

Making Waves without Rocking the Boat: Women's Reinforcement of Gender Status Hierarchies as a Protectant against Discrimination

by

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A thesis submitted in conformity with the requirements
for the degree of doctorate of philosophy
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2013

Abstract

Research on sex discrimination has found consistent support for the idea that women who violate gender roles by succeeding in male-dominated domains elicit hot forms of discrimination. In particular, evidence suggests that a perceivers' conservatism, which represents a preference against gender change toward greater equality, might motivate this kind of discrimination. Therefore, I hypothesized that perceiver conservatism would predict discrimination against female gender role violators. In two studies, I found evidence that conservatism predicts negative evaluations of targets (Study 1), as well as sabotage (Study 2). In addition, Study 2 revealed that the relationship between conservatism and sabotage was partially mediated by the perceivers' anxiety. However, if the discrimination that conservative perceivers direct at gender role violators is motivated by conservatives' preference against social change toward greater equality, then targets who support gender status hierarchies while they violate gender roles should experience less discrimination from conservative perceivers than those who challenge status hierarchies. Consistent with this reasoning, perceivers' conservatism was negatively related to perceived interpersonal hostility of female gender role violators who expressed support for gender hierarchy. In contrast, perceivers' conservatism was positively related to perceived

interpersonal hostility of female gender role violators who expressed opposition to gender hierarchy (Study 1). However, targets' expressions of support for gender hierarchy did not have this effect on the relationship between perceivers' conservatism and perceptions of the target's ineffectuality (Study 1), respect for the target (Study 1), or sabotage of the target (Study 2). Moreover, while supporting status hierarchies reduced perceptions of interpersonal hostility from perceivers high in conservatism, it increased perceptions of hostility from those low in conservatism. Thus, supporting gender hierarchies may appear to help in some contexts, but is associated with significant costs, as well. The implications of these findings for theory and practice are discussed.

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Introduction

Despite decades of research on the origins of bias in selection, promotion, and treatment in organizations, and how to eliminate it, discrimination remains a problem (e.g., Berdahl, 2007a; Lyness & Heilman, 2006). A considerable amount of work has focused on identifying what constitutes discriminatory behaviors, the conditions under which these behaviors are most likely to emerge, and how to eliminate or reduce them. This focus appears to have played a role in reducing flagrant forms of bias, and, correspondingly, the number of women in positions of power has increased over time (although women remain under-represented in these positions; Catalyst, 2011). However, the focus on observable discriminatory behaviors may have inadvertently led to an increase in subtle, so-called modern forms of discrimination (e.g., Brief, Dietz, Cohen, Pugh, and Vaslow, 2000; Cortina, 2008; McConahay, Hardee, & Batts, 1981; Swim, Aikin, Hall, & Hunter, 1995). In order to address this problem, this paper reframes the issue by using what we have learned about situational antecedents of sex discrimination, such as numerical minority status, occupational gender-typing, and victim characteristics, to gain a fuller understanding of the people who engage in sex discrimination, and when and why they do it.

A considerable amount of the research on discrimination has focused on the role of stereotypes (e.g., Campbell 1967; LeVine & Campbell, 1972; Deaux, 1984; see also Biernat & Kobrynowicz, 1997; Eagly & Karau, 2002; Heilman, 2001). Building on this work, several streams of research have come to the conclusion that it is not just individuals who conform to stereotypes that face discrimination, but that individuals who violate stereotypes, and therefore social roles, are targeted with discrimination based on hostility and resentment (Berdahl, 2007a; Burgess & Borgida, 1999; Dall'Ara & Maass, 1999; Duckitt & Sibley, 2007; Heilman & Okimoto, 2007; Heilman, Wallen, Fuchs, & Tamkins, 2004; Maass, Cadinu, Guarnieri, & Grasselli, 2003; Berdahl & Min, 2012; Siebler, Sabelus, & Bohnert, 2008; Thomsen, Green, & Sidanius, 2008). This type of discrimination, which Fiske (1998) termed "hot" discrimination, is argued to reinforce or legitimize status hierarchies by punishing those who blur status boundaries (Berdahl, 2007b; Bobo, 1999; Bobo & Fox, 2003; Franke, 1997). Since this research argued that hot forms of discrimination were elicited by threats to the perceiver's group-based status, research focus shifted to the role of the perceivers' social identity, and the role that threats to the status afforded by this identity play in eliciting mistreatment (see Berdahl, 2007b). More

generally, individuals who are motivated to maintain and enhance societal status hierarchies (i.e., individuals high in conservatism; Jost, Glaser, Kruglanski, & Sulloway, 2003) have been found to be more likely to exhibit bias toward gender role violators (e.g, Maass, Cadinu, Guarnieri, & Grasselli, 2003).

Duckitt and Sibley (2007) found that two ideologies that have been argued to comprise social conservatism (Jost et al., 2003)- right-wing authoritarianism (RWA; Altemeyer, 1981; 2006) and social dominance orientation (SDO; Pratto, Sidanius, Stallworth, & Malle, 1994)- both predicted discrimination against groups that are "...socially deviant in the sense of rejecting or violating conventional social norms or values" (p. 127) and those who "directly challenge inequality" (p. 127), such as feminists, who challenge inequality between men and women (Duckitt & Sibley, 2007). For members of subordinate social groups, simply attaining a high-status position could be seen as a role violation, which should lead to negative reactions from conservative perceivers. However, anecdotal evidence suggests that some gender role violators are able to garner the support of conservative perceivers. For example, women like Germany's Angela Merkel and the United Kingdom's Margaret Thatcher have successfully gained the support of conservative voters, who should have been expected to react negatively to women entering into a male-dominated domains.

While it is unquestionable that not all female leaders are conservative, the success of any conservative female politicians seems paradoxical: why would conservatives vote for women who are attempting to violate social roles, when evidence suggests that conservatism might motivate discrimination against female gender role violators? One potential explanation for this apparent paradox could be that, since conservative ideologies serve to reinforce societal status hierarchies, perhaps women who violate gender roles by entering and succeeding in traditionally masculine fields can avoid being seen as threats to status hierarchies if they espouse support for the existing gender status hierarchy. For example, a conservative perceiver might resent the idea of a woman entering into national politics, since that could be seen as a gender role violation, and this violation would ordinarily motivate rejection or retaliation. However, a female gender role violator who encourages other women to enact traditional subservient social roles might not be seen as a threat by conservatives: even if her position represents a gender role violation that threatens gender status hierarchies, her message might strongly buttress these same hierarchies, possibly taking away the conservative perceiver's motivation to mistreat her.

The line of reasoning presented above is consistent with the results of recent work by Derks and colleagues (Derks, Ellemers, Van Laar, & De Groot, 2011a; Derks, Van Laar, Ellemers, & De Groot, 2011b), who found that when women are exposed to sexism at work, they sometimes respond by acting like "queen bees", which involves perpetuating negative stereotypes about women as a whole, while simultaneously distancing themselves from their female identities (Ellemers, Van Den Heuvel, De Gilder, Maass, & Bonvini, 2004; Garcia-Retamero & Lopez-Zafra, 2006; Mathison, 1986; Parks-Stamm, Heilman, & Hearn, 2008). Derks et al. (2011a; 2011b) proposed that some women do this in order to distance themselves from devalued female identities, so that they can pursue their ambitions in sexist organizational cultures. While it stands to reason that dissociating from a devalued identity could be helpful, a substantial body of research has found that being seen as insufficiently feminine¹ carries its own risks. For example, Heilman and Okimoto (2007) argued that women who succeed in masculine domains are seen as "deficient in the feminine attributes mandated by gender stereotypes, and they are penalized as a result" (p. 91). It is interesting, then, that rather than trying to appear more feminine, women who engage in queen bee behaviors seem to be coping with a sexist environment by attempting to distance themselves from their female identity, and thus choosing to appear less feminine. Since the fulfillment of self-interests is widely accepted to be a key driver of human behavior (see Smith, 1776), it seems likely that women do indeed experience a benefit from engaging in queen bee behaviors, above and beyond any harm caused by being seen as insufficiently feminine.

While Derks et al. (2011a, 2011b) argued that queen bee behaviors are useful coping strategies because they alleviate the threat that sexist environments pose to women's social identity, it is not the only plausible explanation. Like conservative female politicians successfully courting the vote of conservative constituents, female workers in sexist organizations who engage in queen bee behaviors might be seen as showing support for gender status hierarchies, in that they a) perpetuate the idea that women, as a group, are not well suited for male gender-typed jobs, b)

¹ It should be noted that other researchers have argued that this discrimination comes from being seen as too masculine, as opposed to insufficiently feminine (e.g., Rudman, Moss-Racusin, Phelan, & Nauts, 2012). Nevertheless, both perspectives lead to predictions that women who distance themselves from their feminine identities and instead adopt more masculine identities would elicit more discrimination.

play down the prevalence of sex discrimination and the harm it causes, and c) by actively discriminating against other women, thus "keeping them in their place".

In this paper, I explore conservative perceivers' reactions toward female targets who violate gender role but express support for gender status hierarchies, and compare them to reactions toward female gender role violators who challenge gender status hierarchies. Since sex discrimination appears to be motivated by the desire to maintain or enhance sex-based status differences (Berdahl, 2007a; Berdahl, 2007b; Berdahl et al., 2011; Franke, 1997; Rudman, Moss-Racusin, Phelan, & Nauts, 2012), women who support status hierarchies may be able to attenuate discrimination from conservative perceivers.

Chapter 1

Review of the Literature

Women comprise a disproportionately small percentage of senior executives in the private sector (Catalyst, 2011). One study found that in order to be promoted to high level management positions, women need to receive higher performance evaluations than men (Lyness & Heilman, 2006). That women are held to stricter standards than men could help explain why women are under-represented in boardrooms (Lyness & Heilman, 2006). To make matters worse, these authors found that women in a male gender-typed position (line management) received lower evaluations than men in these same positions, and lower evaluations than women in a female gender-typed position (staff management). This field study did not use experimental methods, which makes it difficult to rule out alternative explanations. Nevertheless, the pattern of results reported by these authors was consistent with those of a large body of work, which demonstrate that gender stereotypes are a major determinant of how gender inequality is perpetuated (e.g., Biernat & Kobrynowicz, 1997; Eagly & Karau, 2002; Heilman, 2001).

Gender stereotypes represent consensual beliefs about the attributes of men and women, and are comprised of two overlapping but distinct forms: descriptive and prescriptive. Descriptive stereotypes purport to describe what men and women are typically like, and can lead to bias when there is a perceived lack of fit between the stereotypes of a group and the requirements of a job (Eagly & Carli, 2003; Heilman, 2001). For example, a person who thinks women tend to be indecisive, but thinks managers need to be decisive to be effective, might view women as a poor fit for management positions. However, since people only need to rely on gender stereotypes when they do not know the attributes of a specific woman, information about a specific woman's attributes decreases people's reliance on stereotypes (Gill, 2004). For example, a person who feels that women tend to be indecisive might rely on that stereotype when dealing with an unknown woman, but not when dealing with a woman whom they know to be decisive. Therefore, descriptive stereotypes have been described as a filter through which individuals process social information (Burgess & Borgida, 1999).

While descriptive stereotypes lead to “cold” forms of discrimination, which can occur in the absence of hostility or a desire to discriminate (such as bias in selection and performance evaluations; Burgess & Borgida, 1999; Fiske, 1998), prescriptive stereotypes describe what

people believe men and women should be like (Burgess & Borgida, 1999; Eagly & Karau, 2002; Fiske & Stevens, 1993; Heilman, 2001; Prentice & Carranza, 2002), and can be considered injunctive norms outlining acceptable gender roles for men and women (e.g., Gill, 2004). Prescriptive stereotypes lead to “hot” forms of discrimination, which are driven by emotional reactions, such as personal dislike, hostility, and disgust toward gender role violators (Fiske, 1998; Okimoto & Brescoll, 2010).

1 Gender Roles

Gender roles are social constructs that outline the "behaviors, activities, and attributes that a given society considers appropriate for men and women" (WHO, 2012). Much of the work on gender roles was inspired by early research on group stereotypes, which argued that stereotypes arising from occupational segregation lead to implicit associations between social groups and the work roles they generally filled (Campbell 1967; LeVine & Campbell, 1972). Building on this perspective, gender stereotypes were argued to result from the association of masculinity with the role of agentic breadwinner, and femininity with the role of communal caretaker (Eagly, 1987).

An explanation as to how prescriptive stereotypes might lead to sex discrimination can be found in ambivalent sexism theory (Glick & Fiske, 1996; 2001a; 2001b), which posits that women elicit polarized views from sexist men: women who embrace traditional social roles and serve men (e.g., homemakers and romantic objects) tend to be “rewarded” with paternalistic benevolence, whereas women who challenge traditional social roles or threaten men’s power (e.g., feminists and “temptresses”) are punished with hostile sexism (or “hot” discrimination). Accordingly, a series of studies conducted by Heilman and colleagues found that women who succeed in male gender-typed jobs were seen as bitter, quarrelsome, selfish, deceitful, devious, and unlikeable (Heilman, Block, & Martell, 1995; Heilman, Block, Martell, & Simon, 1989; Heilman et al., 2004; Heilman & Okimoto, 2007). These negative affective reactions can influence women’s careers by biasing evaluations and influencing organizational reward allocations (Heilman et al., 2004).

In addition to negative affective reactions and the resulting bias in selection, studies conducted by various researchers have reported that women who enter into traditionally masculine occupations face disapproval, derision, rejection, and harassment (Berdahl, 2007a; Gill, 2004;

Rudman, 1998; Rudman & Glick, 1999; 2001). Indeed, women who do not adhere to prescribed gender roles experience a disproportionate amount of mistreatment (e.g., Berdahl, 2007a; Berdahl, Min, Moon, & Muradov, 2011; Dall'Ara & Maass, 1999; Maass et al., 2003; Siebler, Sabelus, & Bohner, 2008).

According to the stereotype content model (SCM; Fiske, Cuddy, Glick, & Xu, 2002; Fiske, Xu, Cuddy, & Glick, 1999), groups are primarily stereotyped on the dimensions of warmth and competence. Perceptions of a group's competence and warmth were argued to be determined by perceptions of the group's status and competition, respectively (Fiske et al., 2002). Perceptions of a group's status can influence perceptions of that group's competence through correspondence bias, which occurs when a person's position is believed to reflect his or her traits (see Gilbert & Malone, 1995). Alternatively, the relationship between a group's status and their perceived competence can also be accounted for by the belief that people get what they deserve, which implies that higher status individuals must be more competent (Fiske et al., 2002). Finally, the belief that high status groups are also highly competent was argued to be system-justifying, in that it legitimizes intergroup status hierarchies (see Berger, Rosenholtz, & Zelditch, 1980; Jost & Banaji, 1994; Ridgeway & Berger, 1986).

On the other hand, perceptions of a group's warmth are argued to be determined by the degree to which the group is viewed as a competitor for scarce resources (Caprariello, Cuddy, & Fiske, 2009; Fiske et al., 2002; Oldmeadow & Fiske, 2007; Russell & Fiske, 2008). Competitive outgroups are seen as having goals that are incompatible with those of the ingroup (Fiske & Ruscher, 1993), and this incompatibility in goals is ascribed to the target group's negative intentions. These presumed intentions are then taken as evidence of the target group's low warmth (Fiske et al., 2002; Fiske, Cuddy, & Glick, 2007). Consequently, groups stereotyped as being low in warmth are subjected to various forms of active harm, such as sabotage or direct attacks (Cuddy, Fiske, & Glick, 2007). Therefore, women who enter into traditionally masculine occupations might be seen as competitors to men, leading to perceptions of low warmth motivated by presumed negative intent, which could then result in active harm such as mistreatment and sabotage.

Consistent with both the SCM's explanation of how perceptions of warmth motivate active harm and ambivalent sexism theory's assertion that hostile sexism is directed at women who threaten

men's power (Glick & Fiske, 1996; 2001a; 2001b) a series of lab studies, which are discussed in more detail in the following sections, found that women who challenge traditional social roles by working in a male gender-typed position (banking) and advocating for women's rights were sexually harassed more than women who embrace traditional roles by working in a female gender-typed position (education) and emphasizing their families and children over their careers (Dall'Ara & Maass, 1999; Maass et al., 2003; Siebler, Sabelus, & Bohner, 2008). Importantly, women who do not conform to traditional gender roles by enacting masculine personalities have also been found to face more mistreatment than their more feminine colleagues (Berdahl, 2007a; Berdahl et al., 2011). This suggests that mistreatment can be elicited by both behavioral role violations, which arise from behaving in ways typically reserved for men, and positional violations, which arise from entering or succeeding in traditionally-male occupations. However, no systematic differences in reactions to positional and behavioral role violators are apparent in the literature, and no such difference are predicted by the SCM, suggesting that the mistreatment of both types of violators might be driven by the same underlying motivations in perceivers.

2 Perceiver Characteristics

Franke (1997) described gender harassment as a "disciplinary, constitutive, and punitive regulatory practice" (p. 696) that is used to preserve differences in social norms between men and women, by keeping women sexually objectified and excluding them from nontraditional occupations. Berdahl (2007b) built on this by drawing from the available empirical evidence to argue that since sex-based harassment is primarily directed at women who jeopardize perceivers' sex-based status in some way, it is likely motivated by perceivers' desire to protect that status. It follows that individuals who are more motivated to protect their sex-based status should be more likely to punish those who threaten it. In particular, Berdahl (2007b) argued that individuals who more strongly endorse male dominance and individuals with more sexist attitudes should be more motivated to protect their sex-based status. Thus, the propensity to engage in sex discrimination should differ measurably across individuals.

While much of the research on the dislike and mistreatment of gender role violators has focused on the attributes of the targets (e.g., Berdahl, 2007a; Berdahl et al., 2011; Heilman et al., 1995; Heilman et al., 1989; Heilman & Okimoto, 2007; Heilman et al., 2004), parallel streams of research have yielded a patchwork of evidence suggesting that some individuals might indeed be

more likely to mistreat gender role violators than others. For example, Rudman and Glick (2001) conducted a study on reactions to women who violate behavioral gender roles by being agentic. These researchers found that participants who more strongly associated women with communality, and men with agenticism, viewed female role violators as less socially skilled. Another study, which explored predictors of sexual harassment, found that men who have sexist attitudes and men who identify strongly as men were more likely to sexually harass women who violated social roles by embracing an egalitarian, rather than traditional, gender-role orientation (Dall'Ara & Maass, 1999).

In a follow-up study to Dall'Ara & Maass (1999), Maass et al. (2003) replicated the finding that men who identify with their gender more strongly are more likely to sexually harass women. In addition, this study found that men experiencing a threat to the legitimacy of gender roles in society, the distinctiveness of men and women, or their personal prototypicality as men were more likely to sexually harass women than were men who were not experiencing these threats. These authors concluded that sexual harassment is a strategy used to bolster self-identity in the face of threat. In addition, Maass et al. (2003) also found that men who were high in social dominance orientation (SDO; see Pratto, Sidanius, Stallworth, & Malle, 1994) were more likely to sexually harass women, especially women who violated gender roles. Maass et al. (2003) interpreted this to mean that, "Only [men] highly identified with their gender and those with strong beliefs in a hierarchical social structure will defend a threatened identity through sexual harassment" (p. 868). However, since SDO represents a preference for social inequality and group-based status hierarchies, perhaps men who sexually harass women are attempting not only to defend their masculine identity, but also to reinforce gender status hierarchies.

