PERCEIVED REJECTION OF MASCULINITY AS A PREDICTOR OF BACKLASH

A Dissertation in

Social Psychology

by

Brooke A. L. Di Leone

© 2012 Brooke A. L. Di Leone

Submitted in Partial Fulfillment
of the Requirements
for the Degree of

Doctor of Philosophy

August 2012
The dissertation of Brooke A. L. Di Leone was reviewed and approved* by the following:

Theresa K. Vescio  
Associate Professor of Psychology  
Dissertation Adviser  
Chair of Committee

Melvin M. Mark  
Professor of Psychology  
Head of the Department of Psychology

Janet Swim  
Professor of Psychology

Shannon Sullivan  
Professor of Philosophy, Women’s Studies, and African and African American Studies  
Head of the Department of Philosophy

*Signatures are on file in the Graduate School.
ABSTRACT

The goal of the present research was to examine links between peoples’ perceptions of the degree that individuals endorse normative masculine ideology and the tendency to engage in backlash against gender counter-stereotypic individuals. “Backlash” refers to the phenomenon of levying social and economic sanctions against those who violate gender stereotypes. Two pilot studies and two full studies examined three specific hypotheses: 1) that participants would punish counter-stereotypic targets more than stereotypic targets, 2) that participants would punish targets who did not endorse normative masculine ideology more than those who did endorse normative masculine ideology, and 3) that perceived target endorsement of normative masculine ideology would mediate the relationship between gender stereotypicality and punishment. Findings did not offer support for these hypotheses, but suggested that broad system justification motives are an important moderator of the traditional backlash effect. More specifically, results offered evidence that lower system justification motives may be associated with a pattern of sanctions that is the opposite of the pattern seen in prior backlash research.
# TABLE OF CONTENTS

List of Tables.................................................................................................................. v  
List of Figures..................................................................................................................vi  

Chapter 1. INTRODUCTION............................................................................................ 1  
Chapter 2. PILOT A.........................................................................................................15  
Chapter 3. PILOT B.........................................................................................................21  
Chapter 4. STUDY 1.......................................................................................................24  
Chapter 5. STUDY 2.......................................................................................................36  
Chapter 6. GENERAL CONCLUSIONS......................................................................44  
References.....................................................................................................................47  
Appendix A: Knowledge Tests.......................................................................................54  
Appendix B: Gibberish Task.........................................................................................57  
Appendix C: Male Role Norms Scale.........................................................................59  
Appendix D: Broad System Justification Motives Scale.............................................63  
Appendix E: Gender-Specific System Justification Motives Scale...............................65  
Appendix F: Getting to Know You Questionnaire.......................................................66  
Appendix G: Word-Guessing Task...............................................................................67
LIST OF FIGURES

Figure 1 ...................................................................................................................... 19
Figure 2 ...................................................................................................................... 23
Figure 3 ...................................................................................................................... 28
LIST OF TABLES

Table 1 .........................................................................................................................31
Introduction

Those who are perceived as gender counter-stereotypic are often the targets of backlash, or economic and social sanctions (Rudman, 1998; Rudman & Glick, 1999; Rudman & Glick, 2001; Rudman & Fairchild, 2004). Prior research has examined the conditions that produce and the consequences of backlash. The mechanisms that drive backlash, however, have yet to be identified.

The goal of this work was to examine links between peoples’ perceptions of the degree that individuals endorse (or reject) normative masculine ideology and the tendency to engage in backlash against gender counter-stereotypic individuals. More specifically, the present research considered the possibility that backlash follows from perceptions that a person actively rejects ideological assumptions associated with traditional masculinity (i.e., normative masculine ideology). To consider this possibility, and to derive testable hypotheses, I first review relevant theory and research on backlash. I then turn attention to masculinity literature, defining masculinity, considering the causes and consequences of threats to masculinity, and distinguishing between masculinity as one’s own identity, an identity category, and an ideology. This examination of the mechanisms underlying the backlash phenomenon sheds light on the relationship between identity and ideology, examining the possibility that people are less invested in policing others’ identities than they are in policing their ideologies.

Backlash

“Backlash” refers to the phenomenon of levying social and economic sanctions against those who violate gender stereotypes (see Rudman, 1998; Rudman & Glick, 2001; Rudman &
Theory and research has established linkages between perceptions of gender counter-stereotypicality and backlash. For example, self-promoting women (i.e., agentic women) were seen as violating gender stereotypes and were rated as less hireable than self-effacing women (i.e., communal women; Rudman, 1998). Similarly, men who exhibited high levels of “female knowledge” (e.g., knowledge of child development, fashion) and women who exhibited high levels of “male knowledge” (e.g., knowledge about sports, automobiles) were sabotaged on a subsequent task, such that their performance was hampered and they were less likely to earn a monetary reward (Rudman & Fairchild, 2004). In contrast, neither men who exhibited high levels of “male knowledge” nor women who exhibited “female knowledge” were sabotaged. Together, these findings suggest that gender counter-stereotypicality, regardless of the sex of the gender-role violator, is viewed as a punishable offense. To explicate the relationships among backlash, counter-stereotypicality, and endorsement of masculinity, I will begin by considering what it means to be gender counter-stereotypic, both conceptually and operationally.

**Gender Counter-Stereotypicality**

To understand what it means to be counter-stereotypic, one must first understand what it means to be stereotypic. Stereotypes can be descriptive or prescriptive/proscriptive. Descriptive stereotypes specify the characteristics (e.g., physical appearance) of members of a given group, thereby distinguishing between members of different groups (Fiske, Bersoff, Borgida, Deaux, & Heilman, 1991; Fiske & Stevens, 1993). Prescriptive and proscriptive stereotypes specify how members of a given group should behave and should not behave, respectively (e.g., Burgess &

*Throughout this paper, I will use the term “sex” to refer to biological sex (e.g., male, female) and “gender” to refer to the performative identities often associated with biological sex, but not intrinsically linked to biological characteristics (e.g., masculine, feminine).*
Borgida, 1999; Prentice & Carranza, 2002). Generally, prescriptive gender stereotypes outline the ways in which men should be agentic and women should be communal. Proscriptive stereotypes serve to further differentiate men from women, by additionally articulating how men and women should not behave (see Heilman, 2001; Rudman & Fairchild, 2004). Proscriptive gender stereotypes might therefore be summarized as “men should not be like women” and “women should not be like men.” Together, descriptive, prescriptive, and proscriptive gender stereotypes articulate societal expectations for men’s and women’s gender expression, ensuring that gendered identities remain bifurcated and distinct from each other.

Interestingly, while stereotypes of men and women are oppositional, normative heterosexual relations render men and women interdependent. As such, men and women are perceived to be complementary opposites who come together to make a more complete whole, given heterosexual interdependencies (Glick & Fiske, 1996). For example, women are expected to be nurturing while men are expected to be protective (Glick & Fiske, 1996). The complementarity of stereotypic perceptions of men and women is tied to cooperative dyadic relations between the sexes in a normatively heterosexual context (Rudman & Glick, 2008). Men are expected to be strong, powerful, commanding, and assertive (e.g., Bem, 1974; Spence, Helmreich, & Stapp, 1975) and, broadly, agentic (Bakan, 1966). In contrast, women are expected to be warm, caring, kind, and communal (e.g., Bem, 1974; Spence, Helmreich, & Stapp, 1975; Bakan, 1966).

