, Month, Year) ANOVA was conducted with repeated measures on the last factor. There was a main effect of Type of sexism,  $F(1.40, 349.80) = 100.02, p < .001, \eta^2_{2p} = .29$ , which was qualified by an

a mean score for the Year time period only. All further analyses used these new dependent variables.

### **Protesting Experiences of Sexism**

To investigate the influence of Type of Sexism on frequency of protesting such experiences a mixed 2 (Type of Sexism: HS, BS) x 3 (Protesting Sexism: Family, Online, Confront) ANOVA was conducted with repeated measures on the last factor. As expected participants were more likely to protest experiences of HS sexism than BS,  $F(1, 250) = 6.07$ ,  $p = .014$ ,  $\eta^2_p = .02$ . Participants also reported a greater frequency of protesting sexism by complaining to family and friends, than complaining online or by confronting the perpetrator,  $F(1.94, 485.85) = 40.74$ ,  $p < .001$ ,  $\eta^2_p = .14$ . Further, the Type of Sexism x Protesting Sexism interaction was non-significant ( $F = 2.51$ ,  $p = .084$ ), however upon investigation of the simple effects participants reported a greater frequency of complaining to family/friends about HS, compared to BS ( $p = .004$ ). Additional analyses adjusting for the Frequency of Sexism observed a significant main effect of Type of Sexism,  $F(1, 249) = 22.87$ ,  $p < .001$ ,  $\eta^2_p = .08$ , women protested experiences of HS more, relative to BS. Further, this was qualified by a significant Type of Sexism x Protesting Sexism interaction,  $F(2, 498) = 5.68$ ,  $p = .004$ ,  $\eta^2_p = .02$ . Participants were more likely to protest about HS relative to BS by complaining to family and friends ( $p < .001$ ), sharing experiences online ( $p = .025$ ), and by confronting the perpetrator, ( $p = .006$ ). Note these effects were replicated when we used non-log transformed variables<sup>4</sup>.

[Table 1]

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interaction with Period of Sexism,  $F(1.40, 349.80) = 5.07$ ,  $p = .015$ ,  $\eta^2_p = .02$ . Participants were more likely to complain to family/friends about HS experiences, relative to BS at the year time period (HS:  $M = 0.26$ ,  $SD = 0.30$  vs. BS: HS:  $M = 0.16$ ,  $SD = 0.24$ ) but not at the week and month, respectively:  $F(1, 250) = 8.39$ ,  $p = .004$ ,  $\eta^2_p = .03$ ,  $F(1, 250) = 3.56$ ,  $p = .061$ ,  $\eta^2_p = .01$  and  $F(1, 250) = 4.07$ ,  $p = .045$ ,  $\eta^2_p = .02$ .

<sup>4</sup> All variables were entered as before. A main effect of Type of Sexism was observed, women were more likely to protest HS, compared to BS interactions,  $F(1, 249) = 15.19$ ,  $p < .001$ ,  $\eta^2_p = .06$ . This was qualified by a significant Type of Sexism x Protest interaction,  $F(1.84, 457.44) = 8.29$ ,  $p < .001$ ,  $\eta^2_p = .03$ . Investigation of simple main effects revealed that compared to BS, women were more likely to protest HS by complaining to family/friends ( $p < .001$ ), but differences were only marginal for complaining online ( $p = .09$ ), and confronting the perpetrator ( $p = .05$ ).

### **Mediation analyses.**

To further investigate the relation among Type of Sexism, Warmth and Protesting Sexist Experiences, we tested a mediation model using the Process macro (Model 4; Hayes, 2017) with 95% bias-corrected and accelerated confidence intervals and 10,000 bootstrap resamples. Type of sexism (HS = -1; BS = 1) was entered as the independent variable (X), warmth as the mediator (M), and each of the protesting variables were entered as the dependent variable (Y). A significant indirect effect from Type of Sexism to complaining to family/friends, *indirect b* = -0.07 [-0.12, -0.02]; sharing online, *indirect b* = -0.07 [-0.10, -0.03], and confronting the perpetrator, *indirect b* = -0.04 [-0.08, -0.01] was observed via Warmth. In addition, a direct effect was only observed from Type of Sexism to sharing online, *b* = .05, *SE* = .02, *t* = 2.50, *p* = .013 (all others *bs* < .02, *ps* > .328). Taken together these findings suggest that women are less likely to protest experiences of BS because of its greater warmth relative to HS. Additional models showed that most of these effects were also observed when adjusting for the frequency of sexist experiences<sup>5</sup>. See Figure 2 for individual (a and b) paths.

[Figure 2]

### **Discussion**

Study 1 examined posts on the Everyday Sexism Project and found that few of them protested experiences of BS while many protested experiences of HS and other instances of gender prejudice. However, this archival investigation could not exclude the possibility that

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<sup>5</sup>All variables were entered as before. In addition, the Frequency of Sexism was entered as a covariate. While this covariate did affect some individual paths within the models, we report their influence on the indirect (a\*b) and direct pathways only. When controlling for the frequency of sexism, Type of Sexism predicted complaining to family/friends through warmth, *indirect b* = -0.05 [-0.10, -0.01] and the direct effect of Type of Sexism on complaining to family/friends was non-significant, *b* = -.02, *SE* = .02, *t* = -1.05, *p* = .293. In addition, when controlling for frequency of sexism, Type of Sexism predicted Sharing online via warmth, *indirect b* = -0.06 [-0.09, -0.03], and the direct effect was non-significant, *b* = .03, *SE* = .02, *t* = 1.67, *p* = .098. Finally, Type of Sexism did not predict Confronting the perpetrator when the frequency of sexism was controlled for, *indirect b* = -0.03 [-0.07, 0.00], and there was no direct effect of Type of Sexism on Confronting the Perpetrator, *b* = -.01, *SE* = .02, *t* = -0.22, *p* = .822. These results are indicative of mediation through warmth for Complaining to Family/friends and Sharing Online, but not for Confronting the Perpetrator.

this pattern arises because women perceive BS as relatively rare. Study 2 resolved this interpretive difficulty. We asked women to recall their experiences of sexism, and found they recalled BS more often than HS. Despite experiencing BS more often than HS, women reported protesting it less, consistent with Study 1. Whereas the archival methodology of Study 1 provided no measure of warmth, Study 2 also produced evidence that the tendency to protest BS less often was mediated by its perceived warmth.

Although Study 2 provides the first direct evidence that the inclination to challenge BS is lowered by its warmth, it has an important limitation: women's recall of their experiences may be biased. For example, protesting experiences involves cognitive rehearsal and social sharing of those experiences, and can therefore be expected to increase and distort recall (Hirst & Echterhoff, 2012; Reis & Wheeler, 1991). In Study 3 we address these limitations by employing an experimental methodology that is not reliant on recall.

### **Study 3: The Role of Warmth in Suppressing Protest about Benevolent Treatment**

In Study 3, we presented female participants with behaviors that exemplified either hostile or benevolent sexism. We then asked them to rate the warmth of the male protagonist and his attitudes to women, and then to indicate whether the behaviors were sexist. We also asked women whether they would protest these sexist behaviors if they were ever to personally experience them. We predicted that women would be less likely to perceive benevolent (vs. hostile) behaviors as sexist, and that this finding would be mediated by the perceived attitudinal warmth of the benevolent behaviors. Further, we predicted that women would be less likely to protest experiences of benevolent versus hostile sexism, and that this effect would be mediated sequentially by perceived attitudinal warmth and perceived sexism.

### **Method**

#### **Participants**

Participants were 219 British Women ( $M_{age} = 40.74$ ,  $SD = 11.97$ ) recruited via the crowd-sourcing platform Prolific Academic. Note that one participant was removed due to a failed attention check. Sensitivity analyses indicated that at this sample size we had the sensitivity to detect an effect size of  $\eta^2_p = .03$  with 80% power and alpha of .05. Participants were predominantly White (90.9%), Black British (3.7%), Asian British (3.2%), and other ethnicities (2.3%). All participants were compensated for their time based on Prolific Academic pay standards (minimum £6 per hour).

### Materials and Procedure

Participants were randomly assigned to one of two conditions, in which they were presented either with three instances of benevolent (e.g., “a man insisting on paying for his girlfriend’s meals”) or hostile sexist treatment of women (e.g., “a man using “bitches” and “chicks” to refer to women”), adapted from Becker and Swim (2011). Participants were asked to rate the three behaviors on the four dependent measures described below, which were randomly presented. Finally, participants provided demographic information, and were then debriefed, thanked, and paid.

**Perceived sexism.** Participants were asked: “Please indicate how much you think the following behaviors are sexist.” and “Please indicate how much you think the following behaviors are prejudiced against women.” (1 = *not at all*, 7 = *very much*). All items were averaged to create a mean perceived sexism score ( $\alpha = .97$ ), with higher scores indicating greater perceived sexism.

**Warmth.** Participants were asked: “Please indicate how much you would like someone who acted in these ways? “and “Please indicate how much you would think someone who acted in these ways likes women?” (1 = *not at all*, 7 = *very much*). These

items were averaged to create a mean warmth score ( $\alpha = .90$ ), with higher scores indicating greater warmth to women<sup>6</sup>.

**Protesting Sexism.** Finally, participants were asked: “How likely would you be to complain about such treatment (e.g. by going on a website in which women share their experiences of sexism)?” ( $\alpha = .81$ ; 1 = *not at all*, 7 = *very much*).

## Results

### Effect of Sexism Type on Dependent Measures

One-way ANOVAs were conducted to investigate differences in the perception of hostile and benevolent behaviors on the dependent measures. Means and standard deviations are presented in Table 2. In each ANOVA, Type of Sexism was entered as the independent variable and Perceived Sexism, Warmth or Protesting Sexism as the dependent variable. Means and standard deviations are displayed in Table 2. As expected, participants were significantly more likely to perceive HS as sexist relative to BS,  $F(1, 217) = 400.93, p < .001$ ,  $\eta^2_p = .65$ . In addition, BS was perceived as significantly greater in warmth to women compared to HS,  $F(1, 217) = 674.90, p < .001$ ,  $\eta^2_p = .76$ . Finally, participants were significantly more likely to protest HS than BS,  $F(1, 217) = 135.26, p < .001$ ,  $\eta^2_p = .38$ .

[Table 2]

### Mediation analyses

To further test the relation among Type of Sexism, Warmth, Perceived Sexism and Protesting Sexism, we tested a sequential mediation model using Model 6 of the Process macro (Hayes, 2017) with 95% bias-corrected and accelerated confidence intervals and 10,000 bootstrap resamples. Type of sexism (HS = -1; BS = 1) was entered as the independent variable (X), warm attitudes to women and perceived sexism were entered as the

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<sup>6</sup> Although a person’s overall warmth and their warmth towards women can be separated conceptually, these two items were positively correlated ( $r = .67$ ) and comprised a reliable scale ( $\alpha = .90$ ). The reported results hold when the composite scale is substituted by either the single item measuring overall warmth, or the item measuring warmth toward women.

mediators (M1 & M2), in that order, and protesting sexism was entered as the dependent variable (Y). A significant indirect effect was observed from sexism type to protesting sexism via, in turn, warmth to women and perceived sexism, indirect  $b = -0.34 [-0.56, -0.18]$ . See Figure 3 for individual (a and b), direct and total paths. This finding suggests that women who experience BS are less likely to protest about such experiences owing to BS's greater perceptions of attitudinal warmth to women, and lower perceptions of sexism.

[Figure 3]

## Discussion

Study 3 showed that women perceived benevolent behaviors as less sexist and perceived benevolent sexist men as warmer toward women, compared to hostile behaviors and the men who enact them. Taken together, Studies 1-3 suggest that women are less likely to perceive experiences of benevolent sexism as reflecting instances of sexism, and that this pattern is attributable to the attitudinal warmth to women attached to benevolent sexist treatment. While Study 3 examines the relationship between each type of sexism and warm attitudes to women independently, it does not investigate the perceived relationship between benevolent and hostile sexism or the role that warm attitudes to women plays in their perceived relationship. In Study 4, we test whether the perceived attitudinal warmth to women of a male protagonist may have an effect on the “illusion of antagonism” between BS and HS.

### Study 4: Warmth in the Illusion of Antagonism

Study 4 provides the most direct experimental test of the illusion of antagonism to date, by portraying a male protagonist as high in either HS or BS, and examining whether it causes him to be perceived as low in the complementary aspect of sexism. Thus, Study 4 aimed to test whether perceiving a man as a benevolent sexist leads observers to see him as low in hostile sexism, and vice-versa. Participants were then asked to rate the protagonist's

likelihood of displaying the complementary type of behaviors (either HS or BS), and traditional gender role attitudes. We also asked participants whether they thought the man would support gender equality.

We hypothesized that men who engaged in benevolent (vs. control) behaviors would be perceived as lower in HS, less likely to enact HS, more supportive of equality, and less supportive of traditional gender roles. We also hypothesized that conversely, men who engaged in hostile (vs. control) behaviors would be seen lower in BS, less likely to enact BS, less likely to support equality and more supportive of traditional gender roles. Finally, we hypothesized that this effect would be mediated by warmth, since it is related in opposing directions to BS and HS. See Figure 4 for a conceptual diagram of the expected relationships between variables.