The current set of studies build on Berdahl's (2007b) theory that sex-based discrimination is motivated by the desire to protect or enhance the perpetrator's sex-based status by using quasi-experimental methods to study how perceivers' ideological values affect their reactions to, and treatment of, women. However, whereas Maass et al. (2003) used an intergroup framework that examined how men's personalities and ideologies affect how they respond to women who threaten their masculine identities, the current paper adopts a social structural approach to understand discrimination. With this approach, I investigate how individuals' ideological values shape their reactions to women, and how these reactions are shaped by the effect that these women have on gender status hierarchies. To the degree that these ideological values affect men

and women's responses to targets equally, this approach should be able to address the dearth of research capable of accounting for female-to-female discrimination (see Berdahl, 2007b). Furthermore, this approach allows for specific predictions to be made about the circumstances under which gender role violators will not be mistreated by conservatives, the very individuals who should be the most likely to mistreat them. Perceivers' ideological values, and how they affect their reactions to female role violators, are presented in the following section.

3 Perceivers' Conservatism

According to the motivated cognition model of conservatism (Jost, Glaser, Kruglanski, & Sulloway, 2003), there are two social attitudes that might lead individuals to desire the reinforcement of social status hierarchies: resistance to change (Conover & Feldman, 1981; Huntington, 1957) and a preference for inequality (Bobbio, 1996; Giddens, 1998). Resistance to change is exemplified by right-wing authoritarianism (RWA; Altemeyer, 1981; 2006), and is primarily concerned with the maintenance of ingroup norms, and the punishment of those who violate them (Duckitt, 2001, 2006 Duckitt & Sibley, 2007; Esses, Haddock, & Zanna, 1993; Thomsen, Green, & Sidanius, 2008). This is thought to be motivated by the desire to keep society safe, predictable, cohesive, and orderly (Jugert & Duckitt, 2009). RWA seems to lead to a general preference for preserving the status quo among both dominant and subordinate social groups. For example, in one study (Christopher & Wojda, 2006), both men and women with higher RWA scores were found to express a stronger preference for traditional gender roles. This suggests that the desire to maintain social stability can also contribute to female-to-female discrimination.

When social stability is threatened through social role violations, people high in RWA have been found to experience increased anxiety (Blair, Park, & Bachelor, 2003), and anxiety has been shown to predict racial discrimination (Parkins, Fishbein, & Ritchey, 2006). Thus, negative reactions to role violators and the associated punishments might be the result of anxiety caused by the perceived threat that the violation poses to social order. If this is the case, then anxiety should be expected to mediate the relationship between RWA and negative reactions to gender role violators.

On the other hand, Jost et al. (2003) present that the preference for inequality is exemplified by SDO (Pratto et al., 1994). SDO represents individuals' desire for group-based status hierarchies

(Jost & Thompson, 2000; Pratto et al., 1994; Thomsen et al., 2008). As such, SDO predicts negative reactions to members of low status groups (Duckitt, 2006; Duckitt & Sibley, 2007) in order to justify their subordination (Pratto et al., 1994) and legitimize inequality (Jost & Thompson, 2000). For example, sexually objectifying women presents them as less than human, and is used by rapists as justification for their actions (Scully & Marolla, 1984). SDO can also predict negative reactions to members of low status groups who blur status boundaries, such as "feminists" and "career women" (Duckitt & Sibley, 2007; Thomsen et al., 2008). In these cases, male perceivers who are high in SDO are likely to experience increased anxiety because of the realistic threat posed by women who jeopardize men's dominance, and this increased anxiety might motivate negative reactions.

Importantly, members of low-status groups who have a preference for inequality may show preference for the dominant group (i.e., outgroup favoritism), and against their own best interests. Christopher and Wojda (2006) found that both men and women who were higher in SDO were more skeptical of women's abilities to succeed at work. This explanation is distinct from, but compatible with, the current view that women engage in sex discrimination against other women in order to protect their own sex-based status (Berdahl, 2007b). While some women may indeed attempt to protect any status they receive from being women, such as any "rewards" motivated by benevolent sexism (Glick & Fiske, 1996; 2001a; 2001b), the propensity of women high in SDO² to discriminate against women as a group suggests that female-to-female discrimination can also be motivated by some women's desire to perpetuate a system of inequality. For example, women who are high in SDO are likely to have self-esteem contingent on the perceived legitimacy of the social inequality for which they express preference (see Jost & Thompson, 2000). Since self-esteem is known to buffer against anxiety (Greenberg et al., 1992; Pyszczynski, Greenberg, Solomon, Arndt, & Schimel, 2004), any threats to the legitimacy of the system, such as those posed by women who challenge status hierarchies, are likely to increase female perceivers' anxiety. In turn, this anxiety might mediate the role of SDO on women's reactions to female targets who challenge status hierarchies.

² Importantly, for members of low status groups, social identity has a complex relationship with SDO (Jost & Thompson, 2000). As a result, it is advisable to consider perceivers' social identities when examining reactions believed to be motivated the perceivers' conservatism.

Since traditional social arrangements have tended to be non-egalitarian, increasing equality usually also means being non-traditional (Jost et al., 2003). As a result, the effects of resistance to change and preference for inequality often combine in an additive manner in predicting negative reactions to social role violators (Sibley, Robertson, & Wilson, 2006). This should not be surprising, since these role violations represent a change from traditional roles, as well as a blurring of status boundaries. Thus, even though SDO and RWA a) are distinct constructs with different antecedents (Duckitt, Wagner, du Plessis, & Birum, 2002), b) predict prejudice for different reasons (Duckitt, 2001; 2006; Duckitt & Sibley, 2007; Duckitt et al., 2002), and c) have typically been found to be uncorrelated or only weakly correlated (McFarland, 2010; see also Mirisola, Sibley, Boca, & Duckitt, 2007), social role violators might evoke anxiety in observers with a preference for inequality, a resistance to change, or both. In turn, this anxiety, might drive negative reactions toward role violators.

4 Supporting Gender Hierarchy

For members of low status groups, achieving a high degree of success tends to carry with it a social role violation. For women, this means that entering into, and succeeding in, traditionally male gender-typed positions can result in negative affective reactions (Heilman & Okimoto, 2007; Heilman & Wallen, 2010; Heilman et al., 2004), unfair performance evaluations (Heilman et al., 2004), and high levels of sexual harassment and general mistreatment (Berdahl, 2007a; Berdahl et al., 2011; Dall'Ara & Maass, 1999; Maass et al., 2003; Siebler et al., 2008). These negative reactions have been described as punishment for individuals who threaten gender status hierarchies and blur status boundaries (Berdahl, 2007a; Berdahl, 2007b; Berdahl et al., 2011; Franke, 1997). If this is the case, then punishment directed at role violators should come primarily from perceivers high in conservatism.

But could it be possible for a woman to violate gender roles without threatening status hierarchies? For example, would a woman who succeeds in a traditionally masculine occupation, but who uses her position to support gender status hierarchies, receive the same kinds of mistreatment that are typically directed at gender role violators? While conservatives' reactions to female gender role violators who support status hierarchies have not been studied, two streams of research hint at how they might react. First, a recent set of studies investigated the role of defending gender hierarchy motives on prejudice toward female leaders (Rudman, Moss-

Racusin, Phelan, & Nauts, 2012). These researchers found that participants who held system justifying beliefs about gender (see Jost & Kay, 2005) viewed female gender role violators as less hireable than men who acted in the same (gender conforming) way. Further, these researchers also found that participants sabotaged agentic women more than agentic men, even though there were no differences in the sabotage of men and women who were low on agency. This set of studies provided evidence that prejudice is indeed motivated by concerns over societal status hierarchies. Although the participants' desire to maintain status hierarchies (i.e., conservatism; Jost et al., 2003) was inferred from their degree of system justification, and not measured, their reactions to the targets, which indicated that female gender role violators elicit sabotage, was taken as evidence that sabotage is used to protect gender status hierarchies (cf. Berdahl, 2007a; Berdahl, 2007b).

Interestingly, Rudman et al. (2012) did not report any evidence of differences between male and female participants in the study, suggesting that both men and women might punish women who threaten the status quo. Thus, Rudman et al.'s (2012) findings support the idea that both men and women can concern themselves with maintaining gender status hierarchies. Moreover, this is consistent with the research on RWA and SDO reported above, which suggest that these ideologies affect men and women similarly in their reactions to female gender role violators (Christopher & Wojda, 2006; cf. Jost & Thompson, 2000).

A second stream of research that hints at how conservative perceivers might react to gender role violators comes from research on so-called "queen bees"- women who perpetuate negative stereotypes about women as a whole, while distancing themselves from their female identities. This research has found that women who are only weakly identified with their gender, and who are exposed to sexism at work, tend to act like queen bees (Derks, Ellemers, Van Laar, & De Groot, 2011a; Derks, Van Laar, Ellemers, & De Groot, 2011b). In acting like queen bees, these women are engaging in a subtle form of sex discrimination. While these behaviors are argued to result from women's desire to distance themselves from devalued female identities, I propose an alternative, although compatible, account: given that women who succeed in traditionally-male occupations are seen as threats to the status quo, perhaps women engage in queen bee behaviors in order to show support for status hierarchies, and thus spare themselves the backlash typically associated with gender role violations (e.g., Berdahl, 2007a; Berdahl et al., 2011; Rudman et al., 2012). This proposed relationship is presented in Figure 1.

Much of the work on sex discrimination reviewed thus far has focused on reactions to gender role violators. If reactions to gender role violators are in fact driven by conservatism, then previous work may have implicitly focused on conservative's reactions to those who challenge status hierarchies. This could occur because in any given study, only the subset of participants who are concerned with maintaining status hierarchies might be expected to discriminate against a woman for threatening those hierarchies. In contrast, little attention has been paid to the negative reactions that people low in conservatism (i.e., who have a preference for social change and/or greater societal equality) might have toward targets who act in ways that reinforce gender status hierarchies. For example, it is possible that perceivers who are low in conservatism would have a preference for individuals that challenge status hierarchies, and a bias against those who support them. This would suggest that women who support status hierarchies risk drawing the ire of non-conservatives, and may thus experience discrimination from them. This proposed relationship is presented in Panel A of Figure 2, which depicts a full crossover interaction.

On the other hand, individuals who are low in conservatism (that is, low in SDO and RWA) could be unlikely to mistreat female positional role violators who support gender status hierarchies. For example, if perceivers low in SDO view a woman in a position of authority as a move toward greater equality, this could attenuate some of the contempt arising from her support of the status quo. If this is the case, then women who support status hierarchies might elicit fewer negative reactions from conservative perceivers, while still avoiding negative reactions from perceivers low in conservatism³. Similarly, high levels of RWA represent a resistance to change (Jost et al., 2003) and a concern for "...the enforcement of and adherence to ingroup rules and norms" (Thomsen et al., 2008, p. 1461). Therefore, perceivers low in RWA are likely to be indifferent to the effects others have on status hierarchies, and might not treat differently those who adhere to social norms and those who do not. This proposed relationship is presented in Panel B of Figure 2.

³ Of course, even if this is how hierarchy support was viewed by non-conservatives, there would most likely be limits to how much hierarchy support a non-conservative perceiver would be willing to overlook. However, since these proposed relationships are speculative, more research needs to be conducted before the boundary conditions of this proposed effect can be determined.

Finally, participants' conservatism might be positively related to negative reactions for both hierarchy challenging and hierarchy supporting targets, since both are gender role violators. However, conservative perceivers might react less negatively toward the hierarchy supporter than toward the hierarchy challenger. This proposed relationship is presented in Panel C of Figure 2. While it is impossible to determine which of these three patterns of results should be expected, all three panels have in common that a) increasing conservatism is expected to predict more negative reactions to hierarchy challengers and b) the slope of the line representing reactions to hierarchy supporters is expected to be lower (i.e., flatter or negatively sloped) than the slope of the line representing reactions to hierarchy challengers.

5 Hypotheses

As discussed above, the research that has examined the desire to reinforce status hierarchies as a motivator for mistreatment and harassment has inferred this motivation from perpetrators' choice of targets (Berdahl, 2007a; Berdahl et al., 2011; see also Burgess & Borgida, 1999; Franke, 1997; Rudman et al., 2012). On the other hand, Maass et al. (2003) did measure SDO (although not RWA, which appears to determine reactions to threats to social order; Duckitt, 2001, 2006; Duckitt & Sibley, 2007; Thomsen et al., 2008), but their study used a social identity perspective, whereas the current set of studies focus on social structure. This distinction is important, since a social identity perspective can explain reactions to identity threats, such as those to men's masculinity or women's femininity (cf. Berdahl, 2007b). As a result, Maass et al. (2003) restricted their study to the reactions of men toward female gender role violators, relative to female non-violators. In contrast, a social structural perspective cannot directly account for social identity considerations⁴, but it can account for reactions to threats to status hierarchies in general; from this perspective, both male and female perceivers who have a preference for social stability and inequality would be expected to react negatively to women who threaten these hierarchies. Therefore, I hypothesize that both male and female perceivers who are high in conservatism will

⁴ Since social structure preferences and social identity have been shown to be related (e.g., Jost & Thompson, 2000; Pratto et al., 1994), Thus, neither approach should be taken without considering the other. However, I propose that considering structural concerns separately from social identity concerns can provide a unique lens on discrimination based on role violations.

have stronger negative reactions to role violating women than participants who are low in conservatism.

Hypothesis 1a: Perceivers' conservatism will predict negative reactions toward women who violate gender roles.

Hypothesis 1b: Women's conservatism will predict negative reactions toward other women who violate gender roles.

Hypothesis 1c: Men's conservatism will predict negative reactions toward women who violate gender roles.

If conservatives' negative reactions to female gender role violators are driven by the effects that these violations have on gender status hierarchies, then conservatives should have less negative reactions to female gender role violators who temper their role violations with behaviors that support status hierarchies. Hierarchy supporting behaviors could take forms like opposing policies that promote social equality, mistreating other women who violate gender roles, or showing pro-male bias in selection. This is consistent with conclusions drawn from previous work that has looked at the dislike and mistreatment of women who violate various kinds of gender roles (e.g., Berdahl, 2007a; Berdahl et al., 2011; Heilman et al., 2004; Heilman & Wallen, 2010; Maass et al., 2003), which suggests that negative reactions toward female role violators are driven by the threat that these violations represent to status hierarchies (see also Berdahl, 2007b).

However, previous work has generally confounded gender role violations with expressions of egalitarian ideologies. For example, Maass et al. (2003) compared reactions to vignettes describing traditional and non-traditional women. The non-traditional woman engaged in a positional role violation by aspiring to be a bank manager, and also expressed egalitarian ideologies by volunteering for an organization that promotes women's rights and employment equity. Similarly, Siebler et al. (2008) compared reactions toward a traditional and a non-traditional woman. In contrast, I examine reactions to female role violators who support gender status hierarchies, relative to female role violators who challenge status hierarchies. This allows for reactions to role violations to be separated from reactions to threats to status hierarchies. Addressing this gap in the literature is important, because it provides direct evidence of the role that perceivers' conservative ideologies have on their reactions to role violating women, as well

as indirect evidence of the boundary conditions of discrimination toward gender role violators. Specifically, I hypothesize that the relationship between perceivers' conservatism and discrimination directed at female role violators will be attenuated by the role violator's support for gender status hierarchies.

Hypothesis 2: The relationship between perceiver's conservatism and negative reactions toward a role-violating woman will be moderated by the role-violating woman's hierarchy support, such that women who violate social roles but support gender hierarchies will experience less negative reactions from conservative perceivers than women who violate social roles and challenge gender hierarchies.

As discussed above, perceivers high in RWA are likely to experience increased anxiety when presented with a target who jeopardizes the social order by threatening status hierarchies, and this anxiety likely leads to negative reactions toward the target. Similarly, women who jeopardize status hierarchies likely lead to anxiety in men who are high in SDO, because of the realistic threat that these women pose to male dominance. On the other hand, women who are high on SDO might experience threats to their self-esteem when faced with threats to the legitimacy of status hierarchies (see Jost & Thompson, 2000). Since self-esteem is known to buffer against anxiety (Greenberg et al., 1992; Pyszczynski, Greenberg, Solomon, Arndt, & Schimel, 2004), some women are likely to experience increased anxiety when faced with a threat to the gender status hierarchy. Thus, there is reason to believe that both RWA and SDO would lead to increased anxiety in men and women faced with a threat to the status quo.

Correspondingly, recent research has shown that anxiety predicts discrimination (Parkins et al., 2006). Surprisingly, another recent study found that the drug propranolol, which is commonly used to treat heart disease by lowering autonomic arousal, reduces implicit racism in healthy participants (Terbeck, Kahane, McTavish, Savulescu, Cowen, & Hewstone, 2012), providing further support for a link between anxiety and discrimination. Therefore, I hypothesize that the relationship between conservatism and negative reactions against female role violators will be mediated by anxiety⁵.

⁵ It is important to note that this anxiety could occur because of threats to the social system, or because of threat to social identity. Thus, this hypothesis is not intended to contradict the social identity perspective, and in fact is

Hypothesis 3: The relationship between perceiver's conservatism and negative reactions toward female gender role violators will be mediated by anxiety.

6 Overview of Research Strategy and Potential Contribution

This paper explores the possibility that supporting status hierarchies while violating social roles provides women with protection from hot forms of discrimination originating from conservative perceivers, which would otherwise be expected. In Study 1, I examine whether perceivers' conservatism predicts how interpersonally hostile they perceive gender role-violating women to be, whether this perceived hostility is attenuated by women's expressions of opposition toward progressive sexual harassment policies, and whether conservatism affects male and female perceivers' reactions in the same ways. Importantly, interpersonal hostility appears to be similar to the "coldness" described in the stereotype content model (Fiske, Cuddy, Glick, & Xu, 2002). This perceived coldness, which Fiske et al. (2002) argued might be attributed to groups that are seen competitors to the dominant social group, could be used as justification for discriminating against that group.

Study 2 builds on this by testing a behavioral outcome: is the association between perceivers' conservatism and the sabotage they direct at role-violating women weaker when these women express sexist views of other women and legitimize inequality? Furthermore, Study 2 attempts to identify the mechanism by which conservatism would lead to negative reactions toward women who threaten status hierarchies by testing the mediating role of anxiety.

Together, these two studies will shed light on why it is that conservative perceivers discriminate against female gender role violators. Recent research has used a social identity explanation, which assumes that individuals act in their own best interests in order to enhance their self- or group-based esteem (e.g., Jetten, Spears, & Manstead, 1997; Maass et al., 2003; Siebler et al.,

consistent with it, as one's social identity appears to be related to the position one holds in society (See Jost & Thompson, 2000). Nevertheless, demonstrating that anxiety mediates the relationship between conservatism and negative reactions toward the female target provides valuable information about what psychological mechanism drives conservative perceivers to discriminate against female gender role violators.