In normative heterosexual models of gender, cooperation between men and women is predicated on gender complementarity and therefore gender distinctiveness. Men and women are

---

* It is important to note that gender stereotypes are racialized. In this paper, I will deal exclusively with stereotypes of White men and women. In some cases, the literature outlined explicitly describes these stereotypes as racialized. In many cases, though, race is not explicitly mentioned in the gender literature described. A review of literature on unmarked identities (e.g., Pratto, Korchmaros, & Hegarty, 2007) suggests that even without explicit mention of race, gender stereotypes are implicitly racialized.
said to need each other in order to form a more complete whole, and examples of this can be seen in the statements that compose the Ambivalent Sexism Scale (Glick & Fiske, 1996). In addition, to maintain gender complementarity, men’s and women’s gendered behavior must be distinct. If there is a blurring of the boundaries between men and women’s roles, complementarity and cooperation could easily become competition (as is evident below, in the section dealing with masculinity threat).

Importantly, even ostensibly positive stereotypes of women as warm and communal may serve to reinforce the status quo. As Glick and Fiske (1996) suggest, stereotypes of women as caring and needing protection help justify men’s position at the top of the social power hierarchy. Rudman & Glick (2001) also suggest that prescriptive stereotypes of women as communal are a means to ensure that men maintain status and power while also maintaining a cooperative relationship with women. Women, according to stereotypes, are kinder, gentler creatures who need the protection of agentic men to survive. Thus, women’s violations of stereotypic femininity may be seen as a rejection of the status quo in general or a challenge to men’s stereotypic status, power and dominance in particular (Jackman, 1994). Importantly, as Eagly & Mladinic (1993) display, women can also be complicit in supporting these perceptions that “women are wonderful.”

Punishing deviant individuals, therefore, functionally reinforces and maintains the status quo. Indeed, recent research suggests that the mere threat of punishment serves to suppress women’s agency and self-serving behavior in ways that maintain extant power structures (Amanatullah & Morris, 2010). For example, women’s awareness of the threat of backlash for gender counter-stereotypicality may lead them to avoid self-promotion, fear backlash, and request less compensation for work in negotiations (Amanatullah & Morris, 2010). In turn, this
decrease in women’s negotiation for compensation reinforces extant gender-based inequities, ensuring that women receive less compensation than similarly qualified and similarly performing men. As Eagly (1987) noted, violations of prescriptive gender roles are tantamount to a direct challenge to the extant gender hierarchy. If men are situated at the top of the social power hierarchy, women’s counter-stereotypic behavior may be seen as a challenge to the legitimacy of men’s status, power, and dominance. This, in turn, may motivate backlash.

**Counter-Stereotypicality and Backlash**

There is ample evidence that individuals who are gender counter-stereotypic become and/or fear becoming targets of backlash (Bosson, Taylor, & Prewitt-Freilino, 2006; Prewitt-Freilino & Bosson, 2008; Rudman, 1998; Rudman & Glick, 2001; Rudman & Fairchild, 2004). Below, I cluster my consideration of the literature into two sets of findings that parallel the two main ways in which counter-stereotypicality has been operationalized in backlash research (i.e., as either the violation of prescriptive or proscriptive stereotypes).

**Violations of prescriptive gender stereotypes**

When counter-stereotypicality has been operationalized as the violation of prescriptive stereotypes (e.g., women should be communal and men should be agentic), researchers have crossed sex with stereotypically masculine or feminine person descriptions. For example, in Rudman and Glick’s research (1998; 2001), individuals rated men and women who were presented as (a) agentic and explicitly not communal, (b) communal and explicitly not agentic, or (c) agentic and communal. For example, counter-stereotypic female targets presented were agentic but not communal, stereotypic male targets were agentic but not communal, and androgynous targets were presented as being both agentic and communal. Findings revealed that when applying for a masculine-typed job, counter-stereotypic women were rated as less hireable
than stereotypic men, despite the fact that agency was required for success in the situation. Results for male targets were less consistent; counter-stereotypic men were seen as less competent, but men’s likeability did not differ systematically based on stereotypicality. Additionally, there were no differences in hireability ratings for stereotypic male and female targets, suggesting that backlash was fueling the difference in perceived hireability of agentic female targets.

Interestingly, Rudman and Glick (2001) also found that stereotypic men and androgynous women were rated as equally hireable. Thus, it seems that people are comfortable with agentic women, provided that those women are also unambiguously warm, and therefore compliant with prescriptive stereotypes of women as communal. This is evident in results for qualified, but non-communal targets (i.e., stereotypic men and counter-stereotypic women). Counter-stereotypic women were rated as less hireable than stereotypic men, suggesting that it is the violation of prescriptive stereotypes that is fueling participants’ hireability ratings.

**Violations of proscriptive gender stereotypes**

When counter-stereotypicality has been operationalized as the violation of proscriptive gender stereotypes (e.g., women should not be like men and vice versa), target stereotypicality has been manipulated using performance on a same or opposite-sex typed knowledge task (e.g., Rudman & Fairchild, 2004). More specifically, participants are asked to complete a gendered knowledge test prior to being presented with information about how they and other apparent participants scored on such gendered knowledge tests. In this paradigm, counter-stereotypic targets are those who perform well on the opposite-sex typed task, such as men who score high on the feminine knowledge task (e.g., showing knowledge of fashion and childcare) and women
who score high on the masculine knowledge task (e.g., showing knowledge of guns, cars, and sports).

To assess backlash, Rudman and Fairchild (2004) examined participants’ reactions to a male or female target based on the target’s performance on a gender-typed knowledge task. In all cases, targets outperformed participants. Then, because of their superior performance, targets qualified to continue on to a second task in which they would compete to win money and participants were asked to give the target clues to aid them in completing a puzzle. The clues from which participants could choose (taken from a game that was popular at the time) were helpful, somewhat helpful, or unhelpful. Although the target’s performance on the subsequent task did not have any bearing on direct rewards or punishments for participants, findings revealed that participants sabotaged counter-stereotypic targets. More specifically, compared to stereotypic targets, participants gave counter-stereotypic male and female targets more unhelpful clues thereby limiting their ability to earn money based on their performance. Given that the latter operationalization yielded consistent backlash results across target sex, the gender-typed trivia paradigm was used in the present research.

Masculinity as identity and masculinity as ideology

Given the relationship between stereotypicality and support of extant social power structures, it becomes important to consider what information may be (intentionally or unintentionally) communicated by or inferred about individuals who violate gender stereotypes. If gender stereotypes are a means of maintaining the gender status quo, counter-stereotypicality may be a cue to one’s beliefs about gender more broadly. In other words, counter-stereotypicality in one’s gender identity expression may suggest that an individual rejects (or fails to accept) the dominant gender ideology. Of particular interest to the present work is the
question of whether counter-stereotypicality implies that one rejects normative masculine ideology. To explore this possibility, one must first define masculinity as identity, comparing and contrasting with masculinity as ideology.

What is an identity? Hammack (2008) defines identity as “ideology cognized through the individual engagement with discourse, made manifest in a personal narrative constructed and reconstructed across the life course and scripted in and through social interaction and social practice” (p. 223). This definition makes connections between identity and ideology, the former now defined in terms of the latter. An important aspect of this definition of identity is the social component (echoed also in social identity theory, e.g., Tajfel & Turner, 1986). Identity is formed in part through our interactions with others over time. This, therefore, implies that our identity is or, more accurately, identities are, at stake in social interactions, leaving open the possibility that others can challenge our perceptions of ourselves.