[Figure 4]

## **Method**

### **Participants**

Participants were 296 American Mturk workers<sup>7</sup>, including 170 men ( $M_{age} = 34.36$ ,  $SD = 10.84$ ) and 126 women ( $M_{age} = 40.57$ ,  $SD = 13.30$ ). Based on this sample size, sensitivity analysis indicated a sensitivity to detect an effect size of  $\eta^2_p = .03$  with 80% power and alpha equal to .05. Only workers who had completed over 500 HITs and had a HIT approval rate of greater than 95% were eligible to complete this study. Participants were compensated for their time in line with pay conventions for online crowdsourcing platforms. The majority of the sample was White (81.8%), Black (7.8%) and Asian (4.7%). The remaining 5.8% included Hispanic, Native American, Pacific-Island and other ethnicities.

### **Materials and Procedure**

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<sup>7</sup> An original sample of 301 was collected, but five cases were removed owing to a failed attention check (e.g. “At the beginning of this survey, which of the following was Mike observed doing?”. Responses were recorded as correct if the participant chose the behavior, either HS, BS or non-sexist control, that they had read at the beginning of the study).

Participants read a vignette about a “30-year-old heterosexual man, Mike” who was described as engaging in three behaviors that constituted hostile (e.g. “Sexually harassing women by ogling at them and catcalling”), benevolent (e.g. “Going out of his way to hold heavy doors open for women”), or neither type of sexism (e.g. “call a female colleague “ignorant” because she belongs to a different political party to him”), adapted from Becker and Swim (2011). In the control condition, one behavior was negative, one behavior was positive, and one behavior was neutral toward women (e.g. “Playing tennis with his girlfriend”). Participants then completed the first dependent measure described below, followed by the others. Finally, they provided demographic information, and were debriefed, thanked, and paid. See Supplementary File for all items.

**Complementary behaviors.** Participants rated the likelihood that Mike would engage in the complementary sexist behaviors (in the benevolent condition, this was hostile behaviors,  $\alpha = .84$ ; and in the hostile condition, this was benevolent behaviors,  $\alpha = .76$ ; participants in the control condition rated the likelihood of both, HS:  $\alpha = .85$ , BS:  $\alpha = .70$ ), using a seven-point scale ranging from *very unlikely* (scored as 1) to *very likely* (scored as 7).

**Perceived BS and HS attitudes.** Participants completed the 22-item ASI (Glick & Fiske, 1996) as they believed Mike would complete it using a Likert scale (1 = *strongly disagree*, 6 = *strongly agree*). Higher scores indicated higher levels of HS and BS (HS: “Women seek to gain power by getting control over men”,  $\alpha = .95$ ; BS: “Women should be cherished and protected by men”,  $\alpha = .92$ ).

**Warmth.** Participants completed 12 items to evaluate Mike’s trait warmth (e.g., “Mike’s behavior suggests that he is kind.”) and attitudinal warmth to women as a group (e.g., “Mike’s behavior suggests that he likes women.”; 1 = *not at all*, 7 = *very much*). Exploratory factor analysis using maximum likelihood extractions revealed that the 12 items together comprised a single factor accounting for 84.99% of the variance ( $\alpha = .98$ ).

**Perceived support for equality.** Participants completed six items ( $\alpha = .89$ ) to assess Mike's perceived support for equality (e.g., "Mike's behavior suggests that he is feminist."); 1 = *not at all*, 7 = *very much*). See Supplementary File for exploratory factor analyses.

**Endorsement of traditional gender roles.** Finally, participants completed the 15-item Attitudes towards Women Scale (AWS; Spence, Helmreich & Stapp, 1973) assessing perceptions of Mike's traditional views of women's roles in society (e.g., "The intellectual leadership of a community should be largely in the hands of men"; 1 = *not at all*, 7 = *very much*). These items were averaged to create an overall mean score, with higher scores indicating greater endorsement of traditional gender roles ( $\alpha = .92$ ).

## Results

Means and standard deviations for all study variables are displayed in Table 3. The effects generally were not moderated by participant gender<sup>8</sup>, and therefore we collapsed across participant gender and performed a series of one-way ANOVAs with three levels of sexism (benevolent, hostile, and control) to test our hypotheses. Significant main effects were followed up with planned analyses of simple effects that contrasted the Benevolent and the Control conditions, and the Hostile and Control conditions. As shown in Table 3, the experimental manipulation of sexism type was successful: higher BS scores were reported for Mike when he displayed benevolent behaviors compared to the control condition, and higher HS scores were reported for Mike when he displayed hostile behaviors compared to the control condition.

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<sup>8</sup> A significant Gender x Behavior Type interaction was found on HS,  $F(2,290) = 6.72, p < .001, \eta^2_p = .04$ , and Traditional gender roles,  $F(2,290) = 5.28, p = .006, \eta^2_p = .04$ . Simple main effects revealed that both male and female participants rated the protagonist as lower on HS (men  $p < .001$ , women  $p < .001$ ) and traditional gender role attitudes (men  $p = .006$ , women  $p < .001$ ) in the BS (vs. control condition) and higher on HS (men  $p < .001$ , women  $p = .006$ ) and traditional gender roles (men  $p < .001$ , women  $p < .001$ ) in the HS (vs. control) condition. In general, male (vs. female) participants differentiated more strongly between BS and control men, and less strongly between HS and control men. All other interaction effects of gender were non-significant ( $p > .233$ ).

Consistent with predictions, significant main effects for Sexism Type were observed across each variable (see Table 3). Planned contrasts showed that compared to the control condition, when Mike displayed benevolent behaviors he was rated as having warmer attitudes to women,  $t(196) = 14.32, p < .001, d = 2.19$ , as being less likely to endorse HS attitudes,  $t(196) = -10.22, p < .001, d = 1.45$ , more supportive of equality,  $t(196) = 6.11, p < .001, d = 0.86$ , and less supportive of traditional gender role attitudes,  $t(196) = -6.37, p < .001, d = 0.89$ . Conversely, compared to the control condition, when Mike displayed hostile behaviors he was rated as having less warm attitudes to women,  $t(194) = -15.88, p < .001, d = 2.44$ , as being less likely to endorse BS attitudes,  $t(194) = -7.73, p < .001, d = 1.08$ , less supportive of equality,  $t(194) = -11.23, p < .001, d = 1.54$  and more supportive of traditional gender role attitudes,  $t(194) = 7.94, p < .001, d = 1.15$ .

### **Complementary behaviors**

We examined whether people perceived displays of HS and BS as antagonistic to each other by testing whether displays of one form of sexism were related to displays of the other form. A one-way ANOVA with two levels (BS vs. control) showed that when Mike displayed benevolent behaviors he was perceived as less likely to display hostile behaviors,  $F(1, 193) = 92.48, p < .001, \eta^2_p = .32$ . Also, when Mike displayed hostile behaviors he was perceived as less likely to display benevolent behaviors,  $F(1, 193) = 259.01, p < .001, \eta^2_p = .57$ , compared to the control condition.

[Table 3]

### **Mediation analyses**

We next tested a mediation model using the Process macro (Model 4; Hayes, 2017) to examine the indirect effect of sexist behaviors on these outcomes through warmth<sup>9</sup>. Type of Sexism displayed was dummy coded as (BS/HS = 1; Control = 0) and entered as the

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<sup>9</sup> Note that all mediation analyses held when either trait or attitudinal warmth were entered as mediators.

independent variable (X), warmth was entered as the mediator (M), and each of the four dependent variables was entered in a separate model (Y). Significance of the indirect path was assessed using 95% bias-corrected and accelerated confidence intervals with 10,000 bootstrap resamples. As predicted, Mike's display of benevolent behaviors predicted greater warmth compared to the control condition,  $b = 1.92$  [1.68, 2.16], and Mike's display of hostile behaviors predicted lower warmth compared to the control condition,  $b = -2.21$ , [-2.45, -1.97].

For each dependent variable, indirect effects via warmth conformed to our predictions as outlined conceptually in Figure 4. Via warmth, displays of BS led the male protagonist (compared to the control condition) to be perceived as: less prone to endorse HS statements, *indirect b* = -0.90 [-1.21, -0.62]; less likely to display HS behaviors, *indirect b* = -1.32 [-1.74, -0.89]; more supportive of gender equality, *indirect b* = 1.20 [0.95, 1.48]; and lower in traditional gender roles, *indirect b* = -0.87 [-1.10, -0.66]. Conversely, displays of HS led the male protagonist to be: less prone to endorse BS statements, *indirect b* = -0.69 [-1.02, -0.40]; less likely to display BS behaviorally, *indirect b* = -1.35 [-1.81, -0.96]; less supportive of gender equality, *indirect b* = -1.39 [-1.72, -1.09]; and lower in traditional gender roles, *indirect b* = 1.01 [0.74, 1.30]. Analyses of direct effects are reported in the Supplementary File.

## Discussion

The results of Study 4 provide direct evidence for the illusion of antagonism between HS and BS (Rudman & Fetterolf, 2014; see also Kilianski & Rudman, 1998). When a male protagonist displayed benevolent behaviors, he was judged to endorse hostile sexism less, compared to the control condition. Conversely, when a male protagonist displayed hostile behaviors, he was judged to endorse benevolent sexism less, compared to the control condition. Moreover, this study provided evidence that perceptions of warmth elicited by

benevolent behaviors comprise the psychological mechanism underlying the illusion of antagonism. A limitation of this study, however, is that only male protagonists were presented. The next study investigates whether HS and BS are also perceived as antagonistic among women.

### **Study 5: Protagonist Gender and the Illusion of Antagonism**

Study 5 provided a conceptual replication of Study 4 and examines the generality of its findings in two key ways. Whereas Study 4 presented behaviors consistent with hostile and benevolent sexism, Study 5 presented protagonists' sexist attitudes directly, in the form of agreement or disagreement with statements derived from the ASI. Further, whereas Study 4 presented the behaviors of a single protagonist, Study 5 presented the attitudes of two protagonists, one rejecting and one endorsing sexist attitudes (either BS, or HS, between-groups). Participants were then asked to indicate which of the two protagonists was more likely to accept the complementary type of sexism. Responses above the scale mid-point indicated the protagonist who rejected BS was seen as more likely to endorse HS, and vice-versa. These responses therefore provided an index of the illusion of antagonism for each participant. We predicted that the illusion of antagonism would be apparent in tendency for antagonism above mid-point.

In the only known study to report on protagonist gender, Rudman and Fetterolf (2014) found that ratings of BS and HS were negatively correlated regardless of whether the protagonists were male or female. Nonetheless, there are theoretical and empirical grounds to predict that the illusion of antagonism will be stronger for men. First, since BS explicitly obliges men to be loving and altruistic toward women, men who endorse this ideology are likely to be seen as loving and prosocial. In contrast, endorsing BS may not make women seem as warm because they are not tacitly signing up to the same obligations. Second, most protests about sexism refer to male perpetrators (Study 1). Men are rated as higher in HS and

lower in BS (Rudman & Fetterolf, 2014; Sibley et al., 2009). HS is strongly associated with “sexism” as commonly understood (Barreto & Ellemers, 2005), whereas learning that a man acts in a benevolent fashion toward women leads people to see him as less sexist (Study 4). This suggests that for men (but not women), endorsing BS may serve to defuse a default perception that they are prone to affectively negative, sexist attitudes and behaviors toward women. We therefore predicted that BS and HS would be seen as more antagonistic among male than female protagonists, and that this effect would be mediated by warmth.

### Method

#### Participants

Participants were 376 American Mturk workers, including 143 men ( $M_{age} = 34.89$ ,  $SD = 12.17$ ), 230 women ( $M_{age} = 37.79$ ,  $SD = 11.81$ ) and 3 transgender people ( $M_{age} = 29.33$ ,  $SD = 9.45$ ). Thirteen participants who completed the study in < 120 seconds were excluded, and a final sample of 363 was analyzed. Based on an amended sample, sensitivity analysis indicated a sensitivity to detect an effect size of  $\eta^2_p = .02$  with 80% power and alpha of 0.05. The sample was 72.3% White, 9.6% Asian, 8.5% Black, 9.5% other ethnicities.

#### Materials and Procedure

**Perceptions of antagonism.** Participants read a vignette about two American men (or women), one of whom agreed with (endorsed), and the other disagreed with (rejected) a set of sexist statements (either HS or BS). Statements were adapted from the ASI; Glick & Fiske, 1996), and each set contained three statements (one reverse coded). For HS, statements included “Women are too easily offended”, and for BS “Women, compared to men, tend to have a superior moral sensibility” (see Supplementary File for full vignettes). After reading the vignette participants were asked to choose which protagonist (the endorsing or rejecting) was most likely to endorse a set of statements from the complementary ASI subscale, using a 6-point scale ranging from *Joe(Mary) is very likely to agree* (1), *Joe(Mary)*

*is most likely* (2), *Joe(Mary) is likely* (3) to *Mike(Sue) is likely* (4), *Mike(Sue) is most likely* (5) and *Mike(Sue) is very likely to agree* (6). The items presented were dependent on which type of sexism was presented in the vignette. For example, if the vignette described hostile sexism, the participants rated which protagonist would endorse BS, using the BS subscale of the ASI (and vice versa). For the HS subscale (11 items;  $\alpha = .88$ ), items included “Women seek to gain power by getting control over men”; and for the BS subscale (11 items;  $\alpha = .84$ ), items included “Women should be cherished and protected by men.” This measure acted as the scale total score “Antagonism” (see data preparation section). Following this, participants completed the two additional dependent measures (described below), were debriefed, thanked and paid.

**Warmth.** Participants evaluated “How warm or cold are Joe and Mike [Mary and Sue]’s views of women?” (1 = *cold*, 6 = *warm*); and “How much do you like or dislike Joe [Mary] and Mike [Sue]?” (1 = *dislike*, 6 = *like*), separately for the rejecting and endorsing protagonists. Given the moderate correlations between the items ( $r_{endorsing} = .51$ ,  $r_{rejecting} = .46$ ) we treated these as a single composite score of warmth.