2008). However, as described above, there is growing evidence that people concern themselves with not only their personal outcomes, but also the implications that social role violations have for social structure in general (e.g., Christopher & Wojda, 2006; see Jost, Banaji, & Nosek, 2004).

Beyond providing a refined understanding of what motivates reactions to female gender role violators, identifying the mechanism by which conservatism leads to discrimination against those who threaten social status hierarchies would allow for new interventions to be designed. SDO and RWA are believed to originate from chronic exposure to environmental cues (Duckitt et al., 2002), and the effects of these cues on attachment styles (Weber & Federico, 2007), and may therefore prove difficult to reduce in adults. However, if the discrimination resulting from SDO and RWA is the result of anxiety, finding ways to alleviate this anxiety might prove more effective in reducing discrimination than trying to influence conservatism. This could potentially allow practitioners to tap into the vast clinical literature on dealing with anxiety in their attempts to reduce discrimination in organizations.

Finally, understanding how conservatives react to women who support status hierarchies would also provide fresh insight into the growing field of research addressing female-to-female harassment (Berdahl, 2007b; Christopher & Wojda, 2006; Derks et al., 2011a; Derks et al., 2011b; Rudman et al., 2012). If women who oppose egalitarian policies, express hostile sexism toward other women, and show pro-male bias are rewarded with less interpersonal hostility and sabotage, this would provide a very real incentive for women to support gender hierarchy by exhibiting intragroup discrimination and/or outgroup favoritism. Of course, even if supporting hierarchies benefits the women who do so, it harms women in general by perpetuating an unjust system. Therefore, women could be thought of as having to choose between benefiting themselves and benefiting their group (women in general).

If women are rewarded for supporting status hierarchies, it would allow for intragroup discrimination to be conceptualized as a social dilemma, in which women have to choose between maximizing their personal outcomes and maximizing the group's outcomes. This reconceptualization would allow the vast literature on individuals' behavior in social dilemmas to be integrated with the intragroup discrimination literature. In doing so, it would answer the

call to address the dearth of theorizing capable of accounting for female-to-female harassment (Berdahl, 2007b), and intragroup discrimination in general.

Chapter 2

Study 1

7 Method

7.1 Participants and Design

One hundred and fifty-one⁶ undergraduate commerce students (45 male, 106 female; mean age = 19.4) participated in this online study in exchange for partial course credit. Participants were recruited from a departmental credit pool, and the recruitment materials are presented in Appendix A. Thirty six participants were born in Canada and 117 were born elsewhere. Of the 36 born in Canada, 14 were White and 22 were various other ethnicities. Among the participants born outside of Canada, 73 were Chinese, 14 were Korean, Japanese, or Vietnamese, 13 were South Asian, and 16 were from various other countries. Accordingly, participants were categorized as being "Canadian-born" (irrespective of ethnicity), East Asian (i.e., self-identified as Vietnamese, Chinese, Korean, or Japanese and born outside of Canada), or as "other background" (i.e., born outside of Canada and not East Asian). The participants born outside of Canada reported living in Canada a mean of 4.93 years ($SD = 4.23$), with a range of 0 to 17 years.

This study was conducted online, and only participants who registered ahead of time were able to access the link to the questionnaire website. This questionnaire was only accessible during the pre-determined slot for which the participants had registered. Each participant was automatically assigned a unique user identification number, which made it possible to identify participants who accessed the questionnaire more than once during their scheduled session, as well as those who logged into the system but did not complete the questionnaire. In total, 51 such responses were removed, and are not included in the summary of participants above. An additional 37 participants (11 male, 26 female) completed the study but were excluded for failing the comprehension check, as described in the Measures section below.

⁶ One participant did not provide an age, and was excluded from analyses that included age due to listwise deletion, resulting in an effective sample size of 150 for these analyses.

Participants provided their age, sex, cultural background, and completed a measure of gender identification and conservatism (see Appendix B). After completing these measures, participants were randomly assigned to one of two experimental conditions. In each condition, participants were instructed to read a vignette that described a female executive and her views on a newly proposed sexual harassment policy at her firm. After reading the vignette, participants completed a series of questions assessing their evaluations of the female executive (see Appendix C).

7.2 Manipulation

Participants were presented with a vignette adapted from Heilman et al. (2004), describing a female executive who works for a company that is considering implementing changes to its sexual harassment policy. By virtue of succeeding in a male gender-typed position (being an executive), the female target represented a gender role violator. All participants were presented with background information about the target's job, responsibilities, personal interests, and ambitions:

Andrea is a 36 year old assistant vice president for sales in a large company that designs and manufactures aircraft components. She is responsible for training and supervising junior executives, identifying new markets, and generating new clients. In addition, it is her responsibility to keep on top of trends within the aviation industry. She recently underwent a company-wide performance review, and she received outstanding evaluations from all reviewers, with her performance falling within the top 5% of all company assistant vice presidents. She has been identified as one of a small group of rising stars. She aspires to rise as high as she can within her industry, and hopes to someday be a CEO.

Most employees in her company are men, and there have been several allegations within the company of sexual harassment. Recently, the director of human resources suggested that the company rethink its policies surrounding sexual harassment to include more behaviors as harassing, ensure that all cases are properly investigated, and take clear actions against individuals who behave in unacceptable ways.

Participants were assigned to one of two conditions, in which the target expressed either strong opposition or support for the proposed changes to the company's sexual harassment policy. In the hierarchy supporting condition, participants were presented with a description of the female executive's strong opposition to the proposed changes:

Andrea has made a point of voicing her opinion on these changes: she feels that some of the women within the company are too sensitive and need to learn how to get along in a mostly-male environment or else find an industry that they are better suited to. When asked if she feels the company has a culture of tolerating harassment, she acknowledges that sometimes, some of her

colleagues act inappropriately, but it is not a big deal. She argues that if she is able to excel in that environment, then other women should be able to, as well. Therefore, she feels that the proposed changes are just an attempt by some women to gain more power over their male coworkers.

Participants assigned to the hierarchy challenging condition were presented with a description of Andrea's strong support for the changes:

Andrea has made a point of voicing her opinion on these changes: she feels that the company might not be doing a good job of protecting female employees in the mostly-male environment. When asked if she feels the company has a culture of tolerating harassment, she acknowledges that sometimes, some of her male colleagues act inappropriately. While she has never experienced anything that would have prompted her to file a complaint, she acknowledges that other women might have it worse. This also makes her consider that, even though she has been doing very well within the company, she could be doing better if it had a climate that is less hostile toward women. Therefore, she feels that the proposed changes are a positive step in creating a fairer workplace.

7.3 Measures

7.3.1 Background Questionnaire

The background questionnaire and its measures, which are described below, can be viewed in Appendix B.

7.3.1.1 Conservatism

Consistent with Jost et al. (2003), conservatism was operationalized as the sum of SDO and RWA. I measured SDO with Jost and Thompson's (2000) balanced version of the SDO scale ($\alpha = .86$). This scale is identical to previous scales (e.g., Pratto et al., 1994), except it contains a balanced number of positively and negatively worded items in each of the two subscales identified by the researchers (opposition to equality and desire for group-based dominance), making it more psychometrically sound. Resistance to change was measured with Altemeyer's (2006) 22-item RWA scale ($\alpha = .90$). Since both scales have been widely used and found to be valid and reliable (e.g., Altemeyer, 2006; Pratto et al., 1994; Jost & Thompson, 2000), no further factor analysis was conducted. In past work, the SDO and RWA scales were found to have good internal reliabilities ($\alpha > .80$), and have demonstrated discriminant, convergent, and criterion-related validity: together, SDO and RWA have been found to account for the majority of the variance in generalized prejudice (for a review, see McFarland, 2010).

In both the SDO and RWA scales, participants were instructed indicate their level of agreement with various items on a Likert scale. The SDO scale ranged from 1 (strongly disagree) to 7 (strongly agree), while the RWA scale ranged from 1 (strongly disagree) to 9 (strongly agree). For each of the two scales, an average response was calculated. In order to put the scales in a common metric, these average SDO and RWA scores were standardized, and the standardized scores were summed to produce a single conservatism score.

7.3.1.2 Control Variables

Demographic characteristics, such as age and sex, are known to be associated with RWA and SDO (see Altemeyer, 2006; Sidanius & Pratto, 1999), and are likely also associated with how participants respond to targets. Therefore, in order to prevent a spurious correlation between conservatism and reactions to targets from inflating the apparent strength of the relationship between the conservatism and hostility, I controlled for these demographic characteristics.

In addition, I controlled for gender identification, which has been found to predict men's reactions to female role violators (Siebler et al., 2008) and women's rejection of sexist ideologies (Becker & Wagner, 2009), and has also been found to predict men's and women's levels of SDO (Wilson & Liu, 2003). Consistent with past work (Maass et al., 2003; Siebler et al., 2008), gender identification was measured with items adapted from Luhtanen & Crocker's (1992) collective self-esteem scale so as to refer explicitly to gender identification. Participants were asked to respond to seven items on a 7-point scale ranging from strongly disagree (1) to strongly agree (7). Examples include "In general, I'm glad to be a member of my gender" and "In general, my gender is an important part of my self-image." As in past work (Maass et al., 2003; Siebler et al., 2008), this scale was found to have acceptable internal reliability ($\alpha = .76$).

7.3.2 Post-Vignette Questionnaire

The post-vignette questionnaire and its measures can be viewed in Appendix C.

7.3.2.1 Interpersonal hostility

In order to integrate this study with past work focusing on target characteristics, participants were asked to rate the target on four 9-point bipolar scales used by Heilman et al. (2004), which assessed attributes related to the participants' perceptions of the target's interpersonal hostility, such as abrasive-not abrasive and conniving-not conniving. While the reliability of this scale

was acceptable in the present study ($\alpha = .64$), it was lower than the reliabilities reported by Heilman et al. (2004; Study 1: $\alpha = .84$; Study 2: $\alpha = .74$), and appears to have high variance across studies.

7.3.2.2 Ineffectuality

Ineffectuality represents a measure of a target's ability to have an effect on his or her environment, and is conceptually related to the competence dimension of stereotypes proposed by the stereotype content model (Fiske et al., 2002), which represents how effectively a target will pursue his or her goals. Thus, it was included in this study as an exploratory variable. Participants were asked to rate targets on six 9-point bipolar scales, used by Heilman and Wallen (2010) which assessed attributes related to the participants' perception of the target's ineffectuality, such as competent-incompetent, and weak-strong. This scale had acceptable reliability ($\alpha = .70$), which is similar to the reliability reported by Heilman and Wallen (2010; $\alpha = .78$).

7.3.2.3 Respect

Respect was also included as an exploratory variable, and was measured using questions used by Heilman and Wallen (2010). Using a 7-point scale ranging from "not at all" (1) to "very much" (7), participants responded to three questions, such as "How respected do you think this individual is?" and "How much do you think others look up to this individual?". This measure had acceptable reliability ($\alpha = .72$), similar to the reliability reported by Heilman and Wallen (2010; $\alpha = .69$).

7.3.2.4 Comprehension check

After completing all the measures, participants were asked questions about the vignette they had been presented with. In order to ascertain that participants had in fact read and understood the vignette, they were asked to indicate the sex of the person in the vignette ("What was the sex of the person you read about?") and the nature of the proposed policy changes ("The proposed changes to the company's sexual harassment policy: Classify *more* behaviors as harassing and treat allegations *more* seriously? OR Classify *fewer* behaviors as harassing and treat allegations *less* seriously?"). Thirty-seven participants answered at least one of these questions incorrectly, and were excluded from the analyses. While it is unclear why so many participants answered

these two questions incorrectly, two possible explanations come to mind: First, it might be that some participants either did not read or did not understand the vignette, and so were unable to correctly answer these questions. Second, some participants might have responded to the questions without reading and/or understanding them, so as to finish the questionnaire and obtain course credit, even though they may have read and understood the vignette.

7.4 Results and Discussion

7.4.1 Descriptive Analyses

The means and correlations of all the variables in this study are summarized in Table 1. On average, participants were significantly more identified with their gender than the midpoint of the 7-point scale ($t_{150} = 18.43, p < .001$). In addition, participants scored significantly lower than the scale midpoint on SDO ($t_{150} = -17.75, p < .001$) and RWA ($t_{150} = -25.78, p < .001$), suggesting that the population from which this sample was drawn is somewhat liberal and egalitarian.

Male participants were, on average, more strongly identified with their gender ($M = 5.72, SD = .90$) than were female participants ($M = 5.28, SD = .93$), $t_{149} = 2.70, p = .008$. Male participants were also slightly, but not significantly, higher than female participants on SDO ($M = 2.89, SD = .86$ vs. $M = 2.69, SD = .87, t_{149} = 1.32, p = .19$) and RWA ($M = 3.29, SD = .93$ vs. $M = 3.03, SD = .88, t_{149} = 1.59, p = .11$). The means and correlations of all the study variables for male participants are presented in Table 2, and means and correlations for female participants are presented in Table 3.

Participants' perceptions of the target's interpersonally hostility ranged from 1.50 to 8.75, with an average slightly below the midpoint of 5 ($t_{150} = -3.24, p = .001$). Likewise, average perceived ineffectuality, which ranged from 1.00 to 6.83, fell below the midpoint of 5 ($t_{150} = -18.09, p < .001$). Finally, participants' reported respect for the targets ranged from 2.00 to 7.00, with a mean significantly above the instrument's midpoint of 4 ($t_{150} = 7.93, p < .001$).

7.4.2 Inferential Analyses

7.4.2.1 Interpersonal hostility

Before commencing, I standardized all the continuous independent variables, and these standardized variables were used to calculate interactions. The data were analyzed using hierarchical linear regression; this analysis is summarized in Table 4⁷. In Step 1, I regressed perceived interpersonal hostility on participants' age, sex (female = 1, male = 0), gender identification, conservatism, and a dummy variable representing the nature of the opinions expressed by the target in regard to gender status hierarchies (1 = hierarchy supporting, 0 = hierarchy challenging). Step 1 revealed that, overall, participants perceived targets who expressed opinions that supported gender hierarchy as significantly more hostile ($p < .001$). Since the sample was significantly below the scale midpoint on both SDO and RWA, this could be consistent with Hypotheses 1 and 2, which together predicted that participants' conservatism would be associated with greater perceived interpersonal hostility, but this relationship would be moderated by hierarchy support (although it is not a test of them): if conservatism's relationship with perceived hostility of hierarchy supporters and hierarchy challengers is symmetrical, then there should be a main effect of the opinion expressed by the target, because this sample was found to be fairly low in conservatism. This would suggest that while conservatives react negatively to hierarchy challengers, but positively toward hierarchy supporters, those low in conservatism could be having the opposite reaction. And since the sample was fairly low in conservatism, the proportional representation of non-conservatives' reactions would be

⁷ Although participants provided information about their cultural backgrounds, it is unknown if or how cultural background would relate to the study variables. However, given the high level of cultural diversity in the sample, and the relatively small sample size, a detailed exploration of this relationship was not possible. Nevertheless, these analyses were attempted with and without a dummy variable indicating if the participant was born in Canada (Canadian born = 1, not Canadian born = 0), and a dummy variable indicating if the participant is of East Asian Origin (East Asian origin = 1, non-East Asian origin = 0). Participants were determined to be of East Asian origin if they were born outside of Canada, and self-identified broadly as East Asian, or specifically as Chinese, Korean, Japanese, or Vietnamese (see Appendix B for the questions with which this was assessed). The categorical variable representing other backgrounds (i.e., not Canadian-born and not of East Asian origin) was omitted as the reference category. These analyses revealed that cultural background was a not significant predictor of interpersonal hostility, did not significantly add to the variance explained by the model, and did not affect the substantive conclusions of the regression. Therefore, cultural background was not included in the regression, and is not discussed further in this paper. Since the current study is not able to convincingly rule the potential moderating role of the perceivers' cultural background on the relationship between perceivers' conservatism and reactions to the targets, future work should explore this possibility.

manifested as a main effect, until the conservatism * hierarchy reinforcement interaction is entered into the model; this is tested in Step 3.

In Step 2, I entered interaction terms for participant sex * gender identification, sex * conservatism, and sex * hierarchy support. While these interactions were not significant in this step, entering them into the model increased the variance explained by participants' sex: female participants tended to perceive the targets as less hostile, as evidenced by the negative regression coefficient for participant sex ($p = .029$). However, including these interactions in the model reduced the variance explained by the opinion expressed by the target, so that it no longer predicted hostility ($p = .37$). This suggests that the main effect of hierarchy support on perceived interpersonal hostility might be partly driven by female participants' increased perceptions of hostility toward gender hierarchy supporters. Since women in this sample tended to be slightly lower in conservatism than men (although not significantly so), it is possible that these relationships are spurious, and driven by the relationship between sex and conservatism. If this is the case, then these relationships should become non-significant when the conservatism * hierarchy support interaction is entered into the model.

In Step 3, I entered the interaction between participants' conservatism and the target's expressed opinion. Entering this interaction into the model revealed a significant main effect of conservatism on perceived interpersonal hostility: the higher the participants' conservatism, the more hostile they perceived the target to be ($p = .005$), supporting Hypothesis 1a, which predicted that participants' conservatism would be positively related to perceived interpersonal hostility of female gender role violators. However, this main effect is qualified by the conservatism * hierarchy support interaction entered in this step, which was significant: higher levels of conservatism in participants were associated with lower perceptions of interpersonal hostility toward the hierarchy supporting target ($p < .001$). This supports Hypothesis 2, which predicted that hierarchy support would reduce conservatives' perceived interpersonal hostility of gender role violators. This relationship is represented in Figure 3. Importantly, adding this interaction to the model reduced the variance explained by participant sex and the variance explained by the participant sex * hierarchy support, rendering them non-significant, $ps > .05$. This suggests that the sex differences in perceived hostility observed in Step 2 might be partially explained by sex differences in conservatism observed in this sample.

In order to unpack the significant interaction between participants' conservatism and the experimental condition, I tested the significance of the slopes for each of the two study conditions, following the procedure for simple slopes analysis recommended by Aiken and West (1991). This analysis revealed a significant slope for the hierarchy supporting group, indicating that participants' conservatism negatively predicted the perceived interpersonal hostility of the target in the hierarchy supporting group, $B = -.22$, $SE = .08$, $t_{(139)} = -2.77$, $p < .001$. Similarly, a significant positive relationship was found between participants' conservatism and perceived interpersonal hostility of the target in the hierarchy challenging group, $B = .31$, $SE = .08$, $t_{(139)} = 3.84$, $p < .001$.