While there is some variability in the particular framing of masculine identity constructs across research, similar categories consistently emerge (e.g., Bem, 1974; Spence, Helmreich, & Stapp, 1975; Eagly, 1987; Thompson & Pleck, 1995; Prentice & Carranza, 2002). Researchers tend to agree that masculine identity is characterized by independence (Brannon, 1976; Brannon & Juni, 1984), power and/or status (Brannon, 1976; Brannon & Juni, 1984; Thompson & Pleck, 1986; Thompson, Pleck, & Ferrara, 1992), aggression (Brannon, 1976; Brannon & Juni, 1984; Thompson & Pleck, 1986; Thompson, Pleck, & Ferrara, 1992), anti-femininity (Brannon, 1976; Brannon & Juni, 1984; Thompson & Pleck, 1986; Thompson, Pleck, & Ferrara, 1992), and heterosexuality (Herek, 1986; Herek, 2002).

The three most common categories of masculine identity that emerge are status, toughness, and anti-femininity (see Thompson, Pleck & Ferrara, 1992). Status, as
conceptualized by Thompson & Pleck (1986), centers on the idea that men should strive to achieve positions of relative power (e.g., from the Male Role Norms Scale; “Success in his work has to be man’s central goal in this life”; MRNS, Thompson & Pleck, 1986). Toughness, similar to the idea of the man as “sturdy oak” (Brannon & Juni, 1984), suggests that men should be physically, psychologically, and emotionally strong (e.g., “When a man is feeling a little pain he should try not to let it show very much”; MRNS, Thompson & Pleck, 1986). Anti-femininity, in contrast to the prescriptive norms of the previous two factors, is more proscriptive. It describes the ways in which men should not be like women (e.g., “It bothers me when a man does something that I consider ‘feminine’”; MRNS, Thompson & Pleck, 1986). The concept of anti-femininity is similar to Judith Butler’s (1993) idea of abject identities. The feminine identity is set up as an anti-goal or fear-self that is repeatedly called to mind and rejected (Butler, 1993). Masculine identity, by defining itself in contrast to the devalued and feared feminine identity, therefore becomes the valued identity.

Importantly, masculine identity is precarious, in that it is difficult to achieve and can only be maintained through repeated demonstrations (e.g., Kimmel, 2008; Vandello, Bosson, Cohen, Burnaford, & Weaver, 2008; Bosson, Vandello, Burnaford, Weaver, & Wasti, 2009). While womanhood is often seen as being achieved when females reach sexual maturity, manhood tends to be conceptualized as a status that must be earned and consistently displayed rather than automatically bestowed (Pleck, 1981). That is, in this view, masculinity or manhood is seen as a social identity, whereas womanhood is merely seen as a biological fact.

Eagly (1987) has argued that stereotypes of men and women have arisen from differences in men’s and women’s roles. Prescriptive stereotypes that women should be communal are the result of expectations that women have children and care for them. Prescriptive stereotypes that
men should be agentic and tough, on the other hand, are the result of expectations that men will provide resources and protection for women and children. Therefore, women can fulfill expectations of appropriate feminine identity simply by reaching sexual maturity. Men, on the other hand, must continually prove their masculine identity through their actions.

The precariousness of masculine identity is also apparent when considering what it means to be powerful and high status. As is briefly described above, men are expected to be powerful and achieve high status roles. In particular, men are expected to have power over and be dominant in relation to women (Glick & Fiske, 1996; 2001). In order to successfully bear and raise children, men and women have historically relied on rather cooperative gender relations (Jackman, 1994; Pratto & Walker, 2001; Rudman & Glick, 2008). Implicit in this apparent cooperation, though, is men’s status as dominant and women’s status as submissive (Jackman, 1994). Therefore, the contemporary gender hierarchy is characterized by cooperation between men and women, which in turn fuels the maintenance of patriarchy. If continued support of patriarchy requires cooperation between men and women, then men must rely not only on their own actions to maintain power over women, but also on the actions of women to subordinate themselves.

An ideology is a worldview or a set of ideas that together dictate particular behaviors and expectations. Gender ideology and identity are often conflated. As seen in the above-mentioned masculine identity scales, many measures of gender identity actually ask about gender ideology. This is somewhat logical given the connections between individuals’ self-reported identity and ideology (e.g., Cameron & Lalonde, 2001). However, the two are not identical and connections between identity and ideology may be far more complex than is often assumed (Kroska, 2002). For example, Cameron and Lalonde (2001) found that self-identified feminist and non-traditional
women also reported that gender was more central to their identity than self-identified traditional women. This suggests that, within the individual, a more stereotypic gender ideology does not necessarily imply a more stereotypic gender identity. In addition, Kroska (2002) found that individuals’ self-reported gender ideology (conservative vs. liberal) was unrelated to perceptions of their own gender identity, but was related to their perceptions of their partner’s gender identity. This suggests that the relationship between identity and ideology may differ for perceptions of others.

Given the patriarchal power structure of contemporary American society, women’s violation of prescriptive gender stereotypes may signify a challenge to men’s status as dominant over women, and therefore the cooperative relationship between the sexes (Glick & Fiske, 1996; Rudman & Glick, 2001). Further, stereotypes, and the threat of punishment associated with violating those stereotypes, may serve to maintain the position of men as more powerful than women (Glick & Fiske, 1996; 2001). Building on Rudman and Glick’s assumptions, it is possible that gender identity violations would lead individuals to infer that one does not endorse or actively rejects normative masculinity ideology. If this is the case, perhaps gender identity counter-stereotypicality is experienced as a threat to masculinity.

**Masculinity threat**

Masculinity threat can refer to a challenge to one’s identity as masculine or to the concept of masculine identity in the abstract (Branscombe, Ellemers, Spears, and Doosje, 1999; Maass, Cadinu, Guarnieri, & Grasselli, 2003). Men experience discomfort and feel anxiety when they feel that their identity as appropriately masculine is called into question (Babl, 1979; Bosson, Prewitt-Freilino, & Taylor, 2005; Bosson, Taylor, & Prewitt-Freilino, 2006; Goff, Di Leone, & Kahn, in press). This type of masculinity threat reflects a threat to an individual’s own behavior
and identity. However, it is possible that one may also experience masculinity threat as a result of challenges to the category of normative masculine identity and not in relation to one’s own behavior or one’s own identity.

Social identity threats manifest in five main ways (Maass, Cadinu, Guarnieri, & Grasselli, 2003). These are: 1) category threats, in which one is concerned about being miscategorized (e.g., a straight man being mistaken for as a gay man), 2) threats to group value, in which the value of a group with which one identifies is called into question (e.g., stereotypes of women as bad at math and science), 3) acceptance or prototypicality threats, in which one feels that one is not an exemplary group member (e.g., a man being called a “sissy”), 4) distinctiveness threats, in which one feels that one’s group may be too similar to a devalued outgroup (e.g., men being described as similar to women in terms of emotional experience), and 5) legitimacy threats, in which the legitimacy of one’s group is called into question (e.g., suggestions that the normative gender ideology should be called into question) (Branscombe, Ellemers, Spears, and Doosje, 1999; Maass et al., 2003).

The gender counter-stereotypicality of another person may threaten masculinity in two ways. First, gender counter-stereotypicality in others may be experienced as a threat to the distinctiveness of normative masculinity as an identity, blurring the lines between what it means to be normatively masculine and what it means to be normatively feminine. Second, gender counter-stereotypicality may suggest that an individual rejects normative masculine ideology, which may in turn be experienced as a legitimacy threat to normative masculinity.

When one encounters an individual whose gender expression is counter-stereotypic, it may be perceived as evidence that men and women are actually quite similar. This overlap between ostensibly disparate categories would be a threat to the idea of masculinity as distinct
from femininity. Particularly when one considers definitions of masculinity as not-femininity, it becomes clear that overlap between these categories is a potential threat to masculinity (i.e., if being masculine means being anti-feminine, but masculinity and femininity are similar, masculine cannot logically be anti-feminine).