**Support for equality.** Participants evaluated “How much do their attitudes towards women lend support to social, economic and political equality for women?” (1 = *Does not support equality*, 6 = *Does support equality*); and “How feminist or anti-feminist are Joe and Mike [Mary and Sue]’s views?” (1 = *anti-feminist*, 6 = *feminist*), separately for the rejecting and endorsing protagonists. Mean ratings for the support for gender equality and feminism items were not significantly different for ratings of the endorsing or rejecting protagonist (all  $t < -.94$ ,  $p > .347$ ). As such, the two items were treated as a single composite score.

## Data Preparation

To test our hypotheses a new scale total variable “Antagonism” was created. The Antagonism score was calculated by taking the mean rating of the complementary sexism

items (possible range 1-6). Higher scores indicated the protagonist described as rejecting the presented type of sexism was seen as more likely to endorse the complementary sexist ideology. For example, if the protagonist who rejected BS attitudes was seen as more likely to endorse HS statements (i.e., Antagonism score > midpoint 3.5), this indicated that the participant tacitly perceived antagonism between HS and BS.

## Results

### Perceptions of Antagonism

We first tested the hypothesis that participants would view a person's endorsement of BS as antagonistic to HS and examined whether this varied as a function of the type of sexism presented, and the protagonist gender. We thus conducted a 2 (Type of Sexism: HS, BS) x 2 (Protagonist Gender: male, female) ANOVA with Antagonism as the dependent variable, followed by planned, single-sample t-tests of Antagonism against mid-point. As predicted, there was a main effect of protagonist gender,  $F(1, 359) = 34.74, p < .001, \eta^2_p = .08$ , in which BS and HS were rated as more antagonistic in men,  $M = 4.06 (SD = 1.06)$  than women,  $M = 3.47 (SD = 0.84)$ . Single-sample  $t$ -tests indicated that male protagonists' antagonism score was significantly above the scale mid-point of 3.5, indicating that participants tended to see the man who was low in one type of sexism as more likely to display the other type of sexism,  $t(185) = 7.21, p < .001, d = 0.53$ . In contrast, female protagonists' antagonism scores did not differ significantly from mid-point, indicating that participants did not see BS and HS as antagonistic in women,  $t(176) = -0.54, p = .593, d = -0.04$ . Neither the main effect of Type of Sexism,  $F(1, 363) = 0.24, p = .624, \eta^2_p = .00$ , nor the interaction ( $p > .738$ ), was significant.

We then tested the hypothesis that protagonists would be seen as warmer after endorsing (vs. rejecting) BS, but not HS, and whether this effect was more pronounced for male protagonists. To do this we conducted 2 (Type of Sexism: HS, BS) x 2 (Protagonist

Gender: male, female) x 2 (Endorsement Level: endorse, reject) mixed-design ANOVA with repeated measures on the last factor. The predicted two-way interaction between Type of Sexism and Endorsement Level was significant,  $F(1, 359) = 101.76, p < .001, \eta^2_p = .22$ . Further, a significant three-way interaction indicated that this effect was qualified by Protagonist Gender,  $F(1, 359) = 21.81, p < .001, \eta^2_p = .06$ . As shown in Table 4, people were rated as significantly less warm ( $p < .001$ ) when they endorsed (vs. rejected) HS, regardless of their gender. Likewise, male protagonists were rated as significantly more warm ( $p < .001$ ) when they endorsed BS. In contrast, female protagonists were rated only marginally warmer ( $p = .086$ ) when they endorsed BS. For warmth, the only other significant effect was a main effect of Protagonist Gender, in which female protagonists were rated warmer than male protagonists,  $F(1, 359) = 11.60, p = .001, \eta^2_p = .03$ .

We also conducted ANOVA with the same design to examine whether perceptions of protagonists' support for equality were affected by Type of Sexism, Protagonist Gender and Endorsement Level. As for warmth, the predicted two-way interaction between Type of Sexism and Endorsement level was significant,  $F(1, 359) = 28.57, p < .001, \eta^2_p = .07$ . Also, as for warmth, a three-way interaction revealed that this effect was qualified by Protagonist Gender,  $F(1, 359) = 32.51, p < .001, \eta^2_p = .08$ . As shown in Table 4, male and female protagonists were seen as less supportive of gender equality when they endorsed HS ( $p = .001$ ). In contrast, endorsing BS caused men to be seen as more supportive ( $p = .001$ ), but women as less supportive ( $p < .001$ ), of gender equality. The ANOVA also revealed other significant effects that are not pertinent to our hypotheses, including a main effect of Endorsement Level in which sexist (vs. nonsexist) protagonists were seen as less supportive of gender equality,  $F(1, 359) = 43.42, p < .001, \eta^2_p = .11$ , and a two-way interaction between Endorsement Level and Protagonist Gender,  $F(1, 359) = 5.16, p = .024, \eta^2_p = .01$ .

[Table 4]

### Mediation analyses

Finally, we conducted analyses to explore whether warmth may have mediated the effect of Protagonist Gender on perceptions of Antagonism. We calculated a difference score for each participant (warmth of protagonist endorsing sexism minus protagonist rejecting sexism), for which positive scores meant that the protagonist endorsing sexism was seen as warmer. This variable was entered in a test of moderated mediation, where Protagonist Gender was the independent variable (X), perceived Antagonism was the dependent variable (Y), Warmth (difference score) was the mediator (M), and type of sexism was the moderator (W). We ran Model 58 in Hayes' (2017) Process Macro to examine moderation of both the *a* path (between Protagonist Gender and Warmth) and the *b* path (between Warmth and Antagonism). The critical result was that indirect effects of Protagonist Gender on Antagonism via Warmth were significant when either HS, *indirect b* = -0.04 [-0.10, -0.01], or BS, *indirect b* = -0.11 [-0.19, -0.05] were presented. These indirect paths did not differ significantly from each other (index of moderated mediation = -0.07 [-0.15, 0.01]). This result indicates that levels of either BS or HS have a stronger impact on perceptions of warmth when displayed by a man (vs. a woman), and for this reason, have a stronger effect on perceptions of the complementary aspect of sexism<sup>10</sup> (see Figure 5 for the individual *a* and *b* paths and the protagonist gender x type of sexism interaction effects).

We also examined the potential mediating role of warmth in the effects of Protagonist Gender and Type of Sexism on perceived support for gender equality using Hayes' Process

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<sup>10</sup> Note that for Antagonism, we did not expect moderated mediation to emerge. Theoretically, the negative interaction between Protagonist Gender and Type of Sexism on Warmth (*a* path) can be expected to be cancelled out by the positive interaction between Warmth and Type of Sexism on Antagonism (*b* path). Indeed, the moderated mediation analysis showed that there was a negative interaction between Protagonist Gender and Type of Sexism on the mediator, Warmth (difference score),  $t(359) = -4.67$ ,  $p < .001$ , such that Type of Sexism made a smaller difference to the mediator for male protagonists. Also, as can be expected, there was a positive interaction between Sexist-is-Warmer and Type of Sexism on Antagonism scores,  $t(358) = 6.48$ ,  $p < .001$ , in which the relationship between these variables was positive when HS was presented and negative when BS is presented. For this reason, also, a simpler analysis of mediation (Process macro, Model 4) is not significant unless antagonism scores are reverse-coded in the benevolent or hostile levels of the Type of Sexism manipulation.

macro (Model 58) and the same design. As expected, the effects of Protagonist Gender were mediated by warmth. For HS, a significant indirect effect of Protagonist Gender indicated that the weaker effect of men's (vs. women's) levels of HS on perceptions of support for equality could be explained by warmth, *indirect b* = 0.39 [0.16, 0.65]. For BS, a significant indirect effect indicated that the stronger effect of men's levels of BS on perceptions of support for equality could also be explained by warmth, *indirect b* = -0.46 [-0.76, -0.19]. The index of moderated mediation was significant, -0.85 [-1.25, -0.48], since the conditional indirect effects were in opposite directions for BS and HS.

## Discussion

Using a different methodology to operationalize the illusion of antagonism, the present study replicates Study 4's finding that BS and HS are perceived to be antagonistic among male protagonists. Extending Study 4, the present study confirmed predictions that the illusion of antagonism is more pronounced for male protagonists – and in fact was not significant for female protagonists. Mediation analyses provided some evidence that this effect might stem from the greater effect that endorsement of sexist ideology has on perceptions of men's warmth, compared to women's. Critically, the perceived warmth of BS men consistently mediated the link between displays of sexism and men's support for gender equality.

However, one limitation of this study is that perceptions of antagonism between BS and HS were measured with a single item, which may not be a very sensitive indicator of perceptions of antagonism. Another limitation, shared across the studies thus far, is that participants' understanding of BS has only been tested in relation to HS, gender role attitudes, and support for gender equality. As we have seen, BS is related to a host of other factors that are also antagonistic to gender inequality. If people fundamentally misunderstand BS, then

they should generally be unable to grasp the relationship between BS and other adverse outcomes for women. The next two studies were designed to further test this possibility.

### **Study 6: The Scope of (mis)Understanding of Benevolent Sexism**

The present study further examined whether people understand BS in two specific ways. First, we sought to replicate the effect of protagonist gender from Study 5 that BS is more strongly linked to warmth and more likely to be misunderstood when displayed by men. Consistent with our previous studies, we also tested whether endorsement of BS would increase perceptions of warmth and decrease perceptions of the endorsement of HS. We also tested whether participants would make judgments about the attitudes and behaviors of those who endorse BS that are congruent with the research and thus reflect an accurate understanding of BS. For example, research shows that endorsement of BS is negatively associated with outcomes in the interests of women at a group-level, such as public support for gender equality (Becker & Wright, 2011) and support for elective and traumatic abortions (Huang et al., 2016); and positively associated with a number of group-level outcomes which are antagonistic to women's interests, such as disapproval of public breastfeeding (Acker, 2009), acceptance of the gender status quo (Jost & Kay, 2005), blaming of rape victims (Viki & Abrams, 2002), justification of domestic violence (Glick et al., 2002), acceptance of paternalistic restrictions on pregnant women's behavior (Sutton et al., 2011), and enjoyment of sexist humor (Eyssel & Bohner, 2007). Most recently, researchers have also observed a null relationship with domestic support for equality amongst men (Sudkämper, Ryan, Kirby & Morgenroth, 2018).

In addition, research shows that BS is positively associated with a number of outcomes which are antagonistic to women's well-being at a relational level, such as endorsement of traditional(thin) beauty ideals (Forbes et al., 2004; Swami et al., 2016), acceptance of paternalistic justifications for behavior restrictions (Moya et al., 2007),

unrealistic relationship expectations (Hammond & Overall, 2013), and a preference for men to initiate dating (Paytner & Leaper, 2016). Finally, at an intrapersonal level researchers have observed positive relationships between BS and intrapersonal variables in the interests of women, such as increased life satisfaction (Hammond & Sibley, 2011; Napier et al., 2010), and those which obscure women's interests, such as greater psychological entitlement within peer relations (Hammond, Sibley & Overall, 2014), self-objectification and body shame (amongst women; Calogero & Jost, 2011), and reduced academic/career goal pursuit (Farkas & Leaper, 2016; Montañés et al., 2012). We refrain from discussing all of these correlates and experimental effects of BS in great detail here as many have already been discussed in the introduction of this paper, but for a more comprehensive review of this literature please see the Supplementary File.

On the one hand, participants' evaluations of the relations between BS and these variables in the directions specified here would reflect an understanding of the functions of BS – notably, its role as part of a system of social control that does not support the interests of women as individuals or as a group (aside from its objective positive correlation with life satisfaction). On the other hand, participants' evaluations of the relations between BS and these variables in the opposite directions from what is specified here (or evaluations of no relationship between them) would reflect a misunderstanding of the functions of BS as a form of social control and a misguided belief that BS does support the interests of women. Finally, consistent with Study 4, we expected BS would have a stronger effect on the warmth of men in particular and would thus lead to more misunderstandings of the functions of BS.

## Method

### Participants

Participants were 283 undergraduate psychology students at a University in the southeastern region of England<sup>11</sup>, including 43 men ( $M_{age} = 20.44$ ,  $SD = 3.51$ ), 239 women ( $M_{age} = 20.21$ ,  $SD = 3.90$ ) and one transgender person ( $M_{age} = 20.00$ ). Based on this sample size, sensitivity analysis indicated a sensitivity to detect an effect size of  $\eta^2_p = .01$  with 80% power and alpha of 0.05. The sample was White/White British (72.4%), Asian/Asian British (11.7%), Black/Black British (8.1%), or Other ethnicity (7.8%).

### **Materials and Procedure**

Participants read two randomly presented vignettes, about a male and female protagonist who either rejected (low sexist) or endorsed (high sexist) a set of benevolent sexist statements. Three statements were drawn from the Benevolent sexism subscale of the ASI (Glick & Fiske, 1996) for this purpose: “Men are incomplete without women”, “Men should cherish and protect women”, and “Women have a quality of purity that few men possess.” Participants then completed the dependent measures by rating the likelihood that the protagonists would endorse each dependent measure. Specifically, participants were instructed to rate the extent to which the dependent measures were accurate descriptions of the protagonist (e.g., “please indicate to what extent each of these statements are likely to be accurate descriptions of [the protagonist]”). All dependent measures described below were randomly presented and rated on an eighth-point scale from 1 (*not at all*) to 8 (*very much*). Participants completed 15 dependent measures each for both the male and female protagonists, and one additional measure for male and five additional measures for female protagonists (totaling 36 dependent measures). Finally, participants provided demographic information, were debriefed, thanked and given course credit.