Next, I explored the levels of participants conservatism at which significant differences emerged between the hierarchy supporting and hierarchy challenging conditions by following the procedure for simple effects analysis outlined by Aiken and West (1991). This analysis revealed that participants' with conservatism at two standard deviations below the mean perceived hierarchy reinforcing targets as more interpersonally hostile than hierarchy challenging targets, $t_{(139)} = 6.19$, $p < .001$. Likewise, hierarchy reinforcing targets were perceived to be more interpersonally hostile than hierarchy challenging targets when participant conservatism was one standard deviation below the mean, $t_{(139)} = 6.20$, $p < .001$, as well as at the mean level of conservatism, $t_{(139)} = 4.32$, $p < .001$. However, when participants' conservatism was at one standard deviation above the mean, hierarchy supporting and hierarchy challenging targets did not differ in how interpersonally hostile they were perceived to be, $t_{(139)} = -.05$, $p = .96$, and when participant conservatism was at two standard deviations above the mean, hierarchy reinforcing targets were perceived to be less interpersonally hostile than hierarchy supporting targets, $t_{(139)} = -2.34$, $p = .02$.

In Step 4, I entered the three-way interaction of participant sex * conservatism * hierarchy support. This step did not significantly add to the variance explained by the model, suggesting that conservatism did not differ across men and women in how it predicted the perceived hostility of a gender role violating woman, even when taking into consideration whether she reinforced or challenged status hierarchies. While this is consistent with Hypotheses 1b and 1c, it is not a test of these hypotheses, because it is not appropriate to infer support for a hypothesis from null findings.

To test Hypotheses 1b and 1c, which predicted that the relationship between conservatism and perceived interpersonal hostility would be found among male and female participants, respectively, I regressed interpersonal hostility on age, gender identification, conservatism, the target's expressed opinions (1 = hierarchy supporting, 0 = hierarchy challenging), and the conservatism * hierarchy supporting interaction. This analysis was performed separately on male and female participants (see Table 5). In both male and female participants, higher levels of conservatism predicted greater perceived hostility, lending support to Hypotheses 1b and 1c, $p < .05$.

Finally, these data were analyzed with no control variables in the model (see Table 6). In Step 1, I entered the dummy variable representing the target's expressed opinion (1 = hierarchy supporting, 0 = hierarchy challenging) and conservatism, and in Step 2, I entered the interaction of these two variables. This revealed that the pattern of results described above was not due to the control variables: consistent with Hypothesis 1, participants' conservatism was a significant predictor of perceived interpersonal hostility. However, this relationship became significant only once the two-way interaction was entered into the model in Step 2, which suggests that the relationship between participants' conservatism and the target's perceived interpersonal hostility was qualified by the experimental condition. Consistent with Hypothesis 2, the two-way interaction entered in Step 2 was significant, and produced a negative regression coefficient, indicating that more conservative participants viewed the hierarchy supporting target as less interpersonally hostile.

7.4.2.2 Ineffectuality

Having established support for Hypotheses 1 and 2 with interpersonal hostility, I examined whether the observed relationships hold for other reactions the perceivers might have. The same 4-Step regression analysis was performed on ineffectuality (see Table 7), revealing a main effect of conservatism in Step 1 ($p < .001$). However, no other step yielded a significant increase in variance explained by the model. This suggests that, while conservatives might perceive female gender role violators as less hostile when they reinforce gender status hierarchies, as described in the preceding section, this effect does not extend to perceptions of ineffectuality (see Figure 4). Participants' conservatism predicted perceptions of the targets' ineffectuality, such that more conservative participants viewed the targets as more ineffectual. However, unlike interpersonal

hostility, supporting status hierarchies by opposing egalitarian policy changes did not affect the relationship between participants' conservatism and perceived ineffectuality of targets. This is evidenced by the non-significant change in variance explained by the model when the conservatism * hierarchy support interaction was entered into the model in Step 3, the non-significance of the interaction term itself, and the continued significance of conservatism in Step 3, even with the interaction term entered.

7.4.2.3 Respect

Like ineffectuality, regression analysis performed on respect revealed that participants who were higher in conservatism respected the targets less, and supporting status hierarchies did not attenuate this relationship (see Table 8). Furthermore, a main effect was observed for hierarchy support, such that hierarchy supporting targets were respected less than hierarchy challenging targets. Thus, supporting status hierarchies appears to be associated with reduced respect, even from conservatives. The results from Step 3 of the regression presented in Table 8 are depicted in Figure 5.

7.5 Summary

Study 1 revealed that participants' conservatism is positively associated with perceived interpersonal hostility in the targets, all of whom were female gender role violators (Hypothesis 1a: supported), and this appears to be true for both male and female participants (Hypotheses 1b and 1c: supported). However, this relationship is reversed for targets who supported, rather than threatened, gender hierarchies: for these targets, greater participant conservatism was associated with lower perceived interpersonal hostility in the target, whereas lower conservatism was associated with greater perceived interpersonal hostility (Hypothesis 2: supported). In addition to providing tests of Hypotheses 1 and 2, this study also found a symmetrical effect in how ideology predicts reactions to women who support or threaten gender status hierarchies: while participants high in conservatism viewed targets who support status hierarchies as less interpersonally hostile than those who threaten them, participants with low or average conservatism appear to have had the opposite reaction.

Beyond interpersonal hostility, I also examined how participants reacted to female gender role violators on the dimensions of perceived ineffectuality and respect. In both cases, more

conservative participants had more negative reactions to the targets (consistent with Hypothesis 1). But unlike with interpersonal hostility, supporting status hierarchies did not attenuate conservatives' reactions toward the targets (inconsistent with Hypothesis 2). This suggests that perceivers with very high levels of conservatism might view the targets as less hostile when they support gender hierarchy, but this does not mean that these targets are seen in a more favorable light on all attributes. On the contrary, participants with all levels of conservatism appeared to have less respect for the hierarchy supporter than for the hierarchy challenger. In Study 2, I attempt to build on this by going beyond attitudes, and examining how conservatism relates to actual mistreatment of female gender role violators. In addition, I examine the role of anxiety in mediating conservatives' reactions to gender role violating women.

Chapter 3

Study 2

8 Method

8.1 Participants and Design

Two hundred and nine undergraduate commerce students (79 male, 130 female; mean age = 20.49) completed this study online in exchange for partial course credit. The participants were recruited from a departmental credit pool, and the recruitment materials are presented in Appendix D. Of these participants, 53 were born in Canada, 121 were East Asian, and 35 were from other parts of the world, including South Asia, Eastern Europe, and Africa. Participants signed up for pre-arranged sessions ahead of time. Each session accommodated between 10 and 68 participants, with an average number of 27 participants. Since this was an online study, the participants did not have the opportunity to see each other or communicate. The participants were told that the study consisted of two parts: a personality survey and an unrelated study on competition, both of which were to be completed during the same online session, accessed from a single website. In reality, the personality survey assessed their gender identification, conservatism, and trait anxiety, while the competition study was intended to prompt them into choosing whether to help or sabotage a female gender role violator.

In Part 1, participants were told that the personality survey was being administered in order to validate a series of measures for an unrelated study. These measures included the gender identification, trait anxiety, and conservatism (see Appendix C). After completing Part 1, participants moved on to what they believed to be a competition study, the purpose of which was to examine the factors that help or hinder people when they compete under pressure. To do this, they were to be randomly matched with another participant, who was simultaneously taking part in the study, by a computer program. In order to bolster this cover story, participants were also told that this study was being completed online because physical appearance can influence competition, and completing the study online allows for competition without any visual information about their competitor, which might occur in a lab.

Part 2 of this study examined how participants responded to the targets on a modified version of Rudman et al.'s (2012) sabotage paradigm. In this paradigm, participants are led to believe that

they are competing with another participant on a male gender-typed task. However, all participants are told that their competitor, a female student who either supports or challenges gender status hierarchies, performed exceptionally well, while they themselves performed a little below average. Following this, participants were told that their competitor will have the opportunity to win \$100, but only if they perform well on a series of anagram word puzzles. Importantly, the participant has the chance to choose which clues will be presented to their former competitor, allowing them the chance to either help them by providing helpful hints, or hurt them by providing only vague hints.

8.2 Manipulation

The participants were told that the purpose of this study was to compare the effects of having versus not having information about a competitor. All participants were told that they had been assigned to the "information" condition. Participants were asked to provide their sex, age, area of study, career aspiration, and pet peeve for their competitor to review. In exchange, they were presented with their competitor's information. Unbeknownst to the participants, the competitor was pre-programmed, and participants were randomly assigned to one of two conditions. In both conditions, the competitor was described as a female 22-year-old who violated gender roles by studying finance and aspiring to be an executive at a major firm. In the hierarchy challenging condition, the competitor identified sex discrimination as a cause of continuing career inequality, and listed arguments to the contrary as her pet peeve:

"I hate when people say the reason why there are so few women in finance is that women aren't as good with numbers, not as ambitious, or not as committed as men. Obviously, women face a lot more obstacles than men, and a lot of the time, they're kept out of good jobs. That's why there's fewer of them in the field."

In contrast, in the hierarchy supporting condition, she attributed career inequality to innate differences between men and women, and listed women who emphasize the role of sexism as the source of inequality as her pet peeve:

I can't stand women who blame sexism for why there are so few women in finance. Men just tend to be better with numbers and making decisions under pressure. It has nothing to do with sexism.

After having the chance to review the competitor's information, participants were presented with a test that purportedly assesses basic knowledge that undergraduate students could be expected to have. The information about the competitor was presented as part of the cover story, which led them to believe that the goal of the study was to compare difference between having and not having information about a competitor. In addition, participants were told that there were two versions of this test; one version purportedly measured knowledge that the typical male student is expected to have, while the other measured female knowledge. In reality, all participants were assigned to the male knowledge test, which assesses very specialized knowledge that many people are likely to not have (see Appendix D). Since this test purports to test "masculine" knowledge, women who perform very well are violating stereotypes by enacting a masculine attribute. Not surprisingly, this violation has been found to increase discrimination towards the high-scoring women, in the form of sabotage (Rudman & Fairchild, 2004). In order to draw participants attention to the test results, they were told that whoever performed better on the knowledge test out of each pair would qualify for the second round, in which they would have the opportunity to be entered into a draw for \$100.

In order to make the scoring of the knowledge test unverifiable by students, and to stop them from attempting to cheat (since they were completing the study online), they were told that the test was being scored by a composite of the number of questions answered correctly and the response time per correct answer. Consequently, they were informed that taking time to look up answers online would reduce their score, whereas answering quickly would increase their score. In reality, all participants were told that their competitor performed better than them. Specifically, participants were told they had scored in the 46th percentile, whereas their competitor had scored in the 92nd percentile, meaning that the competitor would be advancing to Round 2. Importantly, this meant that the female target performed well at a male gender-typed task, making her a gender-role violator. Immediately after receiving the outcome of the knowledge test, participants completed a measure of state anxiety.

Participants were told that in Round 2, the winner of Round 1 would be presented with a series of anagram word puzzles adapted from Rudman et al. (2012; see Appendix D). Participants were told that if the competitor scored above the 80th percentile, they would be entered in a draw for a chance to win \$100. For each anagram, the competitor would be provided with a hint chosen by the participant. These hints varied in helpfulness, allowing the participant a chance to subtly influence the competitor's performance; by selecting easy hints or hard hints, participants could ostensibly help or hinder their competitor's chances of being entered into the draw.

8.3 Measures

8.3.1 Background Questionnaire

8.3.1.1 Conservatism

As in Study 1, conservatism was measured with Jost and Thompson's (2000) balanced version of the SDO scale ($\alpha = .88$). Resistance to change was measured with Altemeyer's (2006) 22-item RWA scale ($\alpha = .89$). In both scales, participants were instructed to indicate their level of agreement with various items on a Likert scale. The SDO scale ranged from 1 (strongly disagree) to 7 (strongly agree), while the RWA scale ranged from 1 (strongly disagree) to 9 (strongly agree). In order to put the scales in a common metric, SDO and RWA were standardized before being combined⁸. The full scales are presented in Appendix B.

8.3.1.2 Control Variables

As in Study 1, I controlled for participants' age, sex, and gender identification. Gender identification was adapted from the collective self-esteem scale (Luhtanen & Crocker, 1992) so as to refer explicitly to gender. Participants were asked to respond to a series of items on a 7-point scale ranging from strongly disagree (1) to strongly agree (7), such as "I feel good about my gender" and "Overall, my gender has very little to do with how I feel about myself." This scale had acceptable reliability ($\alpha = .78$). In addition to the control variables used in Study 1, Trait anxiety was used as a control variable and was measured using form Y of the state-trait

⁸ Entering SDO and RWA separately yielded results consistent with the combined conservatism variable. In order to remain consistent with Jost et al. (2003), and to facilitate interpretation, only analyses of the combined conservatism variable are reported.

anxiety inventory for adults (STAI; Mindgarden Inc., 2012; as per the publisher's copyright agreement, five sample items are presented in Appendix E). This measure had good internal reliability ($\alpha = .87$).

8.3.2 Post-Condition Questionnaire

The post-condition questionnaire and its measures can be viewed in Appendix F.

8.3.2.1 State Anxiety

After losing to the competitor in the male knowledge test, participants were asked questions about their state anxiety, using form Y of the anxiety inventory for adults (Mindgarden Inc., 2012). As per the publisher's copyright agreement, five sample items are included in Appendix F. This measure had good reliability ($\alpha = .93$) and was examined as a mediator in the relationship between conservatism and sabotage.

8.3.2.2 Sabotage

As per Rudman et al. (2012), after losing to the competitor in the knowledge test participants were also asked to help the experimenter by selecting which clues the former competitor received for the word puzzles. Each puzzle consisted of an anagram, such as "AOKYRBED", which can be rearranged to form a word (in this case, "keyboard"). For each puzzle, the participants had to select one of three hints, which varied in how helpful they were. For example, for "AOKYRBED", participants could choose between "A set of keys used to operate a computer", "It sends information to your computer", and "It's portable"; these clues were scored on a scale from 1 (very helpful) to 3 (unhelpful), respectively (although this scoring was not made obvious to the participants). Participants were presented with 10 puzzles, along with the correct answers and the options for clues; the values of each of the 10 clues they selected were averaged to form a sabotage index, with a possible range between one (no sabotage) and three (maximum sabotage; $\alpha = .90$).

8.4 Results and Discussion

8.4.1 Descriptive Analyses

The means and correlations of all the variables in this study are summarized in Table 9. On average, participants were significantly more identified with their gender than the midpoint of

the 7-point scale ($t_{203} = 19.63, p < .001$). In addition, participants scored significantly lower than the scale midpoint on SDO ($t_{203} = -14.72, p < .001$) and RWA ($t_{203} = -31.41, p < .001$), suggesting that the population from which this sample was drawn is fairly low in conservatism. Finally, participants reported trait anxiety significantly below the midpoint of the scale, suggesting that they had relatively low levels of trait anxiety ($t_{203} = -12.99, p < .001$).

The difference between male and female participants' levels of gender identification did not quite reach significance ($M = 5.49, SD = .93$ vs. $M = 5.23, SD = .98$, respectively), $t_{202} = 1.87, p = .063$. However, male participants were significantly higher than female participants on SDO ($M = 3.26, SD = 1.03$ vs. $M = 2.86, SD = .89, t_{202} = 2.90, p = .004$), and RWA ($M = 3.33, SD = .84$ vs. $M = 3.09, SD = .81, t_{202} = 2.03, p = .044$). Male and female participants did not differ in their trait anxiety ($M = 2.10, SD = .34$ vs. $M = 2.17, SD = .41$), $t_{202} = 1.39, p = .17$. The means and correlations of all the study variables among male and female participants are summarized separately in Tables 10 (male participants) and 11 (female participants).

Participants reported levels of state anxiety significantly below the midpoint of the scale, $t_{(203)} = -12.23, p < .001$. Similarly, participants engaged in an average level of sabotage below the midpoint of the instrument, $t_{(208)} = -15.87, p < .001$.

8.4.2 Inferential Analyses

I began by analyzing the data using hierarchical linear regression to examine the predictors of sabotage (see Table 12). In Step 1, I regressed sabotage on participant sex, age, gender identification, trait anxiety, conservatism, and a dummy coded variable representing the condition (1 = hierarchy supporting, 0 = hierarchy challenging). Consistent with Hypothesis 1, participant conservatism was significant predictor of sabotage: as participant conservatism increased, sabotage also increased ($p = .004$). None of the control variables significantly predicted sabotage.

In Step 2, I entered interaction terms for participant sex * gender identification, participant sex * trait anxiety, and participant sex * conservatism, and in Step 3, I entered participant sex * hierarchy reinforcement. Neither step significantly increased the variance explained by the model ($p = .98$ for Step 2, and $p = .69$ for Step 3). In Step 2, the lack of significance in the sex*conservatism interactions echo the results of Study 1, which found that conservatism

predicts reactions equally in male and female perceivers. In Step 3, as with ineffectuality and respect in Study 1, conservatism increased sabotage toward the target. However, as indicated by the non-significant two-way interaction between conservatism and hierarchy reinforcement in predicting sabotage, supporting status hierarchies did nothing to reduce the relationship between conservatism and sabotage, $p = .69$. In other words, women who supported status hierarchies by justifying gender inequality did not experience any less sabotage than women who opposed gender inequality, and thus challenged status hierarchies (see Figure 6). Thus, Hypothesis 2 was not supported in this study.

Next, I examined whether state anxiety, which was not included in the analyses described above, mediates the relationship between participants' conservatism and sabotage, controlling for participant age, sex, gender identification, and trait anxiety. To do this, I used the bootstrapping protocol recommended by Preacher and Hayes (2008). Analyses were conducted with code for SPSS developed by Hayes and Preacher (2012), using 5000 bias-corrected and accelerated bootstrap resamples (see Efron & Tibshirani, 1993). Figure 7 summarizes this mediation model.

Conservatism was found to relate to state anxiety, making Path a (see Figure 4) significant, $B = .13$, $SE = .03$, $t_{(197)} = 3.95$, $p < .001$. Likewise, Path b was significant, indicating that state anxiety was related to sabotage, $B = .12$, $SE = .04$, $t_{(197)} = 2.91$, $p = .004$. The direct relationship between conservatism and sabotage, Path c, was also significant, $B = .06$, $SE = .02$, $t_{(197)} = 2.93$, $p = .004$. However, the indirect relationship of conservatism on sabotage, as mediated by state anxiety, was significant, $B = .016$, $SE = .007$, $t_{(197)} = 2.22$, $p = .004$, supporting Hypothesis 3: the relationship between conservatism and sabotage was mediated by anxiety.

In order to determine if the mediation described above is full or partial, I examined whether Path c', which represents the direct relationship between conservatism and sabotage after controlling for indirect effects through the mediator, remained significant. Path c' was found to be significant, indicating that conservatism also predicts sabotage for reasons unrelated to state anxiety, $B = .043$, $SE = .02$, $t_{(197)} = 2.22$, $p = .038$. Therefore, state anxiety provided partial mediation of the relationship between conservatism and sabotage. Put differently, approximately 28% of the relationship between conservatism and sabotage can be explained by the mechanism of anxiety: more conservative participants experienced more anxiety after competing with (and

losing to) the female gender role violator, even when controlling for trait anxiety, and this increase in state anxiety predicted increased sabotage.