Similarly, when one encounters an individual whose gender expression is counter-stereotypic, it may signal an active rejection of normative masculine ideology. That is, the other’s counter-stereotypicality may imply that that individual does not support the tacit cooperative relationship between men and women, challenging the status of men as dominant over women and challenging the (admittedly damning and damaging) status of women as requiring protection. Specifically, if adherence to gender stereotypes is related to men’s dominance and the continued subordination of women, perhaps violations of those stereotypes indicate a rejection of (or, at the least, a lack of support for) this normative masculine ideology.

**Present research**

When one endorses normative masculine ideology, one tacitly endorses adherence to normative gender roles (i.e., normative masculine identity as a category). This connection makes it likely that an individual’s expression of normative masculine identity will be seen as implicating their endorsement of normative masculine ideology. Similarly, one who is counter-stereotypic may be seen as rejecting normative gender roles and therefore, not supportive of normative masculine ideology. If an individual’s counter-stereotypicality serves as a cue that s/he does not endorse normative masculine ideology, then one might logically expect that person to be the target of backlash. That is, the policing of others’ identity is, at its heart, actually the policing of ideology. In the present research, it is the perception that one does not endorse normative masculine ideology that is expected to lead to backlash, and not one’s perceived
counter-stereotypicality, per se. The present research tested the hypothesis that the relationship between gender counter-stereotypicality and backlash is mediated by perceptions that gender role violators reject normative masculine ideology.

This research is an important extension of the backlash literature and an important contribution to the literature on identity more broadly. As noted, prior theory and research on backlash effects have suggested that gender counter-stereotypicality leads to backlash. I further suggest that gender counter-stereotypicality is a cue to non-support of normative masculine ideology and that it is this non-support that leads directly to backlash. In other words, I suggest that it is not gender identity per se that leads individuals to punish gender counter-stereotypic others, but gender ideology. Following this logic, I predicted that perceived support of normative masculine ideology would mediate the relationship between gender counter-stereotypicality and backlash.

Specifically, I broke these predictions into three specific hypotheses: 1) participants would punish counter-stereotypic targets more than stereotypic targets, 2) participants would punish targets who did not endorse normative masculine ideology more than those who did endorse normative masculine ideology, and 3) perceived target endorsement of normative masculine ideology would mediate the relationship between gender stereotypicality and punishment. To examine these hypotheses, I conducted two pilot studies and two experiments.

It is important to note that the present research was conducted with White participants only. Previous research on gender backlash has not explicitly examined race as a moderator, and therefore it is unknown whether the established effect generalizes to non-White individuals or interracial dyads. (Backlash research has, however, examined backlash against racially counter-stereotypic individuals (Phelan & Rudman, 2010)). Given that the category Black tends to be
associated with maleness (Goff, Thomas, & Jackson, 2008), it is possible that Black female targets, for example, would be seen as counter-stereotypic regardless of their performance on a gender-typed knowledge task. Therefore, in the current research, all participants included in analyses were White and all participants were explicitly told that their ostensible partners were White. Future studies will examine non-White participants’ ratings, perceptions of non-White targets and inter-racial dyads.

**Pilot A**

Pilot A was designed to examine the relationship between counter-stereotypicality and backlash. Participants interacted via computer with an ostensible other participant who was either gender stereotypic or gender counter-stereotypic. More specifically, using the same operationalization as Rudman and Fairchild (2004), the target’s performance on a gender-typed task was manipulated such that counter-stereotypic targets were those who performed well on an opposite-sex-typed knowledge test and stereotypic targets were those who performed well on a same-sex-typed knowledge test. Backlash was then measured via the difficulty of clues given to the target on a subsequent task. It was anticipated that participants would punish counter-stereotypic targets more than stereotypic targets.

**Method**

*Participants & Design*

Participants were 167 White undergraduate students (105 male) at the Pennsylvania State University. Following Rudman and Fairchild’s (2004) paradigm, the proposed study used a participant sex (male or female) x target sex (male or female) x type of gender knowledge task (masculine or feminine) between-participants design.

*Procedure*
On arrival, participants were greeted by a female experimenter and, in groups of four to eight, led to an experiment room and seated at individual computer workstations. After signing a consent statement, participants were told that via a computer interaction they would compete against a fellow participant completing a concurrent session either in the same room or next-door. Participants were also told that winners of the competition would participate in a follow-up competition that provided the chance to win monetary rewards, while the round one loser would be eliminated from competition but given the chance to help the victor of round without the chance for personal gain. Participants then completed a gender knowledge trivia test used in prior research on backlash effects (Rudman & Fairchild, 2004) and were told that their scores would be compared to the scores of their assigned partner.

Target stereotypicality was manipulated by altering the type of gender knowledge trivia test used in the “competition” (masculine knowledge test or feminine knowledge test) and by altering information about the competitor’s sex (male or female). Participants were randomly assigned to complete a trivia test that tapped either stereotypically masculine knowledge (e.g., cars, home repair, sports) or stereotypically feminine knowledge (e.g., celebrities, clothing, babies) – see Appendix A. After completing the gendered knowledge trivia task, participants learned that they were outperformed by their competitor, who received a score of 87% on the test compared to the participant’s score of 68%. In addition, target sex (male, female) and type of gendered knowledge task (masculine, feminine) were crossed to create gender counter-stereotypic and stereotypic conditions. In the counter-stereotypic conditions, participants lost to a person who performed well on an opposite-gender-typed knowledge task – either a man with feminine knowledge or a woman with masculine knowledge. By contrast, in the stereotypic
conditions, participants lost to a person who performed well on a same-gender-typed knowledge task – either a man with masculine knowledge or a woman with feminine knowledge.

Because participants lost the first competition, they could not compete for monetary rewards in the subsequent round. Instead, without the possibility for personal benefit, participants were asked to choose the clues to assist their former competitor who advanced to round two. Unbeknownst to participants, potential clues varied in helpfulness, such that the presentation of unhelpful or minimally helpful clues was a form of backlash (see below). After providing clues in round two, participants were debriefed and thanked for their participation.

Dependent Measure

Backlash. Using the materials of Rudman and Fairchild (2004), which are presented in Appendix B and taken from the video game “You Don’t Know Jack,” participants saw a series of gibberish sentences that rhyme with common phrases (e.g., “Buy wood an’ clutch it. Miff the hentoot cool”) that were each followed by three clues. In each set of clues, there was one clue that was unhelpful (e.g., “it expresses revulsion”), one clue that was minimally helpful (e.g., “it expresses an unwillingness to touch”), and one clue that was helpful (e.g., “it mentions a ten-foot pole”). For each phrase, participants chose a single clue to ostensibly help the other participant solve the riddle. The clue selected for each item was scored so that higher numbers reflect punishment or sabotage; unhelpful and minimally helpful clues were assigned a value of 1, whereas helpful clues were assigned a value of 0. Ratings were summed across items and averaged; higher scores indicate more difficult clue choices.
Results