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<sup>11</sup> The original sample was 297, but fourteen participants were removed owing to multiple failed attention checks, leaving a final sample of 283 for analyses.

**Warmth.** Participants evaluated the level of warmth of both protagonists separately on 6-items measuring warmth toward women (e.g., “is warm toward women”, “likes women”, “has positive attitudes toward women”) and personal warmth (e.g., “is a warm person”, “is nice”, “is likable”), using an eight-point scale (1 = *not at all*, 8 = *very much*). Scale reliability was good for both the male and female protagonists (Male:  $\alpha = .95$ , Female:  $\alpha = .91$ ). Exploratory factor analyses using maximum likelihood extraction, with oblimin rotation suggested a single factor was underlying these items for male protagonists (mean item loading .87; range .77 to .92). For female protagonists, two factors were suggested, with mean item loadings of .88 (range .85 to .94) and .83 (range .76 to .91), however given the high level of correlation between items (range from  $r = .51$  to  $.81$ ) and very good reliability of these items a composite score of warmth was also created for female protagonists.

**Hostile sexism.** Participants evaluated each protagonist’s level of hostile sexism (3 items: e.g., “believes that most women interpret innocent remarks or acts as sexist”). All items were drawn from the ASI (Glick & Fiske, 1996) and scale reliability was very good for both the male and female protagonists (Male:  $\alpha = .94$ , Female:  $\alpha = .91$ ).

### Other Dependent Measures

**Group-level variables.** Participants responded on a scale from 1 (*not at all*) to 8 (*very much*) to the following Group-level items: “willing to protest, sign petitions and take other action to support equality for women” (*Public Support Equality*; Becker & Wright, 2011), “willing to split housework equally with their wives/partners” (*Domestic Support Equality*; Sudkämper et al., 2018), “Supports a woman’s legal right to have an abortion on grounds other than to protect her physical health (e.g., poverty, does not want a child, has no partner)” (*Support Elective Abortion*; Huang et al., 2016), “Supports a woman’s legal right to have an abortion when it is essential for her physical health” (*Support Traumatic Abortion*; Huang et al., 2016), “disapproves of breastfeeding in public” (*Disapprove Public Breastfeeding*; Acker,

2009), “believes that the relationship between men and women is fair and equal” (*Gender Status Quo*; Jost & Kay, 2005), “would blame a woman for being raped by a man with whom she is having an extramarital affair” (*Blame Rape Victims*; Viki & Abrams, 2002), “Minimizes and justifies domestic violence perpetrated by men against their wives/partners” (*Justify Domestic Violence*; Glick et al., 2002), “would try to prevent pregnant women from doing what they want, if (s)he thinks their choices could harm the fetus/baby” (*Pregnant Women’s Choices*; Sutton et al., 2011), and “Laughs at sexist jokes and doesn’t find them offensive” (*Enjoy Sexist Humor*; Eyssel & Bohner, 2007).

**Relational variables.** Similarly, participants responded using the same response scale to these Relational items: “rates thinner women as more attractive” (*Traditional(thin) Body Ideal*; Forbes et al., 2004), “accepts protective justifications for restrictions on their behavior (e.g., a job may be dangerous for women)” (*Accepts Paternalistic Justifications*; Moya et al., 2007), “believes potential relationship partners are either destined to get along or they are not”, “when she and her partner disagree, she feels like their relationship is falling apart”, “believes a partner should know what she is thinking and feeling without her having to tell them” (*Unrealistic Relationship Expectations*, 3-items; Hammond & Overall, 2013; Female only:  $\alpha = .63$ ), and “believes that men should take control and initiative in dating (e.g., decide where the date is”); (*Men initiate dating*; Paynter & Leaper, 2016).

**Intrapersonal variables.** Finally, participants responded using the same scale to these Intrapersonal items: “is better psychologically adjusted and satisfied with life” (*Life Satisfaction*; Hammond & Sibley, 2011), “feels entitled to more of everything”, “feels (s)he deserves more things in life”, “demands the best because (s)he is worth it” (*Psychological Entitlement*, 3-items; Hammond et al., 2014; Male:  $\alpha = .90$ ; Female:  $\alpha = .82$ ), “values appearance-based attributes (e.g. physical attractiveness) to be more important than non-observable competence-based attributes (e.g., energy levels)” (*Self-Objectification*; Calogero

& Jost, 2011), “experiences shame about her appearance and body” (*Body Shame*; Calogero & Jost, 2011), and “has less ambitious career goals” (*Reduced Career Goals*; Montañés et al., 2012).

## Results

Means and standard deviations for all dependent variables are reported in Table 5. To investigate our first hypothesis, 2 (Benevolent Sexism: endorse, reject) x 2 (Protagonist Gender: male, female) mixed ANOVAs were conducted for each of the dependent variables measured for both protagonists. Consistent with predictions, a significant main effect of BS was observed for all of the dependent variables, except for acceptance of the gender status quo, psychological entitlement, and life satisfaction (all  $p > .260$ ). Protagonists who endorsed (vs. rejected) BS were seen as higher in warmth, public and domestic support for gender equality, and support for elective and traumatic abortion, and seen as lower in hostile sexism, blaming of rape victims, justification of domestic violence, and enjoyment of sexist humor.

Consistent with Study 4, we also observed significant BS x Protagonist gender interactions for most of the dependent variables. Crucially, both men and women who endorsed BS (vs. rejected BS) were perceived as warmer, but this effect was significantly more pronounced for men. Among the group-level variables the same interaction was observed: participants perceived male and female protagonists who endorsed BS to be less likely to endorse HS and more likely to publicly support gender equality, and this effect was stronger for male protagonists. Male protagonists who endorsed BS were incorrectly perceived to be more inclined to support abortion rights, and less inclined to disapprove of public breastfeeding, blame rape victims, justify domestic violence, enjoy sexist humor, all of which reflect a misunderstanding of the functions and consequences of BS. A significant interaction was also observed for acceptance of the gender status quo, in which simple effects

showed a trend for male protagonists endorsing BS to be seen as system justifiers and female protagonists endorsing BS to be system rejecters, but neither of these simple effects attained significance. Of the group-level variables, only paternalistic restrictions on pregnant women's behavior showed a main effect of BS endorsement with no moderation by protagonist gender: participants perceived that benevolent sexists would be more inclined to restrict pregnant women's behavior. In addition, perceived domestic support for gender equality, measured only for the male protagonist, was perceived (incorrectly) to be higher when BS was endorsed.

The effects for the relational variables reflected an understanding of some functions and consequences of BS and a misunderstanding of others. Endorsers of BS were (incorrectly) perceived to be less likely to endorse traditional (thin) beauty ideals (although a marginal interaction and simple effects analysis suggested that this effect was stronger for or confined to male protagonists). Among the other relational variables, assessed only for female protagonists, women who endorsed BS were (correctly) perceived to be more likely to accept paternalistic restrictions from their male spouses, and (correctly) to harbor more unrealistic relationship expectations. Finally, the other relational variable assessed for both male and female protagonists showed only a main effect of BS, in which endorsing BS increased the extent to which female protagonists were perceived (correctly) to believe men should take the initiative in dating (although this effect was not significant for male protagonists).

The intrapersonal variables assessed for both male and female protagonists also showed interaction effects. Endorsing BS increased perceptions of greater life satisfaction for male protagonists but made no difference to the perceived life satisfaction of women. Endorsing (vs. rejecting) BS led women to be perceived as feeling more entitled, and men to be perceived as feeling less entitled. For variables assessed only for female protagonists

(because previous research on these objective correlates of BS was confined to female participants), endorsing BS led women to be perceived as more appearance concerned (self-objectification), higher in body shame, and to harbor less ambitious career goals. Together, the effects for the intrapersonal variables generally reflected an understanding of the consequences of BS, especially for women.

[Table 5]

### **Mediation analyses**

Having found that endorsement of BS had significant effects on each of the dependent variables, for male protagonists, female protagonists, or both, we then turned to examining the mediating role of warmth in these effects. For preliminary correlational analyses linking warmth to each dependent variable for each protagonist, consult Supplementary File. In our final set of analyses, we tested warmth as the mediating mechanism linking BS to this array of dependent variables. Specifically, we tested a series of mediation models using the Process macro (Model 4) to examine the direct and indirect effect of BS on the dependent variables through warmth separately for each protagonist gender. BS was dummy coded (Endorse = 1; Reject = -1) and entered as the independent variable (X), warmth was entered as the mediator (M), and each dependent variable was entered separately into its own model (Y). Significance of the indirect path was assessed using 95% bias-corrected and accelerated confidence intervals with 10,000 bootstrap resamples. All effects are reported in Table 6, but the indirect effects through warmth of the protagonist were of greatest theoretical interest, and therefore we focus on those effects here.

The results indicated that of the 35 mediation models tested, there were only six models in which warmth did not operate as a mediating mechanism linking BS to dependent

variables<sup>12</sup>. Specifically, there was no significant indirect effect through warmth on acceptance of the gender status quo and paternalistic restrictions on pregnant women's behavior for the male or female protagonists. For male protagonists, we did not observe a significant indirect effect on preferring that men to initiate dating. For female protagonists, we also did not observe a significant indirect effect on unrealistic relationship expectations, psychological entitlement, body shame, and only weakly on self-objectification.

For the remaining variables assessed for each protagonist gender, the warmth of the protagonist significantly linked the endorsement of BS to these group-level, relational and intrapersonal outcomes, even in the absence of any direct (or total) effects of BS on these variables. Collectively, these findings implicate the warmth of the protagonist as a critical psychological basis for misunderstanding the function of BS. This was particularly relevant for the group-level variables whereby warmth seemed to mask the social reality that BS upholds socially conservative beliefs and policy positions that constrain women's civil rights (Christopher & Mull, 2006).

#### [Table 6]

### **Discussion**

In Study 6, believing that men endorsed (vs. rejected) BS caused participants to see those men as less likely to endorse HS, disapprove of public breastfeeding, blame rape victims, justify domestic violence, and enjoy sexist humor. Men who endorsed BS were also seen as more likely to take action to support gender equality – whether by participating in collective action such as protests, or by contributing equally to domestic duties in their homes, to and to support elective and traumatic abortion.

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<sup>12</sup> Note that all mediation analyses held when the male protagonist's trait and attitudinal warmth were substituted for the warmth composite score. For the female protagonist most, indirect effects via Trait Warmth held except for restrictions on pregnant women's choices, indirect  $b = -0.02 [-0.07, 0.01]$ ; traditional(thin) body ideals, indirect  $b = -0.03 [-0.10, 0.00]$ ; men to initiate dating, indirect  $b = -0.02 [-0.08, 0.02]$ , and self-objectification, indirect  $b = -0.02 [-0.08, 0.01]$ .

The present study also provides evidence that participants misunderstood many of the consequences of *women's* endorsement of BS, especially on group-level variables. Women who endorsed (vs. rejected) BS were seen as lower in HS, providing further support for the illusion of antagonism with a more sensitive test that does not rely on a single-item measure of perceived antagonism. This effect was also mediated by the perception that women who endorsed BS were warmer. Further, women who endorsed BS were also seen as less likely to support women's right to abortion on medical grounds (i.e., "traumatic" abortion). As for male protagonists, these misperceptions were mediated by warmth, and even when simple effects were not significant, women's endorsement of BS indirectly affected perceptions of their greater justification of domestic violence and endorsement of traditional (thin) beauty ideals. However, as in Study 5, effects for female protagonists were generally less pronounced. Notably, participants generally did not misunderstand the relational and mental health implications of BS for women. Benevolent sexist women were seen as higher in life satisfaction, but also more likely to accept paternalistic instructions from their partners, more likely to be concerned about their appearance (self-objectification) and to experience body shame, and less likely to have ambitious academic/career goals.

The present results taken together indicate that participants are especially likely to misunderstand the group-level functions of BS. Further, they are especially likely to misunderstand the functions of men's BS. The perception that benevolent sexist men are nice guys with warm attitudes toward women appears to be powerful enough to derail understanding of sexism. However, an important limitation of these findings, like those of Studies 2-5, is that the role of warmth as a mediator can only be inferred from patterns of correlation. In our final study, we set out to address this limitation.

### **Study 7: The Causal Role of Warmth**

In the previous studies we have *measured* warmth. In the next and final study we *manipulated* warmth in order to test whether it plays a *causal* role in people's misunderstandings of the functions of BS. Participants read vignettes about a male and female protagonist described as either warm or cold toward women, and then rated the protagonists on the same dependent variables as in Study 6. We expected that describing a man as warm (vs. cold) would cause him to be seen as simultaneously higher in BS and lower in HS. These simultaneous effects would indicate that warmth is causally responsible for the perceived negative correlation between BS and HS (i.e., the illusion of antagonism). We also expected manipulations of warmth to affect other perceptions of the man's attitudes and behaviors concerning women, since these were each correlated with warmth in Study 6. This implies that correlations between BS and other attitudes and behaviors will be attenuated when the manipulated level of warmth is partialled out.

As in Studies 5 and 6, we included male and female protagonists, to test whether their gender moderated effects. We predicted that the warmth manipulation would have a larger effect on the perceived BS of male protagonists, and whether protagonist gender moderated the effect of warmth on each of the dependent variables.

## **Method**

### **Participants**

Participants were 211 British adults, including 110 men<sup>13</sup>, 100 women, and 1 transgender person, recruited via the crowd sourcing platform Prolific Academic. Note that one participant was removed owing to multiple failed attention checks. Based on this final sample, sensitivity analysis indicated a sensitivity to detect an effect size of  $\eta^2_p = .02$  with

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<sup>13</sup> A human error during data collection meant that no data was collected on participants' age. Prolific Academic (2017) reports that the majority (62%) of their participants are in aged between 20-35 years, with a range from 18 – 91.