8.5 Summary

Study 2 revealed that conservatism is positively related to sabotage against female gender role violators (Hypothesis 1: supported). However, Study 1 found that supporting status hierarchies reduced conservatives' perception of the target's interpersonal hostility, it did not affect sabotage in the same way (Hypothesis 2: not supported). Study 2 also provided evidence that the relationship between conservatism and sabotage against female gender role violators is mediated by anxiety (Hypothesis 3: supported).

Chapter 4

Discussion

In order to shed light the ideological motivations of sex discrimination, I explored how participants' conservatism affected their reactions to female gender role violators. Female gender role violators have consistently been found to elicit hot forms of discrimination, and these reactions are believed to arise out of a desire to maintain or strengthen gender status hierarchies (Berdahl, 2007b; see also Burgess & Borgida, 1999). Therefore, I hypothesized that conservatism, defined as resistance to change and preference for inequality (see Jost et al., 2003), would predict negative reactions to role violating women. Consistent with this prediction, Study 1 revealed that participants' conservatism was positively related to perceived interpersonal hostility, perceived ineffectuality, and decreased respect toward the targets. Study 2 replicated this finding with a behavioral outcome, by showing that participants' conservatism predicted sabotage directed at a female gender role violator. Importantly, the present studies revealed that the relationship between perceivers' conservatism and their reaction to the targets does not differ across perceiver sex. This echoes Christopher and Wojda (2006) in suggesting that SDO and RWA affect men and women equally in their reactions to targets.

According to the stereotype content model (SCM; Fiske et al., 2002), the discrimination directed at women who violate gender roles can be explained as a reaction to perceptions of these women's warmth. In turn, these perceptions of warmth are derived from the competitive threat these women are believed to pose. Thus, women who express support for status hierarchies might be able to reduce the extent to which they are viewed as a competitive threat, which should reduce perceptions of their negative intent. In addition, anecdotal evidence suggests that conservatives might tolerate role violating women under some circumstances, such as female politicians who encourage other women to remain in traditional roles (Carroll, 2009). In addition, empirical evidence suggests that female politicians can avoid being discriminated against when they are not perceived as seeking power (Okimoto and Brescoll, 2010), further suggesting that not challenging status hierarchies might attenuate the discrimination directed at gender role violators. Therefore, I hypothesized that women who violate gender roles, but show support for continued gender inequality, would elicit fewer negative reactions from conservative perceivers than women who challenge gender inequality. Correspondingly, Study 1 revealed that, although

participants' conservatism was positively related to the perceived interpersonal hostility of gender role violators who challenge status hierarchies, it was negatively associated to the perceived interpersonal hostility of gender role violators who support status hierarchies (see Figure 3).

While supporting gender status hierarchies may have attenuated perceived interpersonal hostility from the most conservative participants, it did not appear to attenuate perceptions of ineffectuality or increase respect for the target (Study 1). This is consistent with the SCM (Fiske et al., 2002), since reducing competitive threat by supporting status hierarchies should be expected to reduce perceptions of negative intent in the target (i.e., interpersonal hostility). On the other hand, perceptions of competence are argued by the SCM to originate in the target's perceived status, and supporting gender status hierarchies would be unlikely to increase perceptions of the status of the target's group. From this perspective, it is not surprising that supporting gender status hierarchies did not increase respect or decrease perceived ineffectuality. Moreover, supporting the status hierarchy did not reduce conservatives' sabotage of demonstrably competent female role violators (Study 2). This is surprising, since the SCM suggests that sabotage, as a form of active harm, should be primarily directed at women who are perceived as having negative intentions toward the dominant group (Cuddy, Fiske, & Glick, 2007), and Study 1 revealed that supporting status hierarchies reduced perceptions of the targets' interpersonal hostility. Thus, supporting gender hierarchies does not seem to protect women who violate gender roles from all forms of hate discrimination.

8.6 Implications for Theory

Much of the research on sex discrimination has relied on explanations based on social identity. Characteristically, this line of reasoning argues that individuals engage in discriminatory behaviors to protect or enhance their social identity. For example, Berdahl (2007b) argued that the desire to protect sex-based status is explained by the typology of social identity threats suggested by Branscombe, Ellemers, Spears, and Doosje's (1999). According to this perspective, men and women should discriminate against targets who challenge or otherwise jeopardize their sex-based status. Maass et al. (2003) found that men who were experiencing various threats to their masculine identity were more discriminatory toward women than those not experiencing identity threats, thus demonstrating that social identity concerns play a role in discrimination.

The current findings add to this account by revealing that, in addition to concerns about social identity, discrimination can be motivated by concerns over social structure: men and women's preferences for equality or inequality, and for change or stability, were found to predict discrimination against gender role violators, even when controlling for gender identity. This distinction is important, because it suggests that people can be motivated to act in ways that run counter to fostering a positive gender identity, so long as their behavior matches their ideological preferences. In the present studies, this is evidenced by conservative female participants, who, like male participants, engaged in more discrimination against the role-violating female targets than did less conservative participants. On the other hand, this suggests that not all men would be motivated to discriminate against female gender role violators. In particular, men who hold a preference for greater equality and do not have an aversion to change (i.e., men who are low in conservatism) should not be expected to discriminate against female gender role violators.

The present studies also shed light on why conservatism motivates discrimination against gender role violators: as Study 2 revealed, state anxiety partially mediated the relationship between perceivers' conservatism and how much they sabotaged the target. This echoes Cuddy et al. (2007), who found emotions to mediate the link between stereotypes and active harm. However, while Cuddy et al. (2007) explored emotions like anger, fear, and contempt, I focused on the anxiety predicted by the RWA and SDO in the face of a threat to societal status hierarchies, as predicted by the motivated cognition model of conservatism (Jost, Glaser, Kruglanski, & Sulloway, 2003). The finding that anxiety partially mediates conservative's sabotage of the targets adds to the growing body of evidence pointing to anxiety as a focal construct in understanding discrimination. For example, recent evidence has shown that anxiety predicts race discrimination (Parkins, Fishbein, & Ritchey, 2006), and the anxiolytic drug propranolol reduces implicit racism in healthy participants (Terbeck, Kahane, McTavish, Savulescu, Cowen, & Hewstone, 2012).

In addition to the experiences and motivations of conservatives, the present studies speak to the growing body of research on "queen bees", who, like the hierarchy supporting targets in the present studies, perpetuate gender inequality by reinforcing negative stereotypes about women as a whole, while distancing themselves from their female identities (Ellemers, Van Den Heuvel, De Gilder, Maass, & Bonvini, 2004; Garcia-Retamero & Lopez-Zafra, 2006; Mathison, 1986; Parks-Stamm, Heilman, & Hearn, 2008). Derks et al. (2011a; 2011b) argued that women who

are weakly identified with their gender respond to exposure to sexism by attempting to distance themselves from their devalued identities. The results of Study 1 suggest that women who act like queen bees might experience tangible rewards, in the form of reduced interpersonal hostility from the most conservative of perceivers. Thus, women who engage in queen bee behaviors might experience reductions in the amount of hostility in their interactions with conservative colleagues.

While supporting status hierarchies might reduce the perceived interpersonal hostility of female gender role violators in conservative contexts, it appears that it would not reduce perceptions of ineffectuality (see Figure 4), nor would it reduce sabotage (see Figure 6). In fact, Study 1 revealed that supporting gender hierarchies reduced participants' respect for the target at all levels of conservatism (see Figure 5). Taken with the increase in perceived hostility from participants low in conservatism, the reduced respect for hierarchy supporters suggests that acting like a queen bee carries very real costs. More generally, this suggests that members of subordinate social groups are forced to navigate a complicated maze of rewards and punishments, which are doled out on the basis of the perceivers' ideologies, the targets characteristics, and the effect the target is seen as having on society.

Although supporting or challenging status hierarchies appears to have some effect on how conservative perceivers react to female gender role violators, this relationship does not seem to be as straight forward as a social dilemma. In a social dilemma, a woman would have to choose between maximizing her personal outcomes and maximizing the group's outcomes. In conservative contexts, women who wish to avoid interpersonal hostility from their coworkers (and its associated costs to mental health; see Hershcovis & Barling, 2010) might resort to hierarchy supporting tactics. However, rather than providing a clear maximization of personal outcomes, supporting status hierarchies appeared to be associated with not just the benefit of reduced perceptions of interpersonal hostility from conservative perceivers, but some costs, as well, such as increased perceptions of hostility from non-conservatives and decreased respect from both conservative and non-conservative perceivers.

In summary, the results of these studies raise a call for a more nuanced exploration of how systems of inequality are perpetuated. In addition to the accepted view of discrimination as something that dominant groups do to subservient groups in order to bolster self-identity, these

results paint a picture of discrimination as a complicated system of rewards and punishments, which are delivered in ways that reinforce perceivers' ideological preferences.

8.7 Implications for Practice

In addition to theoretical implications, the results of the present studies hold three major implications for practice. First, these results underscore the importance of differentiating social identity from ideology. When dealing with situations in which sex discrimination can play a role, organizations must be vigilant in ensuring that fairness is never inferred from the presence of women. Indeed, women are capable of holding conservative ideologies, and these ideologies seem to result in similar reactions in men and women. For the most conservative of perceivers, these reactions appear to take the form of hostility, disrespect, and sabotage against women who threaten who status hierarchies.

Secondly, the present studies suggest that women who find themselves in conservative contexts might experience pressure to reinforce gender status hierarchies. However, in conservative contexts, women who react to this pressure by supporting status hierarchies risk being disrespected by their colleagues (see Figure 5), while those who resist and continue to challenge hierarchies are likely to be seen as interpersonally hostile (see Figure 3), and this perceived hostility might be used to justify taking actions to harm them, such as sabotage (see Fiske, Cuddy, & Glick, 2007). Thus, no matter how women react to conservative contexts, they are likely to face either hostility or disrespect, and both of these reactions are likely to serve the role of reducing women's ability to fulfil their personal ambitions. This echoes Derks et al.'s (2011a; 2011b) call to view queen bee behaviors as a reaction to sexism, rather than attributing them to women's personal shortcomings. While the present studies do not provide guidance for women who find themselves in this situation, they provide further evidence of the importance of studying this issue.

The current studies point to an exciting new way of reducing sex discrimination in organizations. Since SDO and RWA are believed to originate from chronic exposure to environmental cues (Duckitt et al., 2002), and the effects of these cues on attachment styles (Weber & Federico, 2007), attempting to reduce discrimination by influencing ideology seems impractical. However, organizations might be able to reduce sex discrimination by using anxiolytic techniques, such as relaxation training, changes to physical layout, or providing workers with access to counselors to

help them work through their anxieties. Anxiety was found to mediate the relationship between conservatism and sabotage in Study 2 (see Figure 7), and has previously been implicated in racial discrimination (Parkins, Fishbein, & Ritchey, 2006). This suggests that anxiety might play a similar role in sex discrimination. Moreover, anxiolytic drugs have been found to reduce implicit racial bias (Terbeck et al., 2012), suggesting that reducing anxiety can reduce discrimination. While it remains to be seen if anxiety-focused approaches to reducing sex discrimination are feasible or economical for organizations to pursue, there appears to be good reason for further investigation.

8.8 Limitations and Future Directions

Like all research, the present studies have a number of limitations that should be addressed in future research. One major limitation in the present studies is the relatively small number of related questions that could be addressed because of concerns over experimental power. For example, the current study examined only female role violators, and thus cannot conclusively inform if the reactions to the targets were because they were women, because they were role violators, or because of an interaction between the two. Valuable information could have been gained from exploring reactions to female role violators versus non-violators, like Maass and colleagues have done in the past (Dall'Ara & Maass, 1999; Maass et al., 2003), or by exploring differences in reactions to male and female targets, like Wallen and Heilman (2010).

Although conservatism was found to be positively associated with perceived interpersonal hostility (Study 1) and sabotage of the role-violating targets (Study 2), it is unlikely that this same relationship would hold for role-conforming women, because conservatives would not be expected to view them as competitors, which should lead to attributions of high warmth, and the SCM argues perceptions of high warmth should motivate active facilitation (Cuddy et al., 2007). On the other hand, since traditional gender roles place women in lower-status roles, and the SCM argues that perceptions of competence are influenced by perceived status (Fiske et al., 2002), both conservatives and non-conservatives are likely to view role-conforming women as low in competence. Importantly, Cuddy et al. (2007) argued that regardless of warmth, perceptions of low-competence should lead to passive harm, such as ignoring, which suggests that role-conforming women might experience discrimination from both conservatives and non-conservatives in the form of passive harm.

Future research would benefit from exploring reactions to men who support or threaten gender status hierarchies, and examining how they differ from reactions to women. Drawing from the stereotype content model (SCM; Fiske et al., 2002), men who challenge status hierarchies might be seen by conservatives as being low in warmth, because they have incongruent goals, and therefore subjected to the active harm as women who challenge hierarchies. However, since men's opposition to gender hierarchies is unlikely to be construed as self-serving, their goals are likely to be ambiguous, so it is unlikely that male challengers would be seen as interpersonally hostile in the same way that female challengers were in Study 1. Men who challenge status hierarchies could even be expected to be perceived as especially warm, since their behavior could be seen as self-less and altruistic. On the other hand, men who challenge gender hierarchies might be seen by some as insufficiently masculine, and this might lead disrespect (e.g., Heilman & Wallen, 2010).

Future work would also benefit from exploring whether men receive benefits for supporting status hierarchies. For example, Heilman and Wallen (2010) found that men in a traditionally-feminine occupation were respected less than men in a traditionally masculine occupation; future work could explore whether men in traditionally-feminine, or otherwise low-status, occupations are respected more when they support status hierarchies. Once these areas have been explored, researchers should be able to examine more boundary conditions affecting when conservative perceivers might show greater support for men than for women, and vice versa. For example, would conservative perceivers show greater support to a high status man or a high-status woman who supports gender status hierarchies? According to the reasoning presented by Cuddy et al. (2007), high status men who support the status quo should be seen as both high in competence (due to their status) and high in warmth (due to their non-competitiveness to male dominance). However, if women who support the status quo are seen as less competent (as found in Study 1), and men are not, then Cuddy et al.'s (2007) model would predict that these women would experience passive harm, such as avoidance and neglect, motivated by pity. Similarly, low status men who support status hierarchies should also be expected to elicit passive harm motivated by pity, since their low status should lead to perceptions of low competence and their support for status hierarchies should lead to high perceived warmth, based on the lack of competition with the system of male dominance. Answering questions like this with confidence will require a

deeper understanding of how conservatives react to men who support and challenge status hierarchies.

Another limitation of the current work is the reliance on undergraduate participants. The participants are business students who will soon be joining organizations, and are therefore a reasonable sample to use for the current research. However, as Derks et al. (2011a; 2011b) have shown, exposure to sex discrimination at work can alter the way women respond to one another. Thus, the young age and limited organizational experience of the participants might result in patterns of response different from what would be seen in older, more experienced workers. On the other hand, since SDO and RWA are believed to be affected by environmental cues (Duckitt et al., 2002), it is likely that any changes arising from organizational experiences would affect not only how participants react to the targets, but also participants' conservatism. If this is the case, then organizational experience with sexism should do little to influence the relationship between perceiver conservatism and reactions to the targets. Future work should address this gap in knowledge by examining the effects of conservatism on reactions to targets among different populations.

While Study 1 looked at only attitudinal reactions to gender role violators, Study 2 looked at sabotage, a behavioral outcome. This study provides valuable insight into how conservatism translates into behavior, but it fails to consider "positive discrimination". According to ambivalent sexism theory (Glick & Fiske, 1996; 2001a; 2001b), women who embrace traditional social roles and serve men tend to be "rewarded" with paternalistic benevolence. As an extension of this reasoning, women in traditionally male occupations who support gender status hierarchies might experience preferential treatment, such as increased cooperation or increased help on non-core tasks. Thus, while Study 2 examined a manifestation of hostile sexism, which has been causally linked to SDO (Sibley, Wilson, & Duckitt, 2007), future work should also examine manifestations of benevolent sexism, which Sibley et al. (2007) causally linked to RWA. Exploring these relationships would allow for a fuller understanding of sex discrimination.

The present studies found evidence that supporting gender status hierarchies reduces the perceived interpersonal hostility of gender role violating women by conservative perceivers. However, it is unclear if reinforcing hierarchies other than those based on sex would have the same effect. For example, would conservative perceivers see a gender role violating woman as

less interpersonally hostile if she expresses support for racial or class-based hierarchies? Or would a role-violating woman be more respected when if supports non-gender hierarchies? In order to answer these question, and to gain a better understanding of the relevant factors, future work should compare reactions to individuals who reinforce hierarchies they themselves challenge through role violations with reactions to individuals who reinforce hierarchies unrelated to personal role violations. In addition, future research could benefit from examining differences in reactions to boundary trespassing (between groups of equal social status) and a status trespassing (between groups of different social status), as this focus could provide a more precise understanding of the roles of social identity and social status concerns in discrimination.

Finally, more work is needed to understand the experiences of women who have been exposed to sex discrimination. Derks et al. (2011a; 2011b) argued that women who are exposed to sexism respond by acting like queen bees. In the present studies, I found that the kind of hierarchy reinforcement inherent in queen bee behaviors decreases interpersonal hostility from conservatives. However, this reduction of hostility comes at a steep price: women who violated gender roles but supported status hierarchies experienced a significant drop in respect, relative to women who challenged these same hierarchies, from perceivers at all levels of conservatism. In addition to a decrease in respect, hierarchy supporting women faced considerable interpersonal hostility from perceivers who were low in conservatism. Thus, it appears that the coping strategies women are able to enact to improve their experiences at work can lead to discrimination from other sources, potentially including liberals. In order to address this, more work is needed on the reactions to women who enact different coping mechanisms when confronted with different forms of sex discrimination.

Chapter 5

Conclusion

In this paper, I explored conservative perceivers' reactions toward female targets who violate gender role but express support for gender status hierarchies, and compare them to reactions toward female gender role violators who challenge gender status hierarchies. The results revealed that conservatism predicts negative reactions to female gender role violators, including perceptions of interpersonal hostility, ineffectuality, and (dis)respect. However, expressing support for existing gender status hierarchies reversed the relationship between perceivers' conservatism and perceptions of the target's interpersonal hostility. Since attributions of negative intent can be used as justification to actively harm the target (Fiske, Cuddy, Glick, & Xu, 2002; Cuddy, Fiske, & Glick, 2007), this suggests that women might sometimes feel pressure to support the gender status hierarchy in the hope of avoiding mistreatment at work, and this could potentially explain why some women who are exposed to sexist work environments exhibit so-called "Queen Bee" behaviors (Derks, Ellemers, Van Laar, & De Groot, 2011a; Derks, Van Laar, Ellemers, & De Groot, 2011b). However, supporting the gender status hierarchy did not appear to increase perceptions of competence (measured as perceived ineffectuality and respect) and did not reduce sabotage directed at the target. Moreover, supporting gender status hierarchies was associated with increased negative reactions from participants low in conservatism. Together, these findings highlight the centrality of preferences for social structure in perceivers' reactions to female gender role violators, and the tradeoffs in victimization that role violators must make while navigating others' preferences.