Difficulty of clue scores were submitted to a participant sex (male, female) X target sex (male, female) X type of knowledge task (masculine, feminine) between-participants Analysis of Variance (ANOVA). A significant main effect of type of task emerged; participants chose less difficult clues when paired with a partner who took the feminine-knowledge task ($M = .37$) than the masculine-knowledge task ($M = .43$), $F(1, 159) = 7.66, p < .01, \eta^2 = .04$. This effect was, however, qualified by a marginally significant target sex by type of task interaction, $F(1, 159) = 3.31, p = .07, \eta^2 = .02$. As shown in Figure 1, participants who lost to a counter-stereotypic female target ($M = .45$) chose significantly more difficult clues than participants who lost to a stereotypic female target ($M = .35$), $t(78) = 3.18, p < .005$ (exceeding the standard of $p \leq .0125$ required based on the Bonferroni correction). In addition, participants paired with a female target who completed the masculine-knowledge test chose marginally significantly more difficult clues ($M = .45$) than participants paired with a male target who completed the masculine-knowledge task ($M = .40$), $t(87) = 1.63, p = .11)$. There was not a significant difference in clue difficulty for participants paired with counter-stereotypic versus stereotypic male targets or for participants paired with female targets who completed the feminine-knowledge test versus male targets who completed the feminine-knowledge test.
Pilot A Discussion

It was expected that there would be a significant interaction between target sex and test gender, such that targets who performed well on an opposite-gender-typed task would be helped less than those who performed well on a same-gender-typed task. This hypothesis was, however, only partially supported. Among female targets, the predicted pattern emerged; participants chose more difficult clues when paired with counter-stereotypic female targets than when paired with stereotypic female targets. Contrary to predictions, however, clue difficulty for male targets did not vary as a function of target stereotypicality. This result is consistent with prior research showing that women may be more likely to be punished or experience negative consequences than men under particular circumstances (e.g., Swim, Borgida, Maruyama, & Myers, 1989; Rudman & Glick, 2001; Rudman & Fairchild, 2004). For this reason, competing predictions were considered in Study 1; namely, backlash against counter-stereotypic targets was expected whether this occurred regardless of target gender or toward counter-stereotypic female (but not male) targets.
Why might backlash be directed toward counter-stereotypic female targets more so than male targets? We saw two possible lines of logic that could lead to this effect.

First, a potential explanation for the lack of backlash effects toward male targets is that participants may have forgotten or misremembered the sex of their assigned male partner after learning that he performed well on the feminine-knowledge test. In other words, some participants might have assumed that they had misread the reported sex of their partner or at least had enough confusion about the sex of their partner to dilute backlash effects. To rule out this possibility, akin to a hindsight bias (e.g., Roese & Olson, 1996), Studies 1 and 2 included a manipulation check, and participants who did not correctly report the sex of their partner were removed from analyses. In addition, target sex was repeated throughout Studies 1 and 2 to keep this information salient (e.g., “your partner has received his score”).

Second, counter-stereotypic female targets may be more threatening to the status quo than are counter-stereotypic male targets. Counter-stereotypic women (particularly in the context of the present research) are counter-stereotypic because they are more like men than the stereotypic women. As described above, women adopting characteristics associated with masculinity may indicate a striving for power or status and therefore a challenge to the status quo (e.g., Jackman, 1994). For men, however, counter-stereotypicality means adopting characteristics of women, which indicates a relinquishing of power that does not necessarily threaten the status quo (Connell & Messerschmidt, 2005). To the degree that this is the case, backlash toward female targets may be more pronounced than backlash toward male targets and system justification motives may be involved, introducing an alternate possible explanation to that proposed (i.e., perceived endorsement of masculine ideology).
On reflection, it is apparent that a system justification alternative explanation may also provide a viable alternative explanation if backlash effects emerge regardless of the gender of the target. System justification is the motivation to act in ways that support and reinforce the status quo (Jost & Banaji, 1994). One might argue that being out-performed by a counter-stereotypic individual would elicit system justification motives, leading one to punish that individual. That is, from a system justification perspective, the manipulation of target stereotypicality might impact participants’ broad or gender-specific system justification motives, rather than perceptions of endorsement of normative masculine ideology, leading to backlash. To examine the alternative possible system justification explanation, both broad and gender-specific system justification motives were measured in Study 1.

**Pilot B**

Pilot B, run concurrently with Pilot A, examined the relationship between target stereotypicality and perceptions of the target’s endorsement of normative masculine ideology. Target stereotypicality was manipulated in the same way as in Pilot A. Perceptions of the target’s endorsement of normative masculine ideology were then measured by asking participants to indicate how they thought the winning participant would complete the Male Role Norms Scale (MRNS; Thompson & Pleck, 1986). It was anticipated that participants would perceive stereotypic targets as endorsing normative masculine ideology more than counter-stereotypic targets.

**Method**

*Participants & Design*

Participants were 75 White undergraduate students (34 male) at the Pennsylvania State University, who received course credit in return for their participation. The study used a
participant sex (male, female) X target sex (male, female) X type of knowledge task (masculine, feminine) between-participants design.

Procedure

Pilot B used the same procedure as Pilot A, but the dependent variable was perceived endorsement of masculinity rather than backlash. Thus, participants were asked to report their perceptions of their partner’s endorsement of normative masculine ideology.

Measures

Perceived Normative Masculine Ideology. To assess the degree that participants perceived that their former competitor endorsed or rejected normative masculine ideology, participants completed the Male Role Norms Scale (MRNS, see Appendix C) as they believed the target would complete it. The 26-item MRNS was developed to assess three areas of normative masculinity: status/power (e.g., “A man always deserves the respect of his wife and children.”), toughness (e.g., “A real man enjoys a bit of danger now and then.”), and anti-femininity (e.g., “It is a bit embarrassing for a man to have a job that is usually filled by a woman.”). In this study, participants rated each item using a 7-point scale (from strongly disagree to strongly agree). After reverse scoring appropriate items, such that higher scores indicate the perception of greater endorsement of normative masculine ideology, I averaged across ratings to create a normative masculine ideology score ($\alpha = .90$).

Results

Normative masculine ideology scores were submitted to a participant sex (male, female) X target sex (male, female) X type of knowledge task (masculine, feminine) between-participants ANOVA. It was expected that participants would view counter-stereotypic targets as rejecting normative masculine ideology and stereotypic targets as endorsing normative
masculine ideology. The predicted two-way interaction between target sex and task gender was significant, $F(1, 67) = 4.22, p < .05, \eta^2 = .03$. As shown in Figure 2, male targets who completed the masculine-typed knowledge test ($M = 4.5$) were perceived to endorse normative masculine ideology significantly more than male targets who completed the feminine-knowledge test ($M = 3.99$), $t(34) = 3.26, p < .002$ (exceeding the standard of $p < .0125$ required based on the Bonferroni correction). Similarly, female targets who completed the feminine-typed knowledge test ($M = 4.32$) were perceived to endorse normative masculine ideology marginally significantly more than female targets who completed the masculine-typed knowledge test ($M = 4.04$), $t(33) = 1.79, p = .08$). No other contrasts were significant.

![Figure 2](image-url)

**Figure 2**

- **Target**
  - female target
  - male target
- **Perception of Endorsement**
  - male test
  - female test

**Pilot B Discussion**

As predicted, findings of Pilot B revealed that counter-stereotypic male targets (i.e., those who performed well on an opposite-sex-typed knowledge task) were seen as endorsing masculinity less than stereotypic male targets (i.e., those who performed well on a same-sex-
typed knowledge task). The contrast for female participants was in the expected direction, but did not attain significance. These findings suggest that gender stereotypicality may be seen as a cue to an individual’s gender ideology. To further explore the consequences of this relationship, Study 1 was designed to examine whether perceived gender ideology mediates the effect of gender counter-stereotypicality on backlash.