80% power and alpha equal to .05. The sample was ethnically White/White British (91%), Asian British/Asian (6.2%), Black British/Black (1.4%) and other ethnicities (1.4%).

## Materials and Procedure

Participants read two randomly presented vignettes containing the warmth manipulations separately, one about a male and the other about a female protagonist. Participants then completed the dependent measures, in a random order, by rating the likelihood that the protagonists would endorse each dependent measure. Finally, participants provided demographic information, were debriefed, thanked and paid.

**Warmth manipulation.** To manipulate warmth, protagonists were described as having warm or cold attitudes toward women. Three statements were adapted from the dependent measure of Study 3 and were similar in content to other measurements of warmth in the literature (see Fiske et al., 2002; Fiske et al., 2007). For high warmth, protagonists were described as “(s)he likes women, has warm feelings, and positive attitudes toward them”. For low warmth, protagonists were described as “(s)he dislikes women, has cold feelings, and negative attitudes toward them”.

**Benevolent sexism.** Participants evaluated both protagonists on benevolent sexism. Items were taken from the ASI (e.g., “Women have a quality of purity that few men possess”; Male:  $\alpha = .87$ ; Female:  $\alpha = .71$ ) and were measured on eight-point scales (1 = *not at all* to 8 = *very much*).

**Dependent variables.** As in Study 6, participants indicated the extent to which each statement was an accurate description of the protagonist, using an eight-point scale (1 = *not at all*, 8 = *very much*). All dependent measures were identical to Study 6 (including HS). Participants completed 15 dependent measures each for the male and female protagonists, and a further one measure for male protagonists and five for female protagonists (totaling 36 dependent measures).

## Results

Means and standard deviations for all dependent variables are reported in Table 7.

Separate 2 (Warmth: high, low) x 2 (Protagonist gender: male, female) mixed ANOVAs were conducted for each of the dependent variables measured for both protagonists. Consistent with our expectation that warmth exerts a causal influence on perceptions of BS and other attitudes and behaviors toward women, a significant main effect of warmth was observed for all dependent variables. Protagonists described as high (vs. low) in warmth were perceived as more likely to endorse those dependent measures that operate in support of women's interests (e.g., showing public support for gender equality) and less likely to endorse those dependent measures that operate against the interests of women (e.g., blaming rape victims; see Supplementary File for report of these analyses in full, including Warmth x Protagonist Gender interactions). Crucially, and as expected, protagonists described as high (vs. low) warmth were perceived as higher in BS, and lower in HS, and this pattern was observed for both male and female protagonists, although it was more pronounced for male protagonists.

### [Table 7]

To test our prediction that the warmth manipulation will alter correlations between perceptions of BS and the dependent variables, we conducted bivariate correlations among all of the study variables (see Table 8). Consistent with predictions, the pattern of zero-order correlations across conditions revealed positive associations between BS and those variables that would serve women's interests and negative associations between BS and those variables that would operate against women's interests (including HS). Then we adjusted for the warmth manipulation (-1 = low warmth, 1 = high warmth) and observed an attenuation of these correlations among many of the group-level variables (e.g., blaming rape victims, justification of domestic violence), relational variables (e.g., preference for men to take the initiative in dating), and intrapersonal variables (e.g., psychological entitlement). These

attenuated correlations indicate that warmth causally contributed to the misunderstanding of such relations, especially for male protagonists. In fact, we did not observe attenuated associations when adjusting for warmth in the female protagonist conditions.

[Table 8]

### **Discussion**

In this final study, the manipulation of warmth affected perceptions of the male protagonist's levels of sexism in opposing directions. Across warmth conditions, perceptions of BS and HS were negatively correlated, whereas this correlation was null when we adjusted for warmth. In contrast, for female protagonists, HS was lowered by the warmth manipulation, but BS was not significantly affected. The correlation between BS and HS was null for female protagonists, whether or not we adjusted for warmth. Consistent with Study 5, this result indicates that the illusion of antagonism between BS and HS is stronger for, and may be unique to, male protagonists. Extending Study 5, this study indicates that the illusion can be causally attributed to the perceived warmth that is ascribed to BS for male (but not female) protagonists.

Also extending our previous studies, participants' misunderstanding of the relationship between BS and those variables that served or undermined women's interests was evident for all but two variables – acceptance of the gender status quo and life satisfaction. That is, although the research literature on benevolent sexism has demonstrated that men who report higher levels of BS are more likely to disapprove of public breastfeeding, blame rape victims, justify domestic violence, enjoy sexist humor and believe men should initiate dating, participants associated BS men with lower levels of these variables. The illusory antagonism between BS and each of these variables was strengthened by the perception that these attitudinal and behavioral displays corresponded with men who were low (vs. high) warmth toward women. In the same vein, previous research has

indicated that men higher on BS are no more likely than men lower on BS to take action to support gender equality (such as sharing domestic duties equally or participating in collective action; Drury & Kaiser, 2014; Sudkämper et al., 2018), and are less likely to support abortion rights (Huang et al., 2016). Nonetheless, in this study, perceptions of BS were positively associated with these characteristics, because they were seen to be displayed by men with warm attitudes toward women.

In contrast, although mean levels of BS differed across the warmth conditions in the expected direction for women protagonists, this difference was not significant. Since women's warmth did not affect their perceived endorsement of BS, we did not examine the hypothesis that warmth was responsible for incorrect tacit perceptions of the functions of BS for women. However, it is noteworthy that participants revealed an understanding of the functions and consequences of BS related to the relational and intrapersonal variables, including the perceived negative associations with unrealistic relationship expectations, acceptance of paternalism, self-objectification and reduced career goals (all of which were negatively affected by warmth), and the perceived positive association with life satisfaction (which was positively affected by warmth). These findings suggest that people are capable of recognizing some consequences of BS – notably among women, whose personal warmth is not strongly associated with their BS in observers' minds. Further work might include a control condition (no information about warmth) and examine whether perceiving a protagonist as warm, or as cold, exerts a greater influence on their understanding of BS.

### **General Discussion**

Sexist ideology is ambivalent: through the filters of benevolent (BS) and hostile (HS) sexism, it casts women in a subjectively positive as well as negative light. Many studies have shown that despite its warm tone, BS is largely antagonistic to gender equality. Indeed, according to Glick and Fiske (1996), BS is antagonistic to gender equality *because* of its

warm tone. The valorization, moral concern and affection that it conveys is assumed to sweeten the deal for women, making wider systems of gender inequality and sexist ideology palatable and encouraging conformity to their expectations.

One of the outstanding questions in this literature is whether people understand what BS is and how it operates. The results of our studies cast new light on this question. An initial observational study showed that fewer online complaints about sexism referred to benevolent (vs. hostile) treatment (Study 1). A second study showed that although women recalled more experiences of BS, they indicated they had protested more experiences of HS (Study 2). An experimental study showed that when presented with HS (vs BS), they perceived it as less sexist and were less inclined to protest it (Study 3). Two further experimental studies indicated that protagonists described as high in BS were seen as lower in HS (and vice-versa), and that this illusion of antagonism was mediated by warmth (Studies 4 & 5). A penultimate study showed that when people (and especially men) endorse benevolent sexism, this leads to a range of – generally incorrect – inferences about character traits, attitudes, and behaviors (Study 6). In Studies 2-6, the perceived warmth of protagonists and their attitudes toward women were measured and appeared to mediate effects of their BS. A final study manipulated protagonists' warmth and found that it played a causal role in participants' misunderstanding of BS (Study 7). The present findings underscore the illusion of antagonism as a robust pattern that is explained by the perceived warmth of BS, and that this illusion generalizes to a range of variables associated with BS beyond HS.

Taken together, these findings indicate that for the most part, people do not understand the functions of BS. Further, they demonstrate that misunderstandings of BS stem from its warmth. As noted in the introduction to this article, warmth is a powerful organizing construct in social cognition (Abele & Bruckmüller, 2011). As shown in Asch's classic

study, warmth leads to halo effects that shape an array of inferences about people's attitudes, motives, and behaviors. It is also intimately related to liking (Fiske, Cuddy, & Glick, 2007). As shown by Heider's studies of cognitive balance, warmth organizes an array of perceptions into a Gestalt. Thus, a person's apparent liking of an attitude object affects how much observers will like them, and vice-versa. Theoretically, the present studies were motivated by these Gestalt principles of warmth, and empirically, they provide evidence that warmth affects people's understanding of BS in a Gestalt fashion. Specifically, measurements of warmth mediated between beliefs about a protagonists' BS and their other attitudes and behaviors (Studies 2-6). These findings held whether warmth was operationalized in terms of the protagonists' traits or their attitudes toward women. Indeed, when measured, these two aspects of warmth were strongly correlated or comprised one factor. These findings also held whether warmth was operationalized in terms of warmth and positivity (e.g., Study 7), liking (e.g., how much participants liked the protagonist, and how much they liked women, as in Study 2), or both - in which case items referring to liking and warmth were highly correlated and formed one factor (e.g., Study 6)<sup>14</sup>.

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<sup>14</sup> Two supplementary experiments also lent support to this Gestalt characterization of the role of warmth in perceptions of benevolent sexism. In the first supplementary experiment, 263 Mturk workers were exposed, in a two-group design, to a male protagonist described as high or low in trait warmth (using keywords taken from the trait warmth items in Study 4). Conceptually replicating the results of Study 7 (in which warmth toward women was manipulated), the warm (vs. cold) man was seen as higher in BS,  $F(1, 261) = 81.38, p < .001, \eta^2_p = .24$ . Analysis of indirect effects suggested this effect was mediated by a measure of warm attitudes toward women, indirect  $b = 0.65 [0.39, 0.90]$ , and there was no direct effect,  $b = 0.22 [-0.08, 0.53]$ . In the second supplementary experiment, 198 MTurk workers were exposed to one of the four cells of a 2 (trait warmth: high or low) x 2 (attitudinal warmth toward women: high or low) design. Both manipulations yielded significant main effects, albeit larger for attitudinal warmth,  $F(1, 194) = 72.75, p < .001, \eta^2_p = .27$ , than for trait warmth,  $F(1, 194) = 8.96, p = .003, \eta^2_p = .04$ . These effects were qualified by an interaction,  $F(1, 198) = 8.38, p = .004, \eta^2_p = .04$ . Simple effects showed that attitudinal warmth increased perceived BS when the man was high ( $M = 5.08, SD = 1.89$  vs  $M = 2.11, SD = 1.30$ ), and low ( $M = 3.55, SD = 2.26$  vs  $M = 2.08, SD = 1.58$ ): respectively,  $F(1, 194) = 65.45, p < .001, \eta^2_p = .25$  and  $F(1, 194) = 15.84, p < .001, \eta^2_p = .08$ . Viewing the interaction differently, trait warmth increased BS when the man was high, but not low, in attitudinal warmth: respectively,  $F(1, 194) = 18.80, p < .001, \eta^2_p = .09$  and  $F(1, 194) = 0.01, p = .946, \eta^2_p = .00$ . Taken together with each other and the other studies in this article, these experiments show that when one of BS, trait warmth, or attitudinal warmth are manipulated, measures of the other two are increased. When trait warmth and attitudinal warmth are orthogonalized, they combine additively and multiplicatively to inform judgments of BS. The supplementary experiments provide some indication that attitudinal warmth exerts a more proximal influence and trait warmth a more distal influence on perceived BS. A selection of other variables (e.g., perceived HS) were included in these supplementary studies and results also conceptually replicate results from Studies 3-7. For further details please consult the Supplementary Experiments file.

The present findings also contribute to the study of impressions of benevolently sexist men. In the present studies, the relation between BS and HS was observed more strongly (Study 6), or only (Studies 5, 7), for men. Several previous studies have indicated that such men are viewed as warm and attractive, and not as sexist (Barretto & Ellemers, 2005; Bohner et al., 2010; Montañés, de Lemus, Moya, Bohner, & Megías, 2013). Study 3 indicated that benevolent (vs. hostile) behaviors by men are not seen as sexist because they are warm. Studies 1- 3 showed that women are less likely to complain about men's benevolent (vs. hostile) behaviors because they are seen as warm. Studies 4-7 demonstrated that warmth leads participants to see men who endorse benevolent sexism as more likely to support feminism, take collective action for gender equality, share domestic and child care responsibilities with their partners, and hold more liberal gender role attitudes. Taken together, these findings show that women may not only fail to see how BS contributes to inequality, but also (erroneously) to perceive benevolently sexist men as allies in the pursuit of gender equality.

In showing that warmth leads to wide-ranging misunderstandings of the functions of BS, the present studies lend support to a false-consciousness perspective on women's acceptance of benevolence. The hypothesis that women accept benevolent treatment and ideology as part of a knowing bargain - that is, accepting BS while being aware of its negative consequences for gender equality - receives little support in the present studies. Normatively, this suggests that gender relations do not possess the knowing consent that characterizes conventionally legitimate social relations (Becker, 2010; Jackman, 1994; Jost & Banaji, 1994; Mill, 1869/1970). Practically, this suggests consciousness-raising may assist efforts to counteract the adverse effects of BS for gender equality (Becker & Swim, 2011, 2012; Becker, Zawadzki & Shields, 2014).