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Tables

Table 1.

Study 1: Means and Correlations of Study Variables (N = 149).

Variable Name	Mean (SD)	1	2	3	4	5	6	7	8	9	10	11	12
1. Participant Sex ^a	.70 (0.46)	-											
2. Canadian-born ^b Participant	.22 (.42)	-.04	-										
3. East Asian Participant ^c	.59 (.49)	.09	-.64***	-									
4. Other Background ^d	.13 (.33)	-.15	-.20*	-.46***	-								
5. Participant Age	19.38 (1.80)	-.01	.09	.06	-.16 [†]	-							
6. Participant Gender Identification	5.41 (0.95)	-.22**	.11	-.14	.17*	-.02	(.78)						
7. Participant SDO	2.75 (0.89)	-.10	-.22**	.22**	-.08	-.06	-.03	(-.86)					
8. Participant RWA	3.09 (0.88)	-.11	-.18**	.18*	.04	.02	.03	.40***	(.90)				
9. Participant Conservatism	-.02 (1.67)	-.13	-.23**	.24**	-.03	-.27	.00	.84***	.83***	-			
10. Target Interpersonal Hostility	4.67 (1.22)	-.18*	.10	-.01	-.03	.11	.05	.06	.03	.05			
11. Target Ineffectuality	3.29 (1.17)	.02	-.08	.11	.01	.04	-.05	.41***	.25**	.40***	.13	(.70)	
12. Target Respect	4.67 (1.06)	.07	.10	-.10	-.02	.02	.15 [^]	-.24**	-.13	-.22**	-.33***	-.29***	(.64)
13. Hierarchy Supporting Target	.54 (0.50)	-.09	.10	.03	-.09	.07	-.02	-.17*	-.09	-.15 [†]	.37***	-.14	-.25**

Note. Reliabilities are in parentheses along the diagonal.

^aFemale = 1, Male = 0

^bCanadian-born = 1, not Canadian-born = 0.

^cEast Asian origin (born outside of Canada and identifying as East Asian, Chinese, Vietnamese, Korean, or Japanese) = 1, Canadian-born or other origin = 0)

^dCanadian-born and East Asian origin = 0, all other backgrounds = 1

[†] $p < .10$ * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 2.

Study 1: Means and Correlations of Study Variables for Male Participants (N = 44).

Variable Name	Mean (SD)	1	2	3	4	5	6	7	8	9	10	11
1. Canadian-born ^a												
Participant	0.22 (.42)	-										
2. East Asian Participant ^b	.59 (.49)	-.60***	-									
3. Other Background ^c	.13 (.33)	-.29 [†]	-.53***	-								
4. Participant Age	19.41 (2.31)	.20	-.01	-.22	-							
5. Participant Gender												
Identification	5.73 (0.91)	-.14	-.08	.28 [†]	.02	-						
6. Participant SDO	2.88 (0.86)	-.14	-.11	.26 [†]	-.03	-.03	-					
7. Participant RWA	3.25 (0.90)	-.16	.17	-.08	-.07	.03	.40***	-				
8. Participant Conservatism	.30 (1.61)	-.19	.04	.11	-.06	.00	.84***	.83***	-			
9. Target Interpersonal												
Hostility	5.01 (1.08)	-.18	.03	.16	.01	.05	.06	.03	.05	-		
10. Target Ineffectuality	3.27 (1.14)	-.01	-.01	.04	-.05	-.05	.41***	.25**	.40***	.13	-	
11. Target Respect	4.56 (1.09)	.18	-.06	-.14	.13	.15 [†]	-.24**	-.13	-.22**	-.33***	-.29***	-
12. Hierarchy Supporting												
Target	.61 (0.49)	-.08	.18	-.06	-.12	-.02	-.17*	-.09	-.15 [†]	.37***	-.14	-.25**

^aCanadian-born = 1, not Canadian-born = 0.

^bEast Asian participant (born outside of Canada and identifying as East Asian, Chinese, Vietnamese, Korean, or Japanese) = 1, Canadian-born or other origin = 0)

^cCanadian-born and East Asian origin = 0, all other backgrounds = 1

[†] $p < .10$ * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 3.

Study 1: Means and Correlations of Study Variables for Female Participants (N = 105).

Variable Name	Mean (SD)	1	2	3	4	5	6	7	8	9	10	11
1. Canadian-born ^a												
Participant	0.22 (.42)	-										
2. East Asian Participant ^b	.59 (.49)	-.66***	-									
3. Other Background ^c	.13 (.33)	-.17 [†]	-.41***	-								
4. Participant Age	19.37 (1.55)	.03	.10	-.12	-							
5. Participant Gender Identification	5.28 (0.93)	.20*	-.14	.07	-.06	-						
6. Participant SDO	2.69 (0.87)	-.26**	.37***	-.31**	-.09	-.20*	-					
7. Participant RWA	3.03 (0.89)	-.19 [†]	.20*	.08	.07	-.07	.43***	-				
8. Participant Conservatism	-.16 (1.68)	-.26**	.34***	-.14	-.01	-.16	.85***	.84***	-			
9. Target Interpersonal Hostility	4.54 (1.25)	.19*	.00	-.17 [†]	.17	-.05	-.02	.04	.01	-		
10. Target Ineffectuality	3.30 (1.19)	.11	.16	.00	.10	-.13	.37***	.30**	.40***	.11	-	
11. Target Respect	4.71 (1.05)	.07	-.12	.07	-.06	.28**	-.19*	-.10	-.18 [†]	-.37***	-.32***	-
12. Hierarchy Supporting Target	.51 (0.50)	.17 [†]	-.02	-.14	.18 [†]	.08	-.13	-.08	-.12	.47***	-.16	-.27**

^aCanadian-born = 1, not Canadian-born = 0.

^bEast Asian participant (born outside of Canada and identifying as East Asian, Chinese, Vietnamese, Korean, or Japanese) = 1, Canadian-born or other origin = 0)

^cCanadian-born and East Asian origin = 0, all other backgrounds = 1

[†] $p < .10$ * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 4.

Study 1: The Effects of Participants' Conservatism on Perceived Interpersonal Hostility

Variable Name	Step 1 ($R^2 = .17^{***}$)		Step 2 ($\Delta R^2 = .04^\dagger$)		Step 3 ($\Delta R^2 = .12^{***}$)		Step 4 ($\Delta R^2 < .01$)	
	B	SE	B	SE	B	SE	B	SE
Participant Age	.10	.09	.07	.09	.10	.09	.10	.09
Participant Sex ^a	-.33	.21	-.77*	.35	-.45	.33	-.45	.35
Participant Gender Identification	.04	.10	.24	.19	.34	.17	.34 [†]	.18
Hierarchy Supporting ^b Target	.88***	.19	.33	.38	.65 [†]	.35	.66 [†]	.37
Participant Conservatism	.68	.06	.05	.11	.34**	.12	.35*	.16
Sex * Gender Identification			-.33	.22	-.45*	.21	-.45*	.21
Sex * Conservatism			-.01	.13	-.07	.12	-.08	.18
Sex * Hierarchy Supporting			.83 [†]	.44	.41	.41	.41	.43
Conservatism * Hierarchy Supporting					-.53***	.11	-.54*	.21
Sex * Conservatism * Hierarchy Supporting							.01	.24

^aFemale = 1, Male = 0.

^bHierarchy Supporting = 1, Hierarchy Challenging = 0.

[†] $p < .10$ * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 5.

Study 1: The Effect of Male and Female Participants' Conservatism on Perceived Interpersonal Hostility

Variable Name	Female Participants		Male Participants	
	B	SE	B	SE
Participant Age	.13	.12	.07	.32
Participant Gender Identification	-.11	.10	.34 [†]	.19
Hierarchy Supporting ^a Target	1.05***	.21	.64 [†]	.38
Participant Conservatism	.27***	.08	.34*	.16
Conservatism * Hierarchy Supporting	-.53***	.12	-.53*	.21

^aHierarchy Supporting = 1, Hierarchy Challenging = 0.

[†] $p < .10$ * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 6.

Study 1: The Effect of Participant Conservatism on Interpersonal Hostility with no Control Variables

Variable Name	Step 1 ($R^2 = .38^{***}$)		Step 2 ($\Delta R^2 = .13^{***}$)	
	B	SE	B	SE
Hierarchy Supporting ^a Target	.92***	.19	.93***	.13
Participant Conservatism	.07	.06	.32***	.07
Conservatism * Hierarchy Supporting			-.52***	.10

^aHierarchy Supporting = 1, Hierarchy Challenging = 0.

*** $p < .001$.

Table 7.

Study 1: The Effect of Participants' Conservatism on Targets' Perceived Ineffectuality

Variable Name	Step 1 ($R^2 = .17^{***}$)		Step 2 ($\Delta R^2 = .01$)		Step 3 ($\Delta R^2 < .01$)		Step 4 ($\Delta R^2 < .01$)	
	B	SE	B	SE	B	SE	B	SE
Participant Age	.07	.09	.08	.09	.08	.09	.07	.09
Participant Sex ^a	.12	.20	.38	.35	.37	.35	.30	.38
Participant Gender Identification	-.05	.09	.05	.19	.04	.19	.02	.20
Hierarchy Supporting ^b Target	-.20	.18	.09	.37	.08	.38	.02	.40
Participant Conservatism	.28***	.06	.30**	.11	.29*	.13	.23	.17
Sex * Gender Identification			-.11	.22	-.11	.22	-.09	.22
Sex * Conservatism			-.03	.13	-.03	.13	.04	.19
Sex * Hierarchy Supporting			-.37	.43	-.35	.44	-.30	.46
Conservatism * Hierarchy Supporting					.02	.11	.12	.23
Sex * Conservatism * Hierarchy Supporting							-.13	.26

^aFemale = 1, Male = 0.

^bHierarchy Supporting = 1, Hierarchy Challenging = 0.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 8.

Study 1: The Effect of Participants' Conservatism on Respect.

Variable Name	Step 1 ($R^2 = .15^{***}$)		Step 2 ($\Delta R^2 = .04^\dagger$)		Step 3 ($\Delta R^2 = .01$)		Step 4 ($\Delta R^2 < .01$)	
	B	SE	B	SE	B	SE	B	SE
Participant Age	.04	.08	.04	.08	.04	.08	.03	.08
Participant Sex ^a	.10	.19	-.01	.31	-.09	.32	-.18	.34
Participant Gender Identification	.16 [†]	.08	-.11	.17	-.14	.17	-.16	.17
Hierarchy Supporting ^b Target	-.61 ^{***}	.17	-.69*	.33	-.77*	.34	-.85*	.35
Participant Conservatism	-.16 ^{**}	.05	-.24*	.10	-.31 ^{**}	.11	-.38*	.15
Sex * Gender Identification			.40*	.20	.43*	.20	.45*	.20
Sex * Conservatism			.13	.12	.15	.12	.24	.17
Sex * Hierarchy Supporting			.03	.39	.13	.39	.20	.41
Conservatism * Hierarchy Supporting					.13	.10	.26	.20
Sex * Conservatism * Hierarchy Supporting							-.17	.23

^aFemale = 1, Male = 0.

^bHierarchy Supporting = 1, Hierarchy Challenging = 0.

[†] $p < .10$ * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 9.

Study 2: Means and Correlations of Study Variables (N = 204).

Variable Name	Mean (SD)	1	2	3	4	5	6	7	8	9	10	11	12
1. Participant Sex ^a	0.63 (0.49)	-											
2. Canadian-born ^b Participant	0.25 (.44)	.01	-										
3. East Asian Participant ^c	0.57 (.50)	.09	-.68***	-									
4. Other Background ^d	0.17 (.38)	-.13 [†]	-.27***	-.53***	-								
5. Participant Age	20.49 (1.78)	-.13 [†]	-.26***	.31***	-.10	-							
6. Participant Gender Identification	5.33 (0.97)	-.13 [†]	-.01	-.07	.10	.11	-						
7. Participant Trait Anxiety	2.15 (0.39)	.10	.00	.14*	-.19**	-.12 [†]	-.16*	-					
8. Participant SDO	3.01 (0.96)	-.20**	-.16*	.17*	-.03	.01	.06	.05	-				
9. Participant RWA	3.18 (0.83)	-.14*	-.13 [†]	.21**	-.13 [†]	.09	.025	.04	.44***	-			
10. Participant Conservatism	0.00 (1.69)	-.20**	-.17*	.22**	-.09	.06	.05	.05	.85***	.85***	-		
11. Participant State Anxiety	2.05 (0.52)	.010	-.06	.17*	-.16*	-.12	-.082	.62**	.24**	.18**	.25***	-	
12. Sabotage	1.45 (0.48)	-.08	.09	.03	-.13 [†]	.05	.089	.10	.23**	.15*	.23***	.25***	-
13. Hierarchy Supporting Target	0.48(.50)	-.04	-.02	-.05	.09	-.04	-.06	.13 [†]	.00	-.06	-.35	.04	-.01

^aFemale = 1, Male = 0^bCanadian-born = 1, not Canadian-born = 0.^cEast Asian origin (born outside of Canada and identifying as East Asian, Chinese, Vietnamese, Korean, or Japanese) = 1, Canadian-born or other origin = 0)^dCanadian-born and East Asian origin = 0, all other backgrounds = 1[†] $p < .10$ * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 10.

Study 2: Means and Correlations of Study Variables among Male Participants (N = 76).

Variable Name	Mean (SD)	1	2	3	4	5	6	7	8	9	10	11
1. Canadian-born ^a												
Participant	0.25 (.44)	-										
2. East Asian Participant ^b	0.51 (.50)	-.59***	-									
3. Other Background ^c	0.24 (.42)	-.32**	-.57***	-								
4. Participant Age	20.79 (2.02)	-.18	.21 [†]	-.07	-							
5. Participant Gender Identification	5.49 (0.93)	-.11	-.09	.23*	.07	-						
6. Participant Trait Anxiety	2.10 (0.34)	-.16	.13	.01	-.05	-.09	-					
7. Participant SDO	3.26 (1.03)	-.06	.14	-.10	.04	.21 [†]	.00	-				
8. Participant RWA	3.33 (0.84)	-.21 [†]	.22 [†]	-.05	.12	.02	.19	.40***	-			
9. Participant Conservatism	0.44 (1.73)	-.16	.21 [†]	-.09	.09	.14	.11	.84***	.83***	-		
10. Participant State Anxiety	2.04 (0.49)	-.29*	.28*	-.03	.00	.04	.49***	.23*	.19 [†]	.25*	-	
11. Sabotage	1.50 (0.52)	.03	.00	-.03	.02	.13	.10	.35**	.02	.22 [†]	.35**	-
12. Hierarchy Supporting Target	0.50 (.50)	-.21 [†]	.13	.06	-.07	-.02	.20 [†]	.04	.01	.03	.12	.05

^aCanadian-born = 1, not Canadian-born = 0.

^bEast Asian participant (born outside of Canada and identifying as East Asian, Chinese, Vietnamese, Korean, or Japanese) = 1, Canadian-born or other origin = 0)

^cCanadian-born and East Asian origin = 0, all other backgrounds = 1

[†] $p < .10$ * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 11.

Study 2: Means and Correlations of Study Variables among Female Participants (N = 128).

Variable Name	Mean (SD)	1	2	3	4	5	6	7	8	9	10	11
1. Canadian-born												
Participant ^a	0.26 (.44)	-										
2. East Asian ^b Participant	0.61 (.49)	-.74***	-									
3. Other ^c Background	0.13 (.34)	-.23**	-.49***	-								
4. Participant Age	20.31 (1.60)	-.33***	.41***	-.16 [†]	-							
5. Participant Gender Identification	5.23 (.97)	.05	-.03	-.03	.12	-						
6. Participant Trait Anxiety	2.17 (.42)	.08	.14	-.30**	-.14	-.17 [†]	-					
7. Participant SDO	2.86 (.89)	-.23**	.23*	-.03	-.07	-.07	.11	-				
8. Participant RWA	3.09 (0.81)	-.08	.22*	-.22*	.04	.00	.00	.45***	-			
9. Participant Conservatism	-.26 (.81)	-.18*	.26**	-.15 [†]	-.02	-.04	.06	.84***	.86***	-		
10. Participant State Anxiety	2.06 (0.55)	.06	.11	-.24**	-.19*	-.14	.68***	.26**	.19*	.26**	-	
11. Sabotage	1.43 (0.46)	.13	.06	-.25**	.06	.05	.11	.12	.23**	.21*	.20*	-
12. Hierarchy Supporting Target	0.46 (.50)	.10	-.16 [†]	.10	-.03	-.09	.11	-.04	-.11	-.09	.01	-.05

^aCanadian-born = 1, not Canadian-born = 0.

^bEast Asian participant (born outside of Canada and identifying as East Asian, Chinese, Vietnamese, Korean, or Japanese) = 1, Canadian-born or other origin = 0)

^cCanadian-born and East Asian origin = 0, all other backgrounds = 1

[†] $p < .10$ * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 12.

Study 2: Effect of Conservatism on Sabotage.

Variable Name	Step 1		Step 2		Step 3	
	B	SE	B	SE	B	SE
Participant Sex ^a	-.03	.07	.01	.10	.01	.10
Participant Age	.02	.03	.02	.03	.02	.03
Participant Gender Identification	.04	.03	.06	.06	.06	.06
Participant Trait Anxiety	.05	.03	.05	.07	.05	.07
Hierarchy Supporting ^b Target	-.01	.07	.04	.11	.05	.11
Participant Conservatism	.06**	.02	.06 [†]	.03	.06 [†]	.04
Sex * Gender Identification			-.03	.07	-.03	.07
Sex * Hierarchy Supporting			-.07	.14	-.09	.14
Sex * Trait Anxiety			-.00	.08	.00	.08
Sex * Conservatism			.00	.04	.00	.04
Conservatism * Hierarchy Supporting					-.02	.04

^aFemale = 1, Male = 0.^bHierarchy Supporting = 1, Hierarchy Challenging = 0.[†] $p < .10$ * $p < .05$. ** $p < .01$. *** $p < .001$.

Figures

Figure 1. Proposed model of the relationship between perceiver conservatism and reactions to role violating women, and the moderating effect of women's support for the status hierarchy.