**Study 1**

The findings of Pilot A partially supported predictions. Target counter-stereotypicality led to backlash for female targets, replicating previous research (Rudman & Glick, 2001; Rudman & Fairchild, 2004). Although in the expected direction, comparisons between counter-stereotypic female targets and stereotypic male targets were marginally significant. This led to adjusted predictions for Study 1. Backlash toward counter-stereotypic targets was expected, and Study 1 examined whether this emerged regardless of target gender or toward female targets more strongly than male targets. In addition, given non-significant findings between counter-stereotypic and stereotypic male targets, Pilot A also underscored the need to include a manipulation check to ensure that participants correctly noted the sex of their assigned partner. The findings of Pilot B suggested that target counter-stereotypicality may lead to impressions the target rejects normative masculine ideology. This relationship was significant for male targets, was in the expected direction in both conditions and approached significance for female targets.

Study 1 was designed to test the twofold prediction that counter-stereotypic (vs. stereotypic) targets would be the targets of backlash and that relationship would be mediated by perceived target endorsement of normative masculine ideology. Toward that end, Study 1 used a participant sex (male, female) X target sex (male, female) X type of knowledge test (masculine,
feminine) between-participants design. Perceptions of the target’s endorsement of normative masculine ideology and backlash were measured in the same manner as in Pilots A and B.

In considering the aforementioned hypothesis, as noted above, a possible alternate explanation for the expected backlash results arose. System justification is the motivation to act in ways that support and reinforce the status quo (Jost & Banaji, 1994). One might argue that being out-performed by a counter-stereotypic individual would elicit system justification motives, leading one to punish that individual. That is, from a system justification perspective, the manipulation of target stereotypicality might impact participants’ broad or gender-specific system justification motives, rather than perceptions of endorsement of normative masculine ideology, leading to backlash.

If system justification, rather than perceptions of endorsement of normative masculine ideology, produced backlash against counter-stereotypic targets, then system justification motives would differ systematically by the stereotypicality of targets (i.e., greater system justification motives would be associated with assignment to a counter-stereotypic target). In addition, system justification would be associated with backlash. Finally, system justification would reduce or eliminate any effect among stereotypicality, difficulty of clues, and perceptions of endorsement. To rule out system justification as an alternate explanation for findings, participants’ completed measures of general system justification motives and gender-specific system justification motives.
Method

Participants & Design

Participants were 103 White (60 male) undergraduate students at the Pennsylvania State University. Study 1 used a target sex (male, female) X participant sex (male, female) X type of gendered knowledge task (masculine, feminine) between-participants design.

Procedure

The procedure for Study 1 was the same as that of Pilots A and B, with a few minor exceptions. First, participants were reminded of their partner’s sex throughout the experiment (e.g., “your partner has received his score for the trivia task”) to ensure that this information was salient. Second, following the manipulation of target stereotypicality, participants completed measures of both perceived endorsement of masculinity and backlash. Third, system justification motives (broad and gender-specific) were assessed. Finally, a manipulation check followed completion of other study procedures. Participants were asked to recall the sex of the target with whom they were paired. All participants who could not recall or recalled incorrectly were eliminated from subsequent analyses (N = 6, four were paired with male targets, two with female targets).

Measures

Perceived Endorsement of Masculine Ideology. As in Pilot B, the MRNS was used to assess perceived endorsement of masculine ideology (α = .91).

Backlash. The measure was the same as that used in Pilot A.

System Justification. As shown in Appendix D, participants indicated their agreement with the 8 items (e.g., “In general, I find society to be fair”) of the system justification scale (Jost
& Kay, 2003) using a seven point scale (from strongly disagree to strongly agree). After reverse scoring appropriate items, I averaged across responses to create a system justification score for each participant, with higher scores indicating greater system justification ($\alpha = .78$).

**Gender-Specific System Justification.** Participants also completed a modified version of the gender-specific system justification scale (Jost & Kay, 2005). As shown in Appendix E, using a 7-point scale (from strongly disagree to strongly agree), participants indicated agreement with 5 items (e.g., “In general, relations between men and women are as they should be”). After reverse scoring appropriate items, I averaged across responses to create a system justification score for each participant, with higher scores indicating greater system justification ($\alpha = .81$).

**Results**

Each variable (clue difficulty, perceived endorsement of masculinity, and the two system justification motives) was submitted to a participant sex (male, female) X target sex (male, female) X type of gendered knowledge task (masculine, feminine) between-participants ANOVA. I expected backlash effects such that counter-stereotypic targets would be the recipients of more difficult clues (or less help) than stereotypic targets. Based on the logic and findings documented to this point, I expected backlash effects to emerge in one of two forms. If, as predicted by Rudman and Fairchild (2004), counter-stereotypic targets are met with backlash regardless of target gender, then a target sex by type of knowledge task interaction on clue difficulty and perceptions of normative masculinity should emerge. In contrast, backlash effects may emerge in response to female but not male targets, replicating the findings of Pilot A and some of Rudman’s backlash research (e.g., Rudman & Glick, 2001). Thus, contrasts comparing the magnitude of backlash toward and perceptions of normative masculinity in stereotypic versus counter-stereotypic targets will be performed within gender.
Analyses of clue difficulty revealed a significant main effect of participant sex, $F(1, 97) = 5.08, p < .05, \eta^2 = .05$; women ($M = .66$) chose more difficult clues than men ($M = .59$) across conditions. There was also a marginally significant main effect of type of gendered-knowledge test, $F(1, 97) = 3.39, p = .07, \eta^2 = .03$; participants chose more difficult clues when paired with targets who completed the feminine-knowledge test ($M = .66$) than targets who completed the masculine-knowledge test ($M = .60$). The two-way interaction between target sex and type of gendered-knowledge test did not reach acceptable levels of statistical significance, $F(1, 97) = 2.56, p < .11, \eta^2 = .03$. In addition, as shown in Figure 3, although difficulty of clues for female targets varied as a function of target stereotypicality, the means were in the opposite direction as predicted; stereotypic women were the recipients of more difficult clues than were countersistypic women.

A single significant effect emerged from analyses of perceived endorsement of normative masculine ideology. There was a significant main effect of target sex, $F(1, 97) = 6.26, p = .01, \eta^2 = .06$; participants perceived male targets ($M = 4.61$) to endorse normative masculine ideology.
more strongly than female targets ($M = 4.21$). Importantly, the target sex by type of gender-knowledge test interaction did not approach significance.

Because the predicted results did not emerge on clue difficulty or perceived endorsement of normative masculine ideology, mediational analyses were not conducted and attempts to rule out alternate explanations for effects were not necessary. Instead, attention was turned to a set of exploratory analyses.

*Exploratory Analyses*

Separate ANOVAs were performed for broad system justification motives and gender-specific system justification motives. No significant effects emerged from either analysis. The only effect to approach significance was a marginally significant main effect of participant sex that emerged on broad system justification motives, $F(1, 97) = 2.81, p < .10, \eta^2 = .03$; women ($M = 4.45$) endorsed broad system justification motives more strongly than did men ($M = 4.05$). In addition, neither broad nor gender-specific system justification motives was correlated with clue difficulty ($r = -.01, r = .11$, respectively, both *n.s.* ) or perceived endorsement ($r = -.14, r = .06$, respectively, both *n.s.*).

Although analyses for broad and gender-specific system justification motives suggested that they did not function as alternate explanations for the predicted effect, research suggests that trait system justification motives are associated with attempts to exert control over external circumstances that are inconsistent with worldview (Kay et al., 2009). Therefore, the possible role of system justification motives (broad and gender-specific) as a moderator for backlash effects was considered.