### **Unanswered questions, limitations, and future directions**

Future research can explore one of the key findings to emerge from the present findings: that observers see warmth and BS as more tightly associated among men than women. A key finding that helps explain this effect is that BS is perceived to be associated with psychological entitlement among women (Studies 6 & 7), presumably because it asserts women's right to protection, adoration, and financial sacrifice (Study 6, 7; see also Hammond et al., 2014). Conversely, and in keeping with our theorizing, BS may be seen as an altruistic ideology when displayed by men, because it asserts that men should protect and provide for women. To further corroborate this account, future research could test the perceived relation between BS and other traits such as altruism and morality among men and women.

In our view, another explanation deserves particular attention. According to the grain-of-truth or stereotype-accuracy hypothesis, beliefs about group members are informed by normatively appropriate inferences from available data; that is, sensitivity to objective regularities in the social environment (Campbell, 1967; Jussim, Cain, Crawford, Harber, & Cohen, 2009). One hint that this mechanism may be important is that in fact, BS and HS are more strongly correlated among men than women - and of course this correlation is positive (e.g., Glick et al., 2000; Sibley, Overall & Duckitt, 2007; Sibley & Perry, 2010; Sibley, Wilson & Duckitt, 2007). Implicit learning of the stronger positive association between benevolent and hostile attitudes and behaviors may have counteracted the effect of warmth - that is, the tendency to infer that BS and HS are negatively related. Further, participants appeared to understand some of the functions of BS, notably among women: for example, its relation to appearance concern, entitlement, and deference to protective spouses (Studies 6 and 7). This effect might also have stemmed from implicit learning of associations between gender attitudes and these outcomes for women.

It is worth considering whether the present findings would also hold for subjectively positive but patronizing views of other social groups. Several disadvantaged groups,

including Blacks and older adults, are the objects of ambivalent or complementary stereotyping (Cuddy & Fiske, 2004; Katz & Hass, 1988; Maldon et al., 2001; North & Fiske, 2013). For various reasons, we do not think that the present findings will necessarily generalize to such groups. Studies have shown that people disapprove of positive stereotypical remarks about social groups, including the elderly (Balsis & Carpenter, 2005; Hummert & Mazloff, 2001) and the mentally ill (Douglas & Sutton, 2011). Gender stereotypes, and positive gender stereotypes in particular, appear to be more normatively acceptable than for other kinds of groups.

Other directions of research are suggested by the present findings. There is anecdotal evidence that women who challenge benevolent sexism in particular are resented, and indeed that academic research on benevolent sexism is sometimes met with public scorn and defensiveness (Bloxham, 2011; Edmunds, 2015). Future research could test whether this is explained by the perceived warmth of BS: people responding negatively to overtly kind and warm behavior generally do not fare well in impression formation tasks.

One of the reasons for this defensiveness might be that challenges to benevolent sexism mean that heterosexual men face the prospect that even their genuinely warm, supportive, protective behaviors might be perceived as sexist. How people decide whether such behaviors are acceptable or not, or sexist or not, is a pressing problem for further research. One clue is offered by the present research: people may use cues to men's warmth. Benevolent behaviors, when presented by a man who seems generally warm, may be less likely to be judged as sexist than when presented by an otherwise cold man. Future research could test this possibility by exposing participants to instances of benevolent behavior from men whose trait warmth is varied. Independent knowledge that a man is warm may make his behavior seem less sexist and may also make women less inclined to react unfavorably even when they recognize it as sexism. Such research could also take advantage of the facets of

BS that are identified in Ambivalent Sexism Theory (Glick & Fiske, 1996). Perceptions of a man's warmth may shape perceptions of whether his warm attitudes toward women are founded on patronizing stereotypes (gender differentiation), whether helpful behaviors are founded on the assumption that women need male assistance (protective paternalism), and whether his loving, romantic behavior is founded on the belief that (straight) men are fundamentally incapable of being complete if they do not revere their partners (heterosexual intimacy). On this note, although we did not formally code for these subtypes of BS in the Everyday Sexism Project (Study 1), women typically did not complain that they were too adored by their male partners. Rather, their protests focused on how they were stereotyped and belittled.

A clear and important limitation of the current work is a lack of racial or cultural diversity in our samples (Simons, Shoda & Lindsay, 2016), which have been recruited from the US and UK, and which across studies has been predominantly White (range 72%-91%). In defense of the present findings, we note that the racial make-up of our samples largely reflects the reported racial compositions from census records: in the UK, 87% of the population are reported as White, and in the USA this figure is 72%. Further, recent investigations of race on personal endorsement of sexist ideology and meta-perceptions of others' sexism have found no effect of participant race (see Rudman & Fetterolf, 2014). Nonetheless, further work is needed to establish the generality of the present findings across cultural contexts and ethnic groups.

## **Conclusion**

The remarkable groundswell of opposition to discrimination, harassment, and sexual assault in recent years seems to represent a watershed in gender relations. However, it has focused on hostility to women, leaving benevolent sexism largely free from scrutiny. In revealing the role of warmth in this phenomenon, the present findings also highlight the point

that affectively warm intergroup attitudes are not a panacea for improvements in gender relations – and that they may even have some ironic consequences (Dixon, Levine, Reicher, & Durrheim, 2012; Saguy, Tausch, Dovidio, & Pratto, 2009). In this case, the warmth of benevolent sexism serves to cast a blinding halo over the ideological systems that serve to maintain gender inequality, and so appears to be part of the ‘problem’ rather than the ‘solution’.

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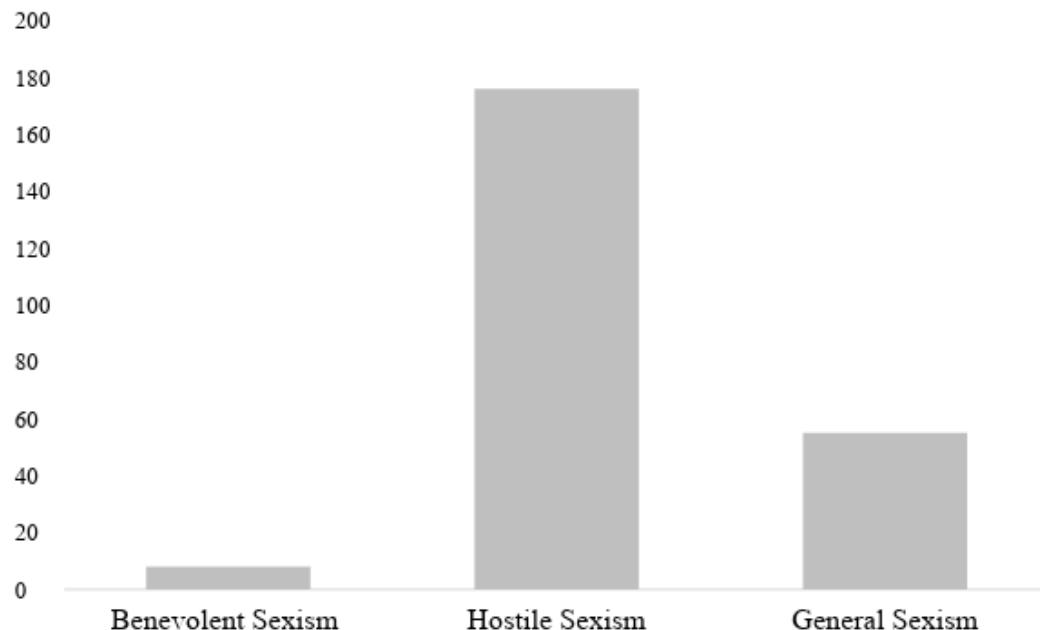
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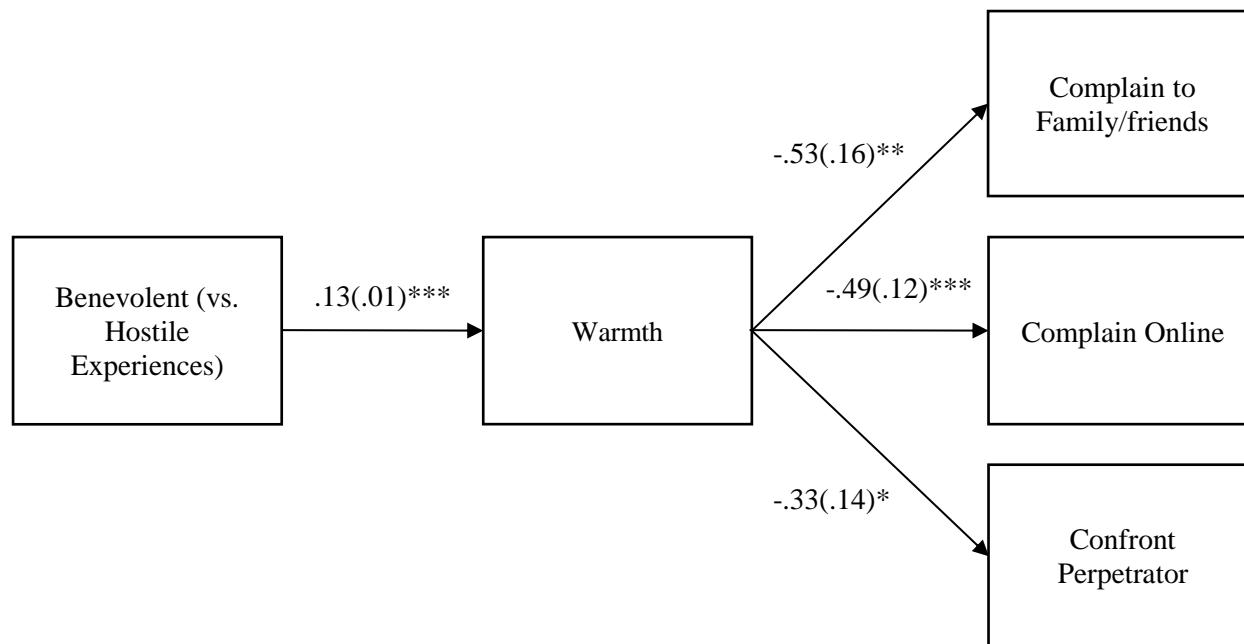
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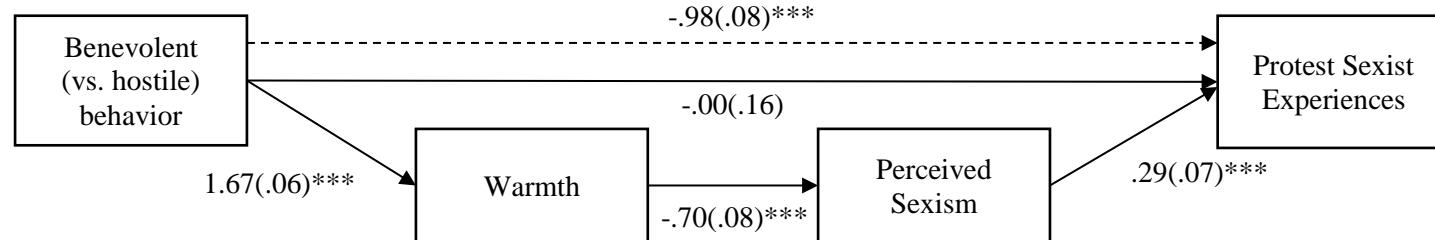
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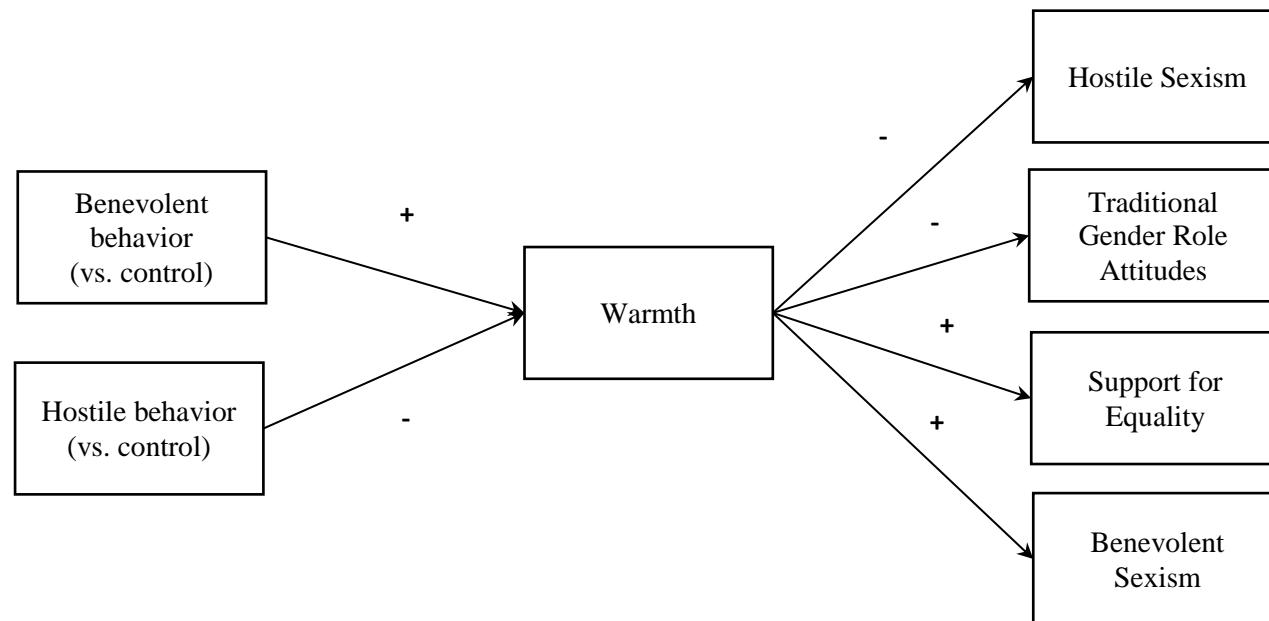
*Figure 1.* N = 239. Observed frequencies of benevolent sexism, hostile sexism and general sexism in posts to the Everyday Sexism Project. All frequencies were significantly different at  $p < .001$ . Extracts coded as two categories simultaneously ( $N = 9$ ) were not included in these analyses (Study 1).