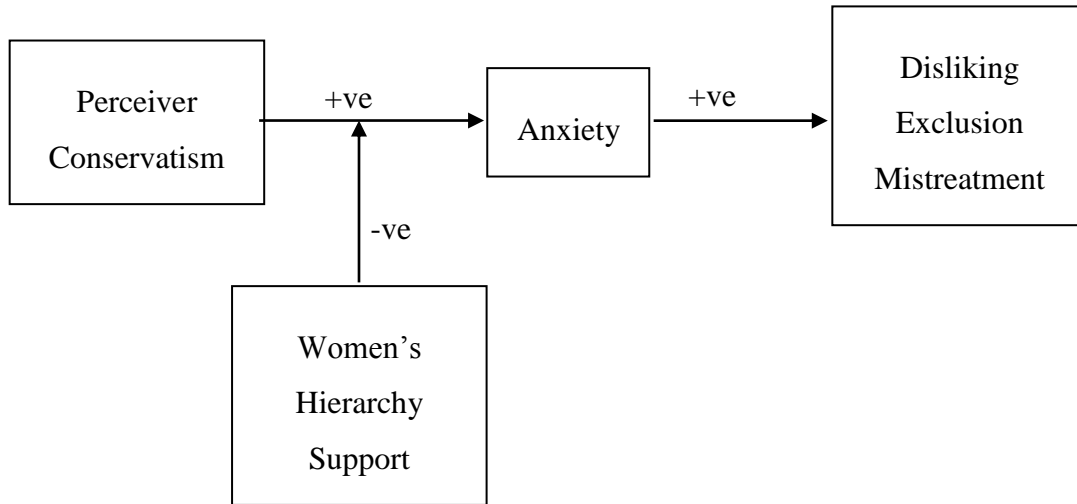


Figure 2. Anticipated reactions to hierarchy challenging and supporting female gender role violators as a function of perceiver conservatism.

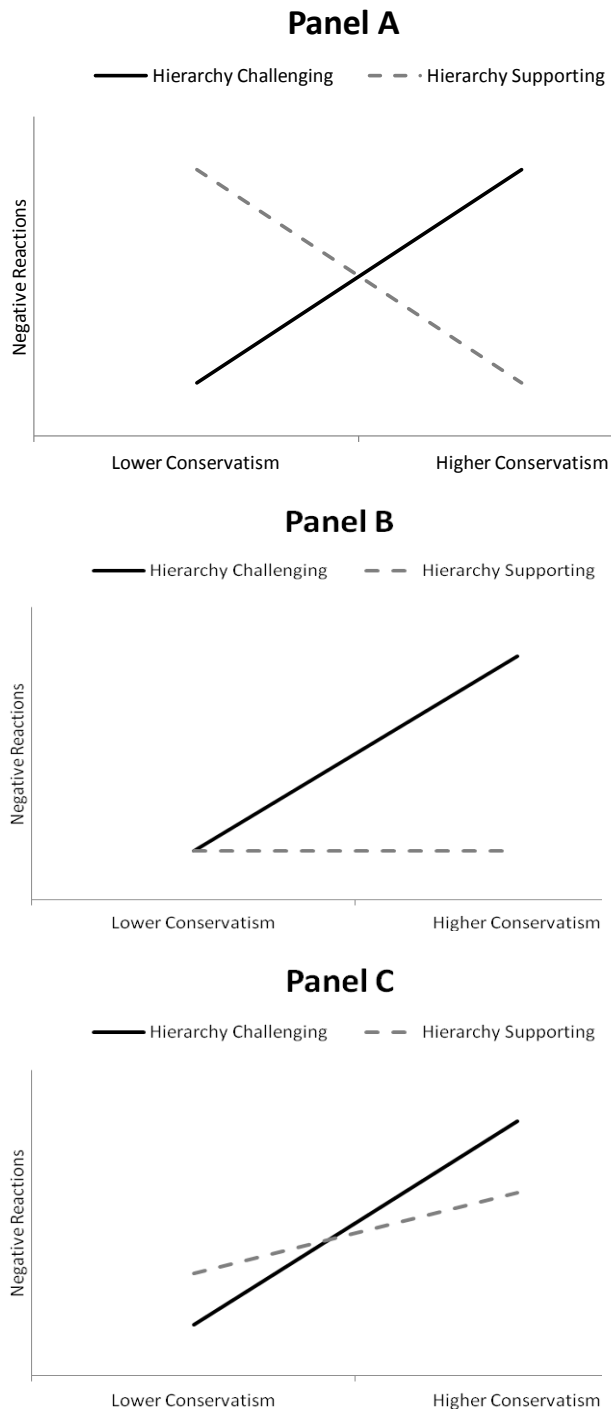


Figure 3. Relationship between participants' conservatism and perceptions of the target's interpersonal hostility for hierarchy supporting and challenging female gender role violators.

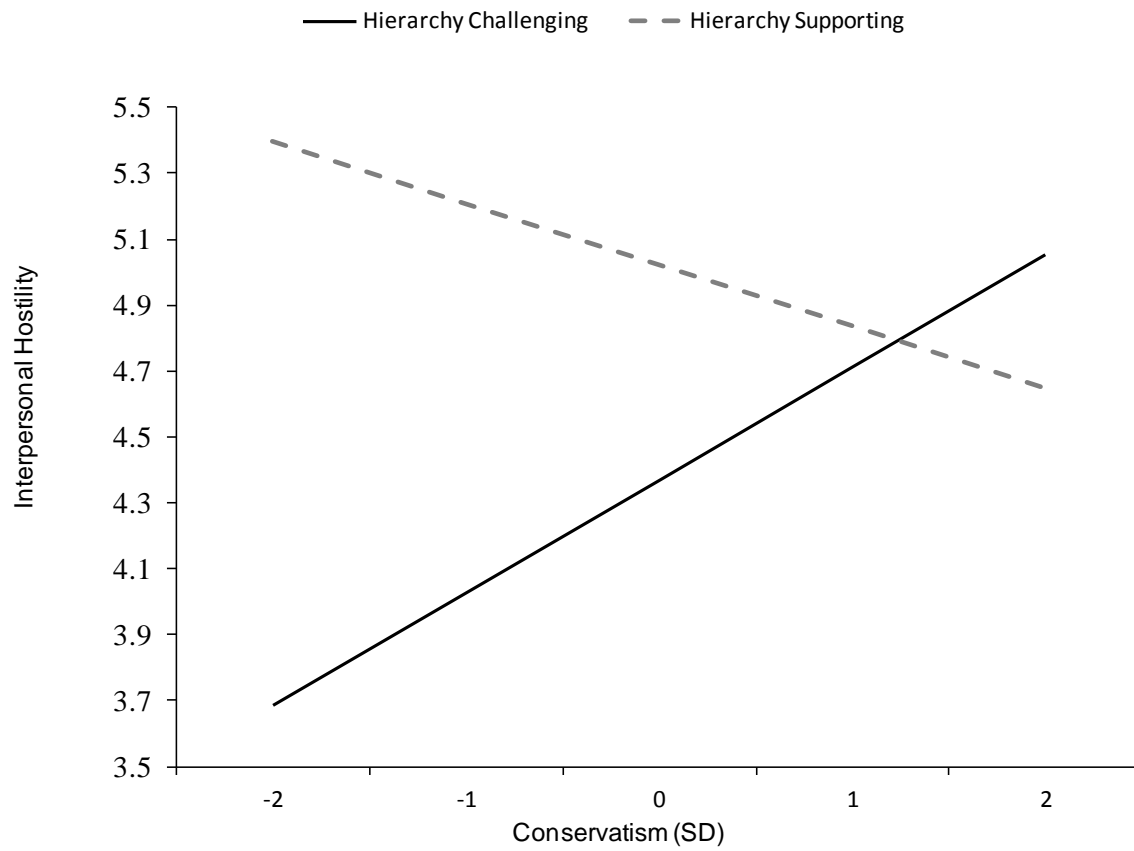


Figure 4. Relationship between participants' conservatism and perceptions of the targets ineffectuality for hierarchy supporting and challenging female gender role violators.

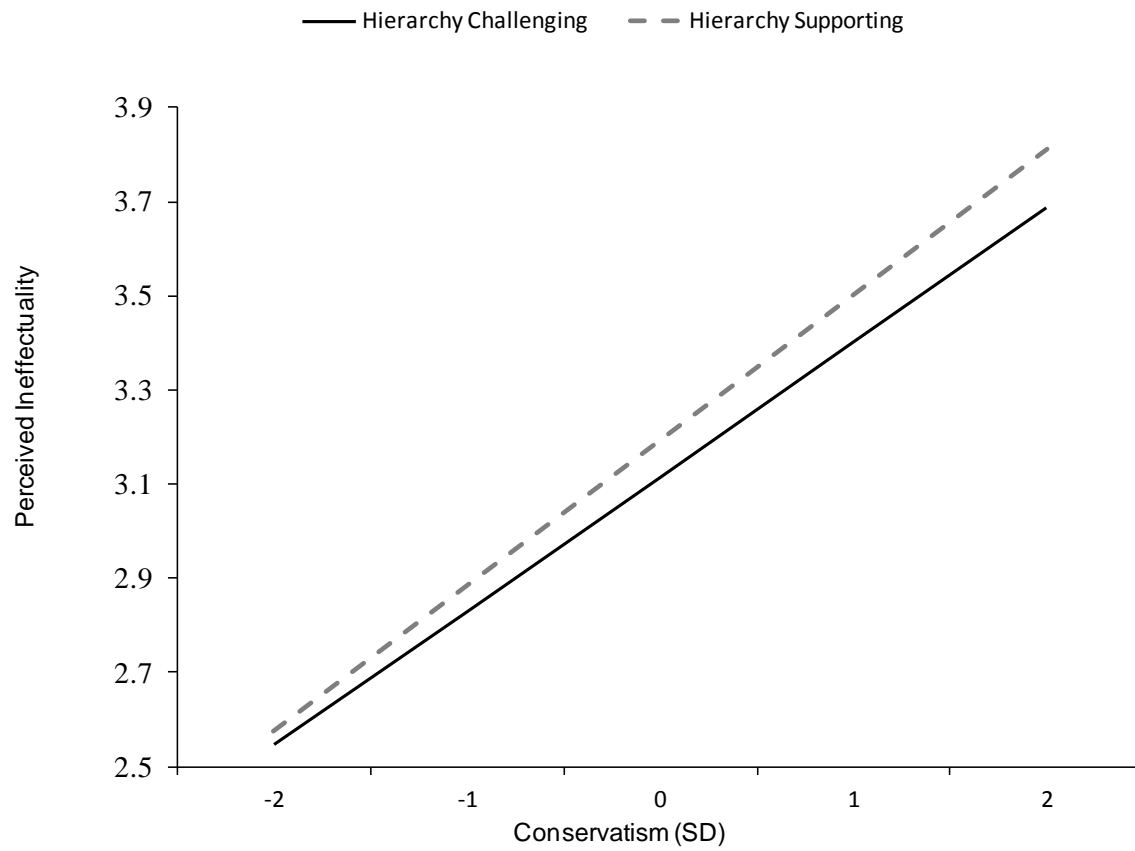


Figure 5. Relationship between participants' conservatism and respect for female gender role violators who support or challenge gender status hierarchies.

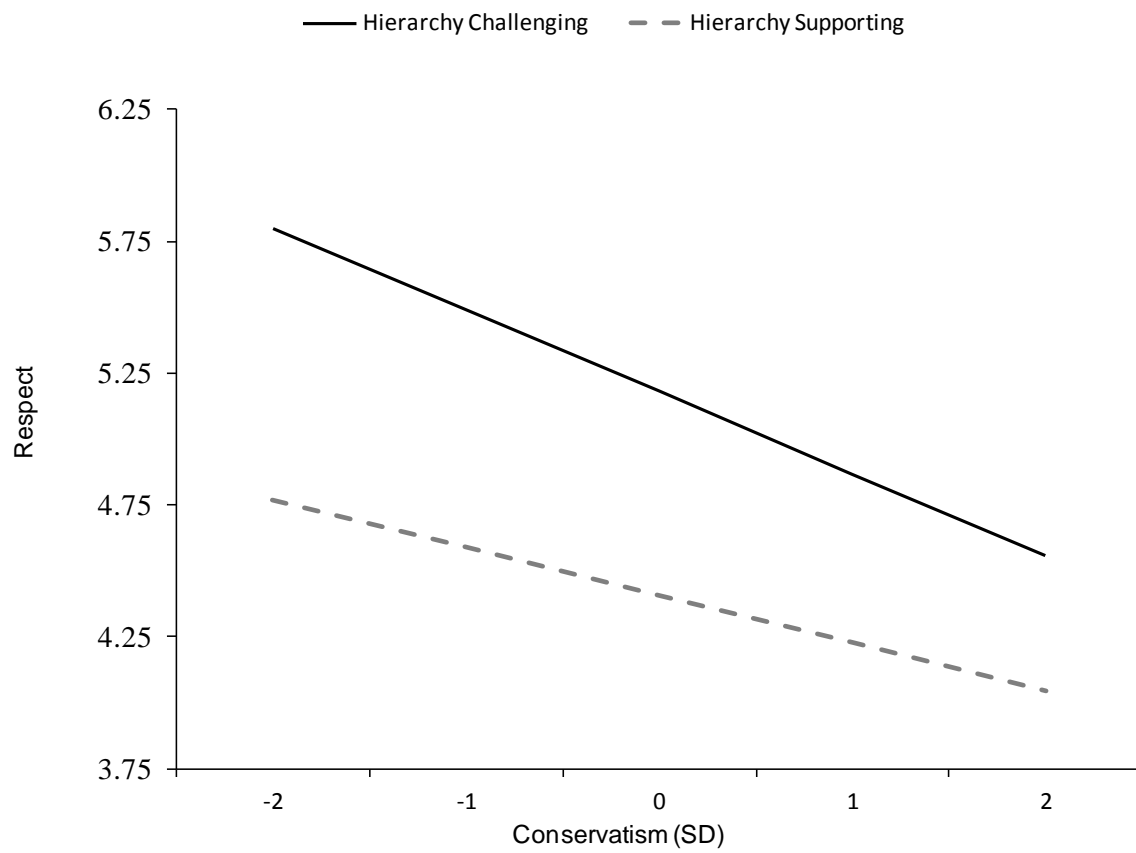


Figure 6. Relationship between participants' conservatism and sabotage directed at hierarchy supporting and challenging female gender role violators.

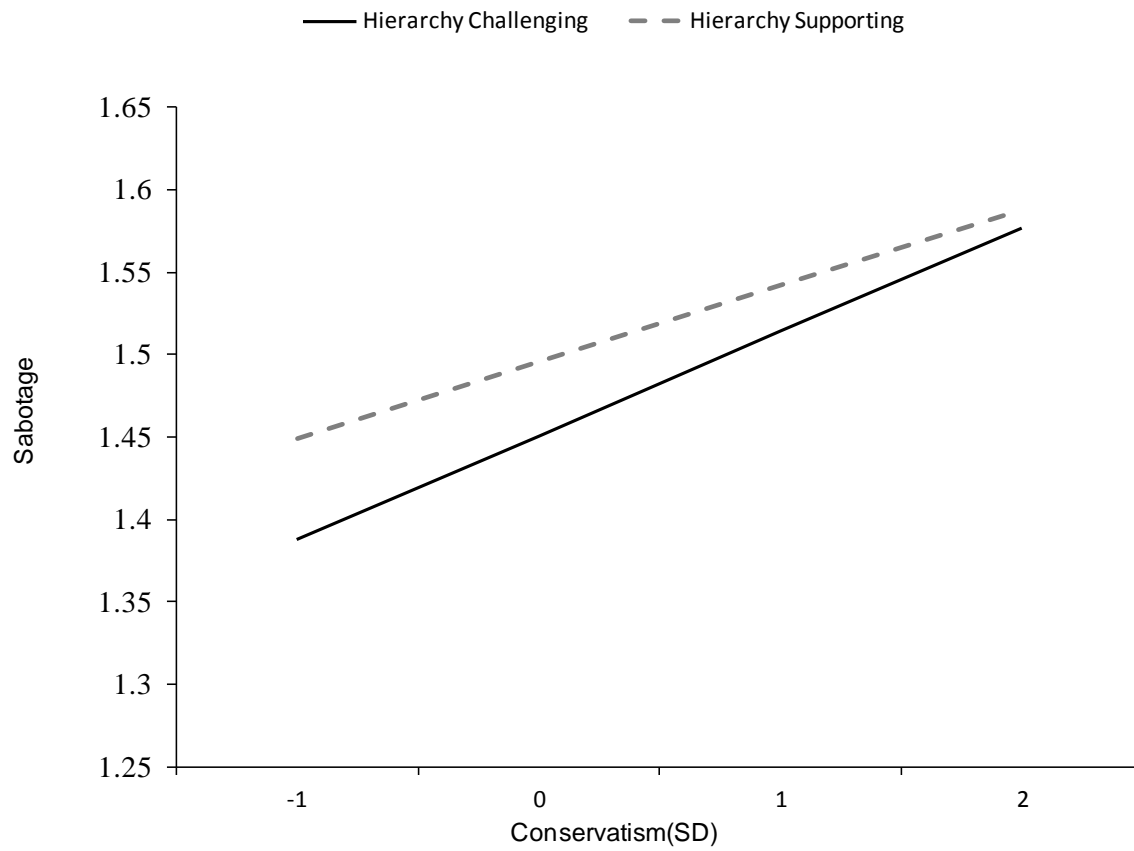
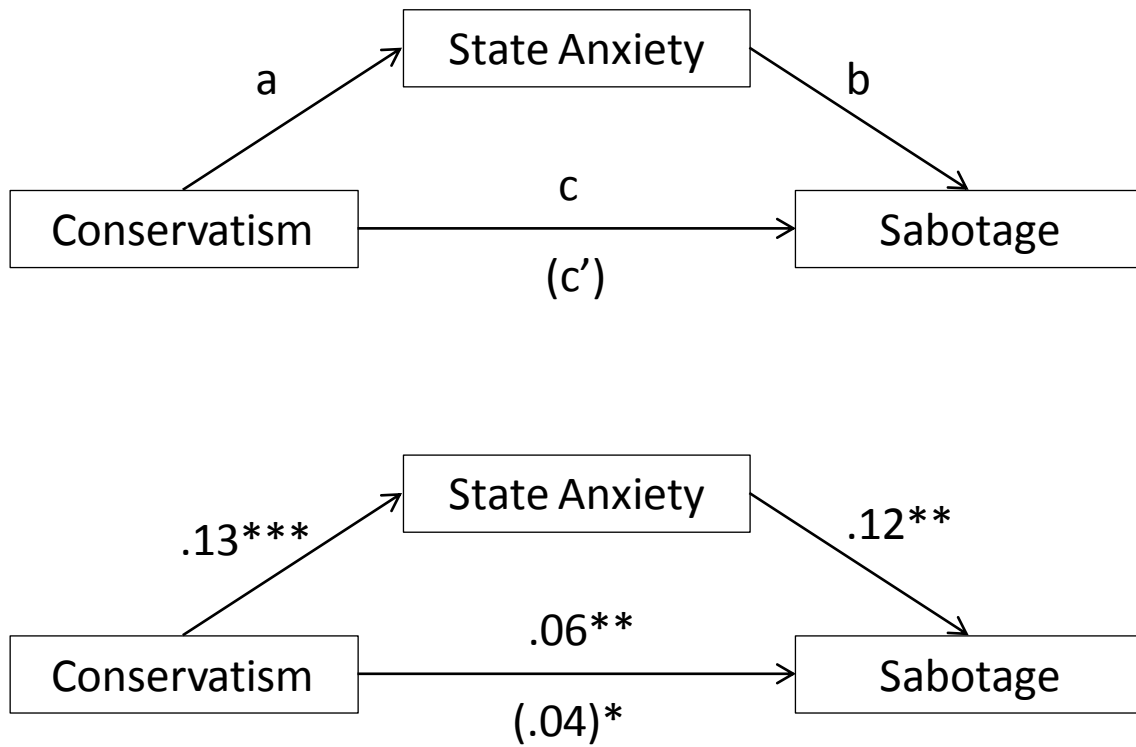


Figure 7. Mediation model of the direct and indirect effects of conservatism on sabotage.