The dataset was recoded to combine target sex and type of gendered knowledge test into one stereotypicality variable. Participants paired with targets whose sex did not match the
gender-typed knowledge test were coded as being in the counter-stereotypic condition, while participants paired with targets whose sex matched the gender-typed knowledge test were coded as being in the stereotypic condition. Collapsing across participant gender, multiple regression analyses were conducted testing the predictor variables target sex, stereotypicality, system justification motives, and the interaction terms for the outcome variable of helping. For gender-specific system justification, no significant effects emerged. For broad system justification motives, a number of significant effects emerged. As seen in Table 1, each factor significantly predicted helping. Consistent with prior research (Swim, Borgida, Maruyama, & Myers, 1989), female targets received significantly less helping than male targets. This and other main effects were qualified by the significant three-way interaction. However, simple slopes analyses revealed no significant differences for the three-way interaction. For the two-way interaction between system justification and stereotypicality, the slopes were significantly different, \( t = 1.63, p < .05 \); higher system justification motives were associated with harder clues for counter-stereotypic targets while lower system justification motives were associated with harder clues for stereotypic targets.
Table 1

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized B</th>
<th>Std. Error</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stereotypicality</td>
<td>.04</td>
<td>.03</td>
<td>1.37</td>
<td>.17</td>
</tr>
<tr>
<td>System Justification</td>
<td>.02</td>
<td>.02</td>
<td>1.00</td>
<td>.32</td>
</tr>
<tr>
<td>Target Sex</td>
<td>.01</td>
<td>.03</td>
<td>.55</td>
<td>.59</td>
</tr>
<tr>
<td>Stereotypicality</td>
<td>.27</td>
<td>.13</td>
<td>2.08</td>
<td>.04</td>
</tr>
<tr>
<td>System Justification</td>
<td>.06</td>
<td>.03</td>
<td>1.96</td>
<td>.05</td>
</tr>
<tr>
<td>Target Sex</td>
<td>.02</td>
<td>.13</td>
<td>.12</td>
<td>.90</td>
</tr>
<tr>
<td>Stereo*Sys. Just</td>
<td>.06</td>
<td>.03</td>
<td>2.11</td>
<td>.04</td>
</tr>
<tr>
<td>Stereo*Target Sex</td>
<td>.06</td>
<td>.05</td>
<td>1.06</td>
<td>.29</td>
</tr>
<tr>
<td>Sys. Just.*Target Sex</td>
<td>-.01</td>
<td>.03</td>
<td>-.27</td>
<td>.79</td>
</tr>
<tr>
<td>Stereotypicality</td>
<td>.65</td>
<td>.18</td>
<td>3.65</td>
<td>.000</td>
</tr>
<tr>
<td>System Justification</td>
<td>.12</td>
<td>.04</td>
<td>3.42</td>
<td>.001</td>
</tr>
<tr>
<td>Target Sex</td>
<td>.44</td>
<td>.19</td>
<td>2.33</td>
<td>.02</td>
</tr>
<tr>
<td>Stereo*Sys. Just</td>
<td>.16</td>
<td>.04</td>
<td>3.68</td>
<td>.000</td>
</tr>
<tr>
<td>Stereo*Target Sex</td>
<td>-.66</td>
<td>.24</td>
<td>-2.71</td>
<td>.008</td>
</tr>
<tr>
<td>Sys. Just.*Target Sex</td>
<td>-.11</td>
<td>.05</td>
<td>-2.47</td>
<td>.02</td>
</tr>
<tr>
<td>Stereo*Sys.*Target Sex</td>
<td>.18</td>
<td>.06</td>
<td>3.01</td>
<td>.003</td>
</tr>
</tbody>
</table>

Considering alternate evidence for a relationship between stereotypicality and perceptions of endorsement of normative masculine ideology, the data file was then split on the basis of stereotypicality condition and correlations between clue difficulty and perceived endorsement of normative masculine ideology were estimated separately for each condition. Interestingly, perceived endorsement of normative masculine ideology was significantly correlated with clue difficulty in the counter-stereotypic condition, \( r(53) = .30, p < .05 \), but not in the stereotypic condition, \( r(52) = .05, n.s. \).

Study 1 Discussion

Study 1 was designed to test three interrelated hypotheses: (1) participants paired with counter-stereotypic targets (particularly female targets) would choose more difficult clues than those paired with stereotypic targets, (2) participants paired with counter-stereotypic targets would perceive those targets as endorsing normative masculine ideology less than stereotypic
targets, and (3) perceptions of endorsement of normative masculine ideology would mediate the relationship between target stereotypicality and clue difficulty. The first hypothesis was not supported in initial planned analyses. Participant sex emerged as the sole significant effect, with women choosing more difficult clues than men. This result is consistent with patterns exhibited in Rudman & Fairchild’s (2004) research. Findings also did not support the second hypothesis. The planned analyses did not reveal any significant effects of stereotypicality on perceived endorsement of normative masculine ideology. Rather, results suggested that participants used targets’ sex as a guide to endorsement, given that men were perceived as endorsing normative masculine ideology more strongly than women. The third hypothesis was not tested, given that it relied on support for the prior two hypotheses.

Interestingly, when clue difficulty was examined by stereotypicality condition with system justification motives included as a moderator, the predicted pattern emerged for those high in system justification, though this relationship was not significant. In addition, those low in system justification displayed the opposite of the traditional backlash effect, choosing significantly more difficult clues when paired with stereotypic targets than counter-stereotypic targets. These oppositional patterns of effects may help explain the lack of the predicted pattern in Pilot A. Broad system justification motives appear to be an important moderator for this sample.

Although the predicted analyses did not reveal the expected results for perceptions of endorsement of masculinity, exploratory correlation analyses suggested that there may be a connection between endorsement and clue difficulty for those presented with counter-stereotypic targets. Given the somewhat arcane nature of the information tested in the trivia task, perhaps the stereotypicality manipulation alone was not sufficient to elicit strong impressions of one’s
endorsement of gender ideology, particularly for those targets presented as stereotypic. That is, perhaps arcane knowledge of trivia associated with one’s gender (e.g., women knowing about developmental stages of children) is not a cue to one’s position on gender equality. Therefore, to examine differences in the relationship between clue difficulty and perceived endorsement for those paired with stereotypic versus counter-stereotypic targets, additional correlation analyses were conducted.

For those paired with counter-stereotypic targets, increases in perceived endorsement of masculinity were associated with increases in clue difficulty, while they were not associated for those paired with stereotypic targets. While this is clearly not definitive evidence of the theorized relationship between these constructs, it does offer some support for key conceptual associations.

Were stereotypicality and the association between clue difficulty and perceived endorsement not associated, the correlations between these variables should have been comparable for those paired with counter-stereotypic and stereotypic targets. Similarly, were clue difficulty and perceived endorsement not related at all, both correlations should have been non-significant.

Given that results suggest that the stereotypicality manipulation alone might not be sufficient to produce consistent results for perceptions of endorsement of normative masculine ideology, endorsement was directly manipulated in Study 2. This allowed for further examinations of the relationship between clue difficulty and endorsement of masculinity.

One potential explanation for participants’ use of target sex as a cue in gauging the target’s endorsement of normative masculine ideology lies in the target sex manipulation. After potential problems with the manipulation of target sex in Pilot A, target sex was repeated to the participant in Study 1. It is possible that this repetition led participants to rely more heavily on target sex than any other factor in determining target endorsement of normative masculinity.
Given that the expected results were not found, exploring alternate hypotheses is somewhat moot. Analyses exploring relationships between key constructs and system justification motives (both broad and gender-specific) revealed no significant relationships. That neither system justification motive was affected by the stereotypicality manipulation is consistent with prior research suggesting that similar state manipulations do not alter system justification motives (Jost & Kay, 2005). Interestingly, broad system justification motives moderated the relationship between stereotypicality and clue difficulty. This result is consistent with prior research suggesting that trait system justification motives are associated with attempts to exert control over external circumstances that are inconsistent with worldview (Kay et al., 2009). For this reason, system justification motives were included in Study 2 as a possible moderator of effects.