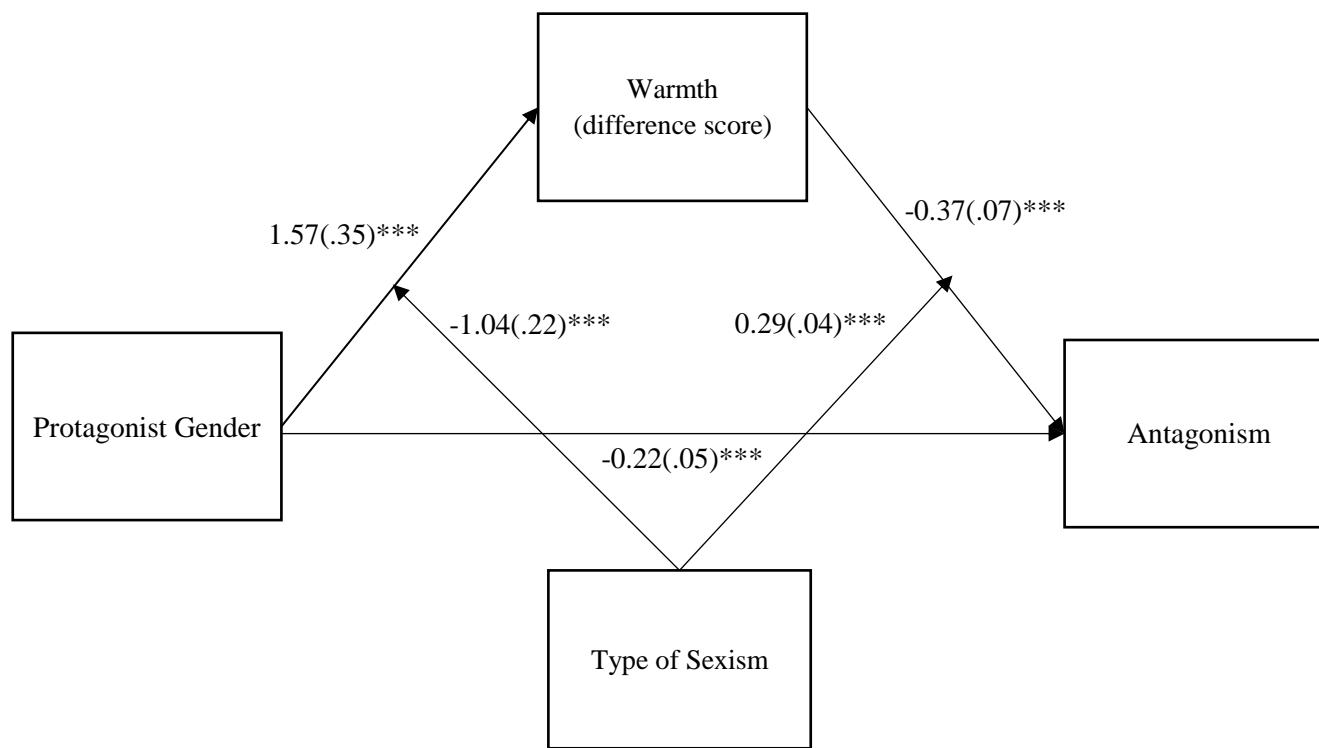
*Figure 2.* Mediation of the relation between Type of Sexist Experience (Hostile = -1, Benevolent = 1), Warmth as the proposed mediator, and Protecting Sexist Experiences (frequency scores) in three ways: by Complaining to Family/friends, Complaining Online and Confronting the Perpetrator. Statistics for each path are unstandardized estimates with standard error in parentheses. \*\*\* $p < .001$ . \*\*  $p < .01$ . \*  $p < .05$ . (Study 2).



*Figure 3.* Mediation model showing the effect of Type of Sexism (HS = -1, BS = 1) on intention to protest experiences of sexism (in an online forum), as mediated by warmth of the protagonist, and perceptions of the behavior as sexist (or not). Statistics for each path are unstandardized estimates with standard error in parentheses. Dashed line indicates the total effect of type of sexist behavior on complaining. \*\*\* $p < .001$ .  
(Study 3)



*Figure 4.* Conceptual diagram for the relation between type of sexist behavior (Benevolent or Hostile compared to Control) and perceived Hostile sexism (attitude and behavior), traditional gender role attitudes, perceived support for equality and perceived Benevolent sexism (attitude and behavior) via warmth (Study 4).



*Figure 5.* Moderated Mediation of the relation between protagonists' gender (Male = -1, Female = 1), warmth (difference between high and low BS protagonist) as proposed mediator, and antagonism (extent to which high BS participant was seen as lower in HS, and vice versa) and Type of Sexism as the moderator. It indicates that female protagonists' level of sexism (either HS or BS) had a smaller effect on perceptions of their

warmth, and subsequently perceptions of the complementary aspect of sexism (i.e. Antagonism). Statistics for each path are unstandardized estimates with standard error in parentheses. \*\*\* $p < .001$ . (Study 5)

Table 1.

*Study 2 Means and Standard Deviations for each of the Dependent Variables by Condition.*

Dependent variables	Hostile sexism <i>M(SD)</i>	Benevolent sexism <i>M(SD)</i>
Frequency of Sexism: Week	0.18 <sub>a</sub> (0.21)	0.17 <sub>a</sub> (0.16)
Frequency of Sexism: Month	0.30 <sub>a</sub> (0.27)	0.34 <sub>a</sub> (0.25)
Frequency of Sexism: Year	0.46 <sub>a</sub> (0.31)	0.59 <sub>b</sub> (0.33)
Warmth	0.49 <sub>a</sub> (0.12)	0.76 <sub>b</sub> (0.09)
Protest:		
Complain family/friends	0.29 <sub>a</sub> (0.30)	0.14 <sub>b</sub> (0.24)
Complain online	0.10 <sub>a</sub> (0.22)	0.04 <sub>b</sub> (0.18)
Confront perpetrator	0.19 <sub>a</sub> (0.24)	0.12 <sub>b</sub> (0.24)

*Note.*  $N = 252$ . All scores are log transformed. Protest variables are mean score for the Year only, and means are adjusted for frequency of sexist experience. Warmth of attitudes is a composite score of the likes women and likeability. Standard deviations are in parentheses. Different subscripts indicate means are significantly different at  $p < .05$ .

Table 2.

*Study 3 Means and Standard Deviations for each of the Dependent Variables by Condition.*

Dependent variables	Hostile sexism <i>M(SD)</i>	Benevolent sexism <i>M(SD)</i>
Perceived Sexism	6.00 <sub>a</sub> (1.14)	2.50 <sub>b</sub> (1.43)
Warmth	2.17 <sub>a</sub> (0.86)	5.51 <sub>b</sub> (1.03)
Protest Sexist Experience	4.30 <sub>a</sub> (1.54)	2.33 <sub>b</sub> (0.88)

*Note.*  $N = 219$ . Perceived Sexism is a composite score of the sexism and prejudice items, and Warmth is a composite score of likes women and likability. Standard deviations are in parentheses. Different subscripts indicate means are significantly different at  $p < .001$ .

Table 3.

*Study 4 Means and Standard Deviations for Each Dependent Variable across Conditions*

Dependent variables	Behavior towards women			<i>F</i> (2, 290)	$\eta^2_p$
	Benevolent ( <i>n</i> = 101)	Control ( <i>n</i> = 96)	Hostile ( <i>n</i> = 99)		
Warmth	6.11 <sub>a</sub> (0.76)	4.20 <sub>b</sub> (0.99)	1.99 <sub>c</sub> (0.82)	578.50*	.80
Benevolent Sexism	4.78 <sub>a</sub> (1.06)	3.77 <sub>b</sub> (1.02)	2.60 <sub>c</sub> (1.09)	106.71*	.42
Hostile Sexism	3.00 <sub>a</sub> (0.99)	4.58 <sub>b</sub> (1.17)	5.82 <sub>c</sub> (1.35)	142.84*	.50
Likelihood of Benevolent Behavior <sup>1</sup>		5.68 <sub>a</sub> (1.08)	3.13 <sub>b</sub> (1.12)	259.01*	.57
Likelihood of Hostile Behavior <sup>1</sup>	2.95 <sub>a</sub> (1.05)	4.64 <sub>b</sub> (1.40)		92.48*	.32
Support for Equality	4.53 <sub>a</sub> (1.11)	3.50 <sub>b</sub> (1.15)	1.87 <sub>c</sub> (0.94)	159.28*	.52
Traditional Gender Role Attitudes	3.31 <sub>a</sub> (0.85)	4.20 <sub>b</sub> (0.94)	5.24 <sub>c</sub> (0.96)	107.64*	.42

*Note.* Standard deviations are in parentheses. Higher means indicate greater levels of the dependent variable. Different subscripts indicate means are significantly different at  $p < .05$ . <sup>1</sup>Degrees of freedom for likelihood of benevolent or hostile behavior were (1,193). \* $p < .001$ .

Table 4.

*Study 5 Means (and Standard Deviations) for Warmth and Perceived Support for Equality by Protagonist Gender, and Type and Level of Sexism.*

Dependent variables	Benevolent Sexism					Hostile Sexism					
	Hi BS	Lo BS	F(1,359)	p	$\eta^2_p$	Hi HS	Lo HS	F(1,359)	p	$\eta^2_p$	
Male protagonists	Warmth	4.29 (1.24)	2.87 (1.31)	41.70	<.001	.10	2.63 (1.26)	4.50 (1.19)	72.04	<.001	.17
	Equality	3.88 (1.36)	3.08 (1.46)	11.61	.001	.03	2.61 (1.20)	4.43 (1.06)	60.53	<.001	.14
Female protagonists	Warmth	4.00 (1.03)	3.61 (1.06)	3.06	.081	.01	3.27 (1.03)	4.08 (1.06)	12.93	<.001	.04
	Equality	3.20 (1.09)	4.29 (1.14)	20.84	<.001	.06	3.07 (1.19)	4.07 (1.04)	17.54	<.001	.05

*Note.* N = 373. Hi = high (endorsing protagonist). Lo = low (rejecting protagonist). Standard deviations are in parentheses.

Table 5.

*Study 6 Means, Standard Deviations, Main Effects of Benevolent Sexism and Interaction Effects between Benevolent Sexism and Protagonist Gender for each of the Dependent Variables.*

Dependent variables	Male Protagonist		Female Protagonist		Main Effect BS endorsement			BS x Protagonist gender			
	Rej BS	End BS	Rej BS	End BS	F (1, 281)	p	$\eta^2_p$	F (1, 281)	p	$\eta^2_p$	
Group-Level	Warmth	4.70 <sub>a</sub> (1.65)	6.23 <sub>b</sub> (1.14)	5.05 <sub>a</sub> (1.33)	5.58 <sub>b</sub> (1.27)	57.08	.001	.17	32.60	.001	.10
	Hostile Sexism	4.35 <sub>a</sub> (1.15)	2.97 <sub>b</sub> (1.34)	3.56 <sub>a</sub> (1.41)	3.17 <sub>b</sub> (1.25)	53.55	.001	.16	28.49	.001	.09
	Public Support Equality	3.99 <sub>a</sub> (2.01)	5.50 <sub>b</sub> (1.92)	5.16 <sub>a</sub> (1.89)	5.74 <sub>b</sub> (1.78)	31.79	.001	.10	13.16	.001	.04
	Domestic Support Equality	4.53 <sub>a</sub> (2.08)	5.35 <sub>b</sub> (1.76)			12.71	.001	.04			
	Support Elective Abortion	4.44 <sub>a</sub> (1.79)	5.32 <sub>b</sub> (1.85)	5.62 <sub>a</sub> (1.72)	5.79 <sub>a</sub> (1.72)	8.26	.004	.03	10.89	.001	.04
	Support Traumatic Abortion	4.76 <sub>a</sub> (1.86)	5.94 <sub>b</sub> (1.77)	5.66 <sub>a</sub> (1.89)	6.20 <sub>b</sub> (1.62)	22.69	.001	.08	8.00	.005	.03
	Disapprove Pub. Breastfeeding	3.94 <sub>a</sub> (2.05)	2.98 <sub>b</sub> (1.86)	3.02 <sub>a</sub> (1.68)	2.71 <sub>a</sub> (1.76)	11.77	.001	.04	7.68	.006	.03
	Gender Status Quo	4.47 <sub>a</sub> (1.84)	4.87 <sub>a</sub> (1.99)	4.01 <sub>a</sub> (1.63)	3.75 <sub>a</sub> (1.65)	0.14	.711	.00	5.39	.021	.02
	Blame Rape Victim	3.76 <sub>a</sub> (2.08)	2.53 <sub>b</sub> (1.66)	2.62 <sub>a</sub> (1.62)	2.46 <sub>a</sub> (1.73)	16.57	.001	.06	18.20	.001	.06
	Justify Domestic Violence	3.64 <sub>a</sub> (2.09)	2.76 <sub>b</sub> (2.02)	2.88 <sub>a</sub> (1.68)	2.49 <sub>a</sub> (1.79)	12.47	.001	.04	3.08	.080	.01
Relational	Pregnant Women's Choices	4.21 <sub>a</sub> (1.87)	4.58 <sub>a</sub> (2.03)	3.69 <sub>a</sub> (1.83)	4.11 <sub>a</sub> (2.03)	4.16	.040	.02	0.03	.857	.00
	Enjoy Sexist Humor	4.56 <sub>a</sub> (2.13)	2.99 <sub>b</sub> (1.78)	3.42 <sub>a</sub> (1.94)	2.95 <sub>a</sub> (1.90)	31.83	.001	.10	14.17	.001	.05
	Traditional(thin) Body Ideal	4.30 <sub>a</sub> (1.99)	3.71 <sub>b</sub> (1.93)	3.76 <sub>a</sub> (1.71)	3.58 <sub>a</sub> (1.94)	4.01	.050	.01	3.14	.077	.01
	Accepts Paternalistic Justifications			3.52 <sub>a</sub> (1.77)	4.53 <sub>b</sub> (1.89)	21.09	.001	.06			
	Unrealistic Rel. Expectations			4.09 <sub>a</sub> (1.18)	4.71 <sub>b</sub> (1.27)	17.76	.001	.06			