Appendix A

Study 1 Recruitment Information

Study Title: Pilot Perception Project with Rotman Commerce

Length of Study: 1 Hour

Location: Online

Researcher Name: Alexander Garcia Muradov

Supervisor Name: Jennifer Berdahl

Researcher E-mail: alexander.garcia06@rotman.utoronto.ca

Summary of this research:

This study explores how individuals' attributes influence how they perceive others. You will complete a series of personality measures, and asked to indicate your reaction to another person.

Appendix B

Study 1 Demographic and Independent Variables

Demographic Characteristics

1. What is your sex? (male/female)
2. What is your age?
3. Please indicate the broad ethnic group(s) that best describe(s) you (select all that are applicable)
Caucasian; East Asian; Southeast Asian; South Asian; West Asian; Middle Eastern; Black; Hispanic; Other
4. If you selected "Other" in Question 3, please specify:
5. Were you born in Canada? (yes/no)
6. If you were not born in Canada, how long have you lived in Canada? (in years)
7. What is your native language? (the language that you first learned)

Gender Identification

Instructions - You will now be presented with a series of statements. Please indicate your level of agreement with each statement.

1. I often regret belonging to my gender.*
Strongly disagree 1 2 3 4 5 6 7 Strongly Agree
2. In general, I'm glad to be a member of my gender.
Strongly disagree 1 2 3 4 5 6 7 Strongly Agree
3. I feel good about my gender.
Strongly disagree 1 2 3 4 5 6 7 Strongly Agree
4. Overall, my gender has very little to do with how I feel about myself.*

Strongly disagree 1 2 3 4 5 6 7 Strongly Agree

5. My gender is an important reflection of who I am.

Strongly disagree 1 2 3 4 5 6 7 Strongly Agree

6. My gender is unimportant to my sense of what kind of person I am.*

Strongly disagree 1 2 3 4 5 6 7 Strongly Agree

7. In general, my gender is an important part of my self-image.

Strongly disagree 1 2 3 4 5 6 7 Strongly Agree

*Reverse Scored

SDO Scale

Instructions- Please indicate your level of agreement with the following statements:

1. We should do what we can to equalize conditions for different groups.*

Strongly disagree 1 2 3 4 5 6 7 Strongly Agree

2. No one group should dominate in society.*

Strongly disagree 1 2 3 4 5 6 7 Strongly Agree

3. Increased social equality would be a bad thing.

Strongly disagree 1 2 3 4 5 6 7 Strongly Agree

4. Treating different groups more equally would create more problems than it would solve.

Strongly disagree 1 2 3 4 5 6 7 Strongly Agree

5. It would be good if all groups could be equal.*

Strongly disagree 1 2 3 4 5 6 7 Strongly Agree

6. All groups should be given an equal chance in life.*

Strongly disagree 1 2 3 4 5 6 7 Strongly Agree

7. There is no point in trying to make incomes more equal.

Strongly disagree 1 2 3 4 5 6 7 Strongly Agree

8. Group equality is not a worthwhile ideal.

Strongly disagree 1 2 3 4 5 6 7 Strongly Agree

9. Inferior groups should stay in their place.

Strongly disagree 1 2 3 4 5 6 7 Strongly Agree

10. Sometimes other groups must be kept in their place.

Strongly disagree 1 2 3 4 5 6 7 Strongly Agree

11. It's a real problem that certain groups are at the top and other groups are at the bottom.*

Strongly disagree 1 2 3 4 5 6 7 Strongly Agree

12. If certain groups of people stayed in their place, we would have fewer problems.

Strongly disagree 1 2 3 4 5 6 7 Strongly Agree

13. No group of people is more worthy than any other.*

Strongly disagree 1 2 3 4 5 6 7 Strongly Agree

14. To get ahead in life, it is sometimes necessary to step on other groups.

Strongly disagree 1 2 3 4 5 6 7 Strongly Agree

15. Superior groups should not seek to dominate inferior groups.*

Strongly disagree 1 2 3 4 5 6 7 Strongly Agree

16. In getting what your own group wants, it should never be necessary to use force against other groups.*

Strongly disagree 1 2 3 4 5 6 7 Strongly Agree

*Reverse Scored

RWA Scale

Instructions- Please indicate your level of agreement with the following statements:

1. The established authorities generally turn out to be right about things, while the radicals and protestors are usually just “loud mouths” showing off their ignorance.¹

Strongly disagree 1 2 3 4 5 6 7 8 9 Strongly Agree

2. Women should have to promise to obey their husbands when they get married.¹

Strongly disagree 1 2 3 4 5 6 7 8 9 Strongly Agree

3. Our country desperately needs a mighty leader who will do what has to be done to destroy the radical new ways and sinfulness that are ruining us.

Strongly disagree 1 2 3 4 5 6 7 8 9 Strongly Agree

4. Gays and lesbians are just as healthy and moral as anybody else.*

Strongly disagree 1 2 3 4 5 6 7 8 9 Strongly Agree

5. It is always better to trust the judgment of the proper authorities in government and religion than to listen to the noisy rabble-rousers in our society who are trying to create doubt in people's minds

Strongly disagree 1 2 3 4 5 6 7 8 9 Strongly Agree

6. Atheists and others who have rebelled against the established religions are no doubt every bit as good and virtuous as those who attend church regularly.*

Strongly disagree 1 2 3 4 5 6 7 8 9 Strongly Agree

7. The only way our country can get through the crisis ahead is to get back to our traditional values, put some tough leaders in power, and silence the troublemakers spreading bad ideas.

Strongly disagree 1 2 3 4 5 6 7 8 9 Strongly Agree

8. There is absolutely nothing wrong with nudist camps.*

Strongly disagree 1 2 3 4 5 6 7 8 9 Strongly Agree

9. Our country needs free thinkers who have the courage to defy traditional ways, even if this upsets many people.*

Strongly disagree 1 2 3 4 5 6 7 8 9 Strongly Agree

10. Our country will be destroyed someday if we do not smash the perversions eating away at our moral fiber and traditional beliefs.

Strongly disagree 1 2 3 4 5 6 7 8 9 Strongly Agree

11. Everyone should have their own lifestyle, religious beliefs, and sexual preferences, even if it makes them different from everyone else.*

Strongly disagree 1 2 3 4 5 6 7 8 9 Strongly Agree

12. The “old-fashioned ways” and the “old-fashioned values” still show the best way to live.

Strongly disagree 1 2 3 4 5 6 7 8 9 Strongly Agree

13. You have to admire those who challenged the law and the majority’s view by protesting for women’s abortion rights, for animal rights, or to abolish school prayer.*

Strongly disagree 1 2 3 4 5 6 7 8 9 Strongly Agree

14. What our country really needs is a strong, determined leader who will crush evil, and take us back to our true path.

Strongly disagree 1 2 3 4 5 6 7 8 9 Strongly Agree

15. Some of the best people in our country are those who are challenging our government, criticizing religion, and ignoring the “normal way things are supposed to be done.”*

Strongly disagree 1 2 3 4 5 6 7 8 9 Strongly Agree

16. God's laws about abortion, pornography and marriage must be strictly followed before it is too late, and those who break them must be strongly punished.

Strongly disagree 1 2 3 4 5 6 7 8 9 Strongly Agree

17. There are many radical, immoral people in our country today, who are trying to ruin it for their own godless purposes, whom the authorities should put out of action.

Strongly disagree 1 2 3 4 5 6 7 8 9 Strongly Agree

18. A "woman's place" should be wherever she wants to be. The days when women are submissive to their husbands and social conventions belong strictly in the past.*

Strongly disagree 1 2 3 4 5 6 7 8 9 Strongly Agree

19. Our country will be great if we honor the ways of our forefathers, do what the authorities tell us to do, and get rid of the "rotten apples" who are ruining everything.

Strongly disagree 1 2 3 4 5 6 7 8 9 Strongly Agree

20. There is no "ONE right way" to live life; everybody has to create their own way.*

Strongly disagree 1 2 3 4 5 6 7 8 9 Strongly Agree

21. Homosexuals and feminists should be praised for being brave enough to defy "traditional family values.*

Strongly disagree 1 2 3 4 5 6 7 8 9 Strongly Agree

22. This country would work a lot better if certain groups of troublemakers would just shut up and accept their group's traditional place in society.

Strongly disagree 1 2 3 4 5 6 7 8 9 Strongly Agree

*Reverse Scored

Appendix C

Study 1 Dependent Variables

Interpersonal Hostility

Instructions- In your estimation, what is this person like?

- | | | | | | | | | | | | |
|--------------------|---|---|---|---|---|---|---|---|---|---------------|---------------|
| 1. Abrasive | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Not abrasive | |
| 2. Conniving | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Not conniving |
| 3. Not trustworthy | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Trustworthy | |
| 4. Pushy | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Accommodating | |

Ineffectuality

Instructions- In your estimation, what is this person like?

- | | | | | | | | | | | |
|------------|---|---|---|---|---|---|---|---|---|----------------|
| Competent | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Incompetent |
| Weak | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Strong* |
| Wimpy | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Not Wimpy |
| Commanding | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Not Commanding |
| Insecure | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Not Insecure* |
| Spineless | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Not Spineless* |

*Reverse Scored

Respect

1. How respected do you think this individual is?

Not at all 1 2 3 4 5 6 7 Very Much

2. How much do you think others look up to this individual?

Not at all 1 2 3 4 5 6 7 Very Much

3. How much do you think this is someone who commands respect from others?

Not at all 1 2 3 4 5 6 7 Very Much

Appendix D

Study 2 Recruitment Information

Study # 2 Study Title: Competition Project with Rotman Commerce

Length of Study: 1 Hour Location: Online

Researcher Name Alexander Garcia Muradov Supervisor Name Jennifer Berdahl

Summary of this research:

This study consists of two unrelated studies. First you will complete a personality survey to help validate it for future use. Secondly, you will take part in a study on competition, in which you will be paired with another participant, and the each of you will complete a test to help determine what attributes affect performance. Even though this is an online study, you ***must*** be available to participate online at a pre-scheduled session in order to take part in this study.

Special Restrictions:

Must not have participated in "Pilot perception project with Rotman Commerce"

Appendix E

Study 2 Independent Variables

SDO

See Appendix B for items.

RWA

See Appendix B for items.

Gender Identification

See Appendix B for items

Trait Anxiety⁹ (STAI-Y Sample Items)

Instructions- A number of statements which people have used to describe themselves are given below. Read each statement and then circle the appropriate number to the right of the statement to indicate how you generally feel.

1. I am a steady person: 1 (not at all) 2 (somewhat) 3 (moderately so) 4 (very much so)
2. I lack self-confidence: 1 (not at all) 2 (somewhat) 3 (moderately so) 4 (very much so)
3. I feel pleasant: 1 (not at all) 2 (somewhat) 3 (moderately so) 4 (very much so)
4. I feel nervous and restless: 1 (not at all) 2 (somewhat) 3 (moderately so) 4 (very much so)
5. I feel rested: 1 (not at all) 2 (somewhat) 3 (moderately so) 4 (very much so)

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Appendix F

Study 2 Dependent Variables

Male Knowledge Test

Instructions- Answer each of the following questions. Please do not consult any search engines or other sources to answer these questions. Note that, in order to prevent cheating, response times will be recorded, and excessively long delays in answering questions will drastically reduce your score. Conversely, answering questions more quickly will increase your score, if you choose the correct answer.

1. Anfernee Hardaway's nickname is (Penny vs. Doc).
2. In American football, a dime is what kind of play in football? (defensive vs. offensive)
3. The name of the Carolina NHL team is? (Thrashers vs. Hurricanes)
4. What team did Bob Gibson pitch for as a Cy Young winner in 1970? (Cardinals vs. Yankees)
5. In 1982, who won the Super Bowl's MVP award? (Joe Namath vs. Joe Montana)
6. [Displaying a picture of an Italian car] What kind of car is this? (Lamborghini vs. Ferrari)
7. [Displaying a picture of a sports coup] What kind of car is this? (Porsche vs. Mazda)
8. [Displaying a picture of a Japanese motorcycle] What kind of motorcycle is this? (Honda vs. Suzuki)
9. A motorcycle engine turning at 8000 rpms generates an exhaust sound at (4000 rpms vs. 8000 rpms).
10. All else being equal, increasing an engine's displacement: (increases power vs. decreases power)
11. In nature, the best analogy for a spark plug is (solar fire vs. lightning).
12. From what country does capoeira originate? (Angola vs. Brazil)

13. Soldiers in WWII often used what type of guns? (Gatling vs. Tommy)
14. The groove inside the barrel of a revolver is (spiraled vs. smooth).
15. What is the compressed force behind BB guns? (gas vs. air)
16. The first people to use primitive flamethrowers in battle were (Greeks vs. Turks).
17. [Displaying a picture of a M240G machine gun] What type of gun is this? (machine gun vs. assault rifle)
18. The material used between bathroom tiles is called (spackling vs. grout).
19. If you need to replace the tank ball in a toilet, ask for a (flapper vs. ball cock).
20. The paste used for soldering joints is called (gel vs. flux).
21. When choosing insulation, the R-value should be (as high as possible vs. as low as possible).
22. Hugh Hefner first published Playboy magazine in (1963 vs. 1953).
23. Arnold Schwarzenegger killed more people in which film? (True Lies vs. Total Recall)
24. After shooting a deer, bear, elk, or turkey, you must attach a (kill tag vs. ID tag).
25. When hunting, the legal amount of Hunter's Orange on your clothes is (25% vs. 50%).
26. When punching someone, you should aim your fist (a foot beyond optimal target vs. directly at target).
27. What's the best way to deflect a punch? (use the forearm to block it vs. use hand to catch it).
28. By Olympic rules, boxing gloves for all weight classes weigh (12 ounces vs. 10 ounces).
29. When punching someone, the majority of the force comes from (the speed of your fist vs. your upper arm and shoulder).
30. When ramming a car to disable it, you should aim for the (rear passenger's tire vs. front driver's tire).

State Anxiety¹⁰ (STAI-Y Sample Items)

Instructions-A number of statements which people have used to describe themselves are given below. Read each statement and then blacken the appropriate circle to the right of the statement to indicate how you feel right now, that is, at this moment. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your present feelings best.

- | | | | | |
|---------------------|----------------|--------------|-------------------|------------------|
| 1. I feel at ease: | 1 (not at all) | 2 (somewhat) | 3 (moderately so) | 4 (very much so) |
| 2. I feel upset: | 1 (not at all) | 2 (somewhat) | 3 (moderately so) | 4 (very much so) |
| 2. I feel strained: | 1 (not at all) | 2 (somewhat) | 3 (moderately so) | 4 (very much so) |
| 2. I feel nervous: | 1 (not at all) | 2 (somewhat) | 3 (moderately so) | 4 (very much so) |
| 2. I am worried: | 1 (not at all) | 2 (somewhat) | 3 (moderately so) | 4 (very much so) |

Word Puzzle: Anagrams¹¹

Instructions- For each of the following anagrams, please select the clue you want to be presented to your former competitor. If they perform better than 80% of respondents, they will be entered into a draw to win \$100.

1. AOKYRBED= _____ (KEYBOARD)

Clue option #1: A set of keys used to operate a computer (easy)

Clue option #2: It sends information to your computer (medium)

Clue option #3: It's portable (hard)

2. NUNGRIN= _____ (RUNNING)

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¹¹ Participants did not see the difficulty of the clues.

Clue option #1: What you do in a marathon race (easy)

Clue option #2: Moving quickly (medium)

Clue option #3: Not always a healthy hobby (hard)

3. ISRANIP= _____ (ASPIRIN)

Clue option #1: It helps with a headache (easy)

Clue option #2: It comes in a bottle (medium)

Clue option #3: Don't have too many! (hard)

4. AYCNADECN= _____ (CANDYCANE)

Clue option #1: A Christmas sweet for children (easy)

Clue option #2: It has colored stripes (medium)

Clue option #3: Your dentist hates it (hard)

5. KBEOXJU= _____ (JUKEBOX)

Clue option #1: Plays many songs for people in bars(easy)

Clue option #2: It's usually in a bar (medium)

Clue option #3: The newest models use the internet (hard)

6. EEUQBRAB= _____ (BARBEQUE)

Clue option #1: A way to cook meat outdoors (easy)

Clue option #2: A fourth of July activity (medium)

Clue option #3: It better not be raining! (hard)

7. CPESNRAA= _____ (PANCREAS)

Clue option #1: It's the organ in your body that starts with "P" (easy)

Clue option #2: It's in your body (medium)

Clue option #3: It starts with the letter P (hard)

8. UCAIPNOPCC= _____ (CAPPUCCINO)

Clue option #1: A foamy coffee beverage (easy)

Clue option #2: Made by a barista (medium)

Clue option #3: Bad after dinner (hard)

9. TSUMERD= _____ (DRUMSET)

Clue option #1: A loud musical instrument played by Ringo Starr from

The Beatles (easy)

Clue option #2: Played with sticks (medium)

Clue option #3: They come electric now (hard)

10. RTNNIEET= _____ (INTERNET)

Clue option #1: What you use to check your email (easy)

Clue option #2: Stores tons of information (medium)

Clue option #3: Creates a generation gap (hard)

Appendix G

Ethics Approval

PROTOCOL REFERENCE # 26833
September 7, 2011

Professor Jennifer Berdahl
Rotman School of Management
University of Toronto
105 St. George St.
Toronto, ON M5S 3E6

Mr. Alexander Garcia
Rotman School of Management
University of Toronto
105 St. George St.
Toronto, ON M5S 3E6

Re: Your research protocol entitled, "Making Waves without Rocking the Boat: Women's Reinforcement of Gender Status Hierarchies as a Protectant against Discrimination"

ETHICS APPROVAL Original Approval Date: September 7, 2011
Expiry Date: September 6, 2012
Continuing Review Level: 1

We are writing to advise you that the Social Sciences, Humanities and Education Research Ethics Board has granted approval to the above-named research study under the REB's delegated review process. Your study has been approved for a period of **one year** and ongoing projects must be renewed prior to the expiry date.
All your most recently submitted documents have been approved for use in this study.

Any changes to the approved protocol or consent materials must be reviewed and approved through the amendment process prior to its implementation. Any adverse or unanticipated events should be reported to the Office of Research Ethics as soon as possible.

Please ensure that you submit an Annual Renewal Form or a Study Completion Report 15 to 30 days prior to the expiry date of your study. Note that annual renewals for studies cannot be accepted more than 30 days prior to the date of expiry, as per federal and international policies.

If your research has funding attached, please contact the relevant Research Funding Officer in Research Services to ensure that your funds are released.
Best wishes for the successful completion of your project.

Yours sincerely,



Dean Sharpe, Ph.D.
Research Ethics Board Manager--Social Sciences and Humanities