	Men Initiate Dating	4.60 <sub>a</sub> (2.03)	4.96 <sub>a</sub> (1.92)	3.46 <sub>a</sub> (1.85)	4.81 <sub>b</sub> (2.00)	19.67	.001	.07	14.97	.001	.05
Intrapersonal	Life Satisfaction	4.31 <sub>a</sub> (1.61)	4.92 <sub>b</sub> (1.63)	4.70 <sub>a</sub> (1.53)	4.45 <sub>a</sub> (1.51)	1.29	.256	.00	19.47	.001	.07
	Psych Entitlement	4.38 <sub>a</sub> (1.63)	3.67 <sub>b</sub> (1.45)	4.37 <sub>a</sub> (1.52)	5.24 <sub>b</sub> (1.42)	0.34	.560	.00	44.21	.001	.14
	Self-objectification			3.88 <sub>a</sub> (1.71)	4.12 <sub>b</sub> (1.79)	1.34	.249	.01			
	Body Shame			3.94 <sub>a</sub> (1.66)	4.17 <sub>b</sub> (1.78)	1.24	.269	.00			
	Reduced Career goals			2.92 <sub>a</sub> (1.57)	3.27 <sub>b</sub> (1.86)	2.81	.095	.01			

*Note.* N = 283. Rej = Reject. Pub. = Public. Rel. = Relationship. Standard deviations are in parentheses. Higher means indicate greater levels

of that variables except where the direction of the measure is explicitly indicated. Means with different subscripts are significantly different within condition at  $p < .01$ .

Table 6.

*Study 6 Multiple Indirect Effects for the Relation between Level of Benevolent Sexism (Endorsing Compared to Rejecting) and the Dependent Variables via Warmth of the Protagonist.*

Dependent Variables		Benevolent Sexism (reject vs. endorse)					
		Male Protagonist			Female Protagonist		
		Total	Direct	Indirect	Total	Direct	Indirect
Group-level	Hostile sexism	-0.49***	-0.36***	-0.13 [-0.20, -.06]	-0.15**	-0.07	-0.08 [-0.14, -.03]
	Public Support Equality	0.36***	0.03	0.33 [0.25, 0.41]	0.17**	0.02	0.14 [0.06, 0.21]
	Domestic Support Equality	0.21***	-0.15**	0.36 [0.27, 0.45]			
	Support Elective Abortion	0.23***	-0.04	0.28 [0.20, 0.36]	0.05	-0.08	0.13 [0.06, 0.21]
	Support Traumatic Abortion	0.31***	-0.02	0.33 [0.25, 0.41]	0.15**	0.02	0.13 [0.06, 0.21]
	Disapprove Public Breastfeeding	-0.24***	-0.01	-0.23 [-0.32, -0.15]	-0.09	0.01	-0.10 [-0.17, -0.04]
	Gender Status Quo	0.10	0.12	-0.02 [-0.10, 0.06]	-0.08	-0.10	0.02 [-0.01, 0.05]
	Blame Rape Victim	-0.31***	-0.03	-0.28 [-0.36, -0.19]	-0.05	0.05	-0.10 [-0.17, -0.04]
	Justify Domestic Violence	-0.21***	-0.11	-0.10 [-0.18, -0.03]	-0.11 <sup>+</sup>	-0.05	-0.07 [-0.13, -0.03]
	Pregnant Women's Choices	0.09	0.12 <sup>+</sup>	-0.03 [-0.12, 0.04]	0.11 <sup>+</sup>	0.13*	-0.02 [-0.06, 0.01]
Relational	Enjoy Sexist Humor	-0.37***	-0.14**	-0.23 [-0.32, -0.15]	-0.12*	-0.05	-0.07 [-0.13, -0.03]
	Traditional(thin) Body Ideal	-0.15**	-0.03	-0.12 [-0.21, -0.05]	-0.05	-0.01	-0.04 [-0.09, -0.01]
	Accepts Paternalism				0.26***	0.30***	-0.03 [-0.08, -0.01]
	Unrealistic Rel. Expectations				0.24***	0.26***	-0.02 [-0.06, 0.01]
Intrapersonal	Men Initiate Dating	0.09	0.16*	-0.07 [-0.15, 0.01]	0.33***	0.37***	-0.04 [-0.09, -0.01]
	Life Satisfaction	0.19**	-0.12*	0.31 [0.23, 0.40]	-0.08	-0.21***	0.12 [0.06, 0.20]
	Psych Entitlement	-0.23***	-0.02	-0.21 [-0.31, -0.12]	0.28***	0.27***	0.01 [-0.02, 0.05]
	Self-objectification				0.07	0.10	-0.03 [-0.07, -0.00]

Body Shame	0.07	0.09	-0.02 [-0.06, 0.01]
Reduced Career Goals	0.10	0.16**	-0.07 [-0.12, -0.03]

*Note.* N = 283. Rel. = Relationship. Standard deviations are in parentheses. Statistics for each path are standardized. Where the direction of the measure is not explicitly indicated, assume a positive direction (e.g. Body Shame = greater body shame). \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Table 7.

*Study 7 Means, Standard Deviations, Main Effects of Warmth and Interaction Effects between Warmth and Protagonist Gender for each of the Dependent Variables.*

Dependent Variables	Male Protagonist		Female Protagonist		Main Effect Warmth			Warmth x Protagonist gender			
	Lo warmth <i>M(SD)</i>	Hi warmth <i>M(SD)</i>	Lo warmth <i>M(SD)</i>	Hi warmth <i>M(SD)</i>	<i>F(1, 209)</i>	<i>p</i>	$\eta^2_p$	<i>F(1, 209)</i>	<i>p</i>	$\eta^2_p$	
Group-level	Benevolent sexism	2.30 <sub>a</sub> (1.32)	4.87 <sub>b</sub> (1.71)	3.46 <sub>a</sub> (1.50)	3.76 <sub>a</sub> (1.70)	58.15	.001	.22	115.44	.001	.36
	Hostile sexism	6.78 <sub>a</sub> (1.09)	2.89 <sub>b</sub> (1.49)	5.97 <sub>a</sub> (1.19)	2.29 <sub>b</sub> (1.25)	633.12	.001	.75	1.29	.257	.01
	Public Support Equality	1.64 <sub>a</sub> (1.26)	5.04 <sub>b</sub> (1.99)	2.50 <sub>a</sub> (1.68)	6.45 <sub>b</sub> (1.64)	353.85	.001	.63	5.27	.023	.03
	Domestic Support Equality	2.03 <sub>a</sub> (1.28)	5.91 <sub>b</sub> (1.61)			378.93	.001	.65			
	Support Elective Abortion	2.43 <sub>a</sub> (1.63)	5.97 <sub>b</sub> (1.79)	3.53 <sub>a</sub> (1.99)	6.31 <sub>b</sub> (1.91)	201.46	.001	.49	10.16	.002	.05
	Support Traumatic Abortion	2.93 <sub>a</sub> (1.96)	6.40 <sub>b</sub> (1.81)	3.88 <sub>a</sub> (2.01)	6.65 <sub>b</sub> (1.88)	182.60	.001	.47	7.30	.007	.03
	Disapprove Pub. Breastfeeding	6.53 <sub>a</sub> (1.78)	2.39 <sub>b</sub> (1.50)	6.05 <sub>a</sub> (1.97)	1.86 <sub>b</sub> (1.28)	481.70	.001	.70	0.04	.836	.00
	Gender Status Quo	3.55 <sub>a</sub> (2.33)	5.29 <sub>b</sub> (1.76)	4.30 <sub>a</sub> (1.74)	4.32 <sub>a</sub> (2.04)	16.73	.001	.07	25.70	.001	.11
	Blame Rape Victim	6.47 <sub>a</sub> (1.77)	1.78 <sub>b</sub> (1.15)	5.50 <sub>a</sub> (2.01)	1.53 <sub>b</sub> (1.19)	530.64	.001	.72	10.83	.001	.05
	Justify Domestic Violence	5.78 <sub>a</sub> (1.94)	1.90 <sub>b</sub> (1.60)	4.58 <sub>a</sub> (1.93)	1.63 <sub>b</sub> (1.31)	252.22	.001	.55	21.29	.001	.09
Relational	Pregnant Women's Choices	5.22 <sub>a</sub> (1.88)	3.81 <sub>b</sub> (2.09)	4.79 <sub>a</sub> (1.84)	3.31 <sub>b</sub> (2.09)	39.56	.001	.16	0.08	.785	.00
	Enjoy Sexist Humor	7.17 <sub>a</sub> (1.27)	3.46 <sub>b</sub> (1.97)	5.73 <sub>a</sub> (1.73)	2.60 <sub>b</sub> (1.72)	300.56	.001	.59	5.41	.021	.03
	Traditional(thin) Body Ideal	5.70 <sub>a</sub> (2.09)	4.01 <sub>b</sub> (1.87)	4.68 <sub>a</sub> (2.16)	3.49 <sub>b</sub> (1.91)	35.52	.001	.15	3.41	.066	.02
	Accepts Paternalism			4.61 <sub>a</sub> (1.97)	2.93 <sub>b</sub> (1.63)	45.20	.001	.18			
	Unrealistic Rel. Expectations			4.68 <sub>a</sub> (1.20)	3.90 <sub>b</sub> (1.32)	19.89	.001	.09			
	Men Initiate Dating	6.27 <sub>a</sub> (1.76)	4.17 <sub>b</sub> (1.80)	5.16 <sub>a</sub> (1.80)	2.77 <sub>b</sub> (1.73)	131.83	.001	.39	1.00	.321	.01

	Life Satisfaction	2.87 <sub>a</sub> (1.79)	5.22 <sub>b</sub> (1.57)	3.02 <sub>a</sub> (1.57)	5.14 <sub>b</sub> (1.77)	126.08	.001	.38	0.94	.333	.00
	Psych Entitlement	6.32 <sub>a</sub> (1.45)	3.61 <sub>b</sub> (1.46)	5.25 <sub>a</sub> (1.55)	3.76 <sub>b</sub> (1.70)	128.90	.001	.38	46.27	.001	.18
Intrapersonal	Self-objectification			4.60 <sub>a</sub> (1.91)	3.22 <sub>b</sub> (1.87)	27.95	.001	.12			
	Body Shame			4.50 <sub>a</sub> (1.80)	3.32 <sub>b</sub> (1.76)	23.43	.001	.10			
	Reduced Career Goals			3.64 <sub>a</sub> (1.84)	2.39 <sub>b</sub> (1.55)	28.48	.001	.12			

Note. N = 211. Lo = Low. Hi = High. Pub. = Public. Rel. = Relationship. Psych = Psychological. Standard deviations are in parentheses.

Higher means indicate greater levels of that variables except where the direction of the measure is explicitly indicated. Means with different subscripts are significantly different within condition at  $p < .01$ .

Table 8.

*Study 7 Pearson's Product Moment Correlations for Benevolent Sexism and each of the Dependent Variables, and Partial Correlations Removing the Variance of the Independent Variable Warmth.*

Dependent variables	Male		Female		
	BS (zero-order)	BS (partial)	BS (zero-order)	BS (partial)	
Group-level	Hostile Sexism	-.50***	.09	-.02	.11
	Public Support equality	.58***	.21**	.31***	.38***
	Domestic Support equality	.64***	.26***		
	Support Elective Abortion	.67***	.40***	.24***	.23***
	Support Traumatic Abortion	.66***	.40***	.24***	.23***
	Disapprove Public Breastfeeding	-.55***	-.10	-.10	-.04
	Gender Status Quo	.41***	.22***	.09	.09
	Blame Rape Victim	-.60***	-.13	-.08	-.02
	Justify Domestic Violence	-.49***	-.03	-.12	-.08
	Pregnant Women's Choices	-0.12	.14†	.21**	.26***
Relational	Enjoy Sexist Humor	-.44***	.08	-.04	.03
	Traditional(thin) Body Ideal	-.10	.21**	.17**	.20**
	Accepts Paternalism			.22***	.29***
	Unrealistic Rel. Expectations			.46***	.52***
Intrapersonal	Men Initiate Dating	-.17**	.24***	.24***	.36***
	Life Satisfaction	.63***	.42***	.32***	.33***
	Psych Entitlement	-.33***	.20**	.39***	.46***
	Self-objectification			.26***	.31***

Body Shame	.11	.15**
Reduced Career Goals	.18**	.23***

*Note.*  $N = 211$ . Rel. = Relationship. Where the direction of the measure is not explicitly indicated, assume a positive direction (e.g. Body Shame = greater body shame).  ${}^{\dagger}p = .047$ .  ${}^{**}p < .01$ .  ${}^{***}p < .001$ .