Contrary to expectations, the predicted two-way interaction for perceived endorsement was not significant. One potential explanation for this result is related to measure order. Participants in Study 1 completed the MRNS prior to completing the backlash measure. Perhaps completing the MRNS made gender cooperation motives more salient, as it contains items related to gender complementarity (e.g., “It is a bit embarrassing for a man to have a job that is usually filled by a woman”). Reading these items may have had the effect of making male participants more likely to help female targets and vice versa. For this reason, the order of completion for the MRNS and backlash measure were counterbalanced in Study 2.

Another methodological concern associated with Study 1 is similarly a limitation of Rudman and Fairchild’s (2004) research. As I mentioned above, there are multiple types of masculinity threat. Rudman and Fairchild’s operationalization of stereotypicality creates a potential confound between sex and threat type. That is, for male participants in the study, being
out-performed by a woman on a male-knowledge test could be threatening to their sense of
themselves as masculine. Being beaten by a woman on a test on which men should perform well
might make some men feel as though they are not adequately masculine and call into question
their own identity as masculine.

Given aforementioned differences in the precariousness of gender identities and different
social pressures for women (i.e., minimal pressure for the average women to be normatively
masculine), female participants, on the other hand, are less likely to experience either this
prototypicality masculinity threat or a threat to their feminine identity in a similar manner.
However, both men and women may have been impacted by legitimacy threats. That is, men
may be experiencing threats to their own gender identity as well as to the legitimacy of
normative masculinity more broadly, whereas women may be experiencing only legitimacy
threats (given that women, too, are implicated in the delegitimizing of normative masculinity, as
detailed above). In Rudman and Fairchild’s research, this confound did not appear to impact
results, but it remains unclear whether men and women in those studies were motivated by
different processes to punish counter-stereotypic individuals. To reduce the likelihood of the
experience of multiple identity threats, only women were recruited for participation in Study 2.

Given that women chose more difficult clues, on average, than men, concerns about
participant engagement in research were aroused. Prior research at this university with men has
suggested that the experience of masculinity threat may lead White men to disengage from
research tasks (Goff, Di Leone, & Kahn, 2012). This offers further support for recruiting only
female participants for Study 2.

Another potential limitation of Study 1 is the backlash measure. Given that the measure
itself appeared to function differently in the present research (both in Pilot A and Study 1) from
Rudman and Fairchild’s research, and only offered participants a three-point scale for each item, a backlash measure with additional clue choices was sought for Study 2. For this reason, a similar measure taken from prior research was used in Study 2 and offered a broader scale, allowing for greater variability in the backlash measure.

**Study 2**

To further examine the relationship between target stereotypicality, perceived endorsement of masculine ideology, and backlash, Study 2 crossed target stereotypicality with a direct manipulation of the target’s endorsement of masculine ideology via a brief introductory statement from the target. In addition, a new backlash measure was used to address potential problems associated with the backlash measure used in Study 1 (and in Rudman and Fairchild, 2004). Lastly, due to potential masculinity threat confounds associated with male participants, as well as prior unsupported hypotheses, only women were recruited for Study 2. Study 2, therefore, used a target sex (male, female) X type of gendered knowledge test (masculine, feminine) X target endorsement of normative masculine ideology (endorse, reject, no information) between-participants design.

Participants completed measures of backlash, perceptions of target endorsement of normative masculine ideology, and system justification motives. I predicted a main effect of target endorsement of normative masculine ideology for clue difficulty; targets who endorsed normative masculine ideology would be given less difficult clues than targets who rejected normative masculine ideology. In addition, with no information provided about one’s acceptance or rejection of normative masculine ideology, it was predicted that counter-stereotypic targets would be punished more than stereotypic targets. That is, it was expected that clue difficulty analyses would reveal a significant 3-way interaction between target sex, type of gendered-
knowledge test, and endorsement condition such that those who rejected normative masculine ideology would be punished more than those who endorsed normative masculine ideology.

Method

Participants & Design

Participants were 144 White female undergraduate students at the Pennsylvania State University. Participants were randomly assigned to one of 12 conditions created by crossing target sex (male, female) X type of gendered knowledge test (masculine, female) X target endorsement of masculinity (endorse, reject, no information) between-participants design. As in prior studies, participants competed with a target on a trivia task. After losing to the target, participants read a brief introductory statement and then chose clues for the target’s subsequent competition. Primary dependent measures were clue difficulty and perceptions of endorsement of masculinity. The system justification measures used in Study 1 were also included as potential moderators.

Procedure

The procedure for Study 2 was similar to that of Pilot Studies A and B and Study 1. The experimenter told participants that they would be competing with a fellow participant. After completing the gendered-knowledge trivia challenge, participants learned that they had been outperformed. Participants were then told that, as winner of the trivia task, their ostensible partner would be asked to write a brief response to a series of “getting to know you” questions that the participant would read (see Appendix F). After participants received feedback on the trivia task, they read the brief getting-to-know-you summary that was ostensibly written by the target. The summary contained the endorsement manipulation, taken from the Male Role Norms Inventory – Revised (MRNI-R, Levant et al., 2007); the other participant’s response to a
question related to the MRNI-R construct of reliance on others contained the manipulation (“How do you feel about group projects in classes?”). In the endorsement condition, the answer read, “It’s fine. I just think that when guys are sick or something or can’t work they should just suck it up and do their job.” In the rejection condition, the answer read, “It’s fine. I think it’s good for guys to just be ok with it if they can’t do their work when they’re sick though and not try to push themselves so much.” In the no information condition, the answer read, “It’s fine. I don’t really mind it.” (As seen in Appendix F, incorrect capitalization and punctuation were included to foster the impression that a college student typed it.) Other questions and responses were also included as filler and to mask the manipulation’s intent. Participants read the target’s summary and then completed the backlash measure and completed the MRNS as they believed the target would fill out the measure, as well the measures of system justification. The order of the backlash measure and the MRNS was counterbalanced across participants to account for any potential order effects. Finally, prior to debriefing, a manipulation check followed completion of other study procedures. Participants were asked to recall the sex of the target with whom they were paired. All participants who could not recall or recalled incorrectly were eliminated from subsequent analyses (N = 2).

Measures

Perceived endorsement of normative masculine ideology. As in Pilot B and Study 1, participants completed the MRNS as they believed the target would complete the measure (α = .87). This was included as a manipulation check to ensure that the manipulation of target endorsement was successful.

Backlash. Modifying Johnson, Petzel, Zarantonello, and Johnson’s (1985) measure of problem solving, backlash was measured by asking participants to help a partner guess a
common target word via clue words. For example, the participant would be presented with the target word “man”, and the participant would choose one clue from a list of ten words, such as “male” (a highly helpful clue) or “gaffer” (a highly unhelpful clue). The difficulty of hint words ranged from 1 (most helpful) to 10 (least helpful) and was determined by pretesting. The ten word-clue groups with the most agreement across raters were used in the scale. Hint word difficulty was summed across all items and averaged to create a helpfulness score from 1 to 10. Higher scores indicate more difficult clues. For a complete list of words and clues, see Appendix G. Alpha for this sample was .71.

System justification. Participants completed the system justification measures (broad and gender-specific) used in Study 1 (αs = .80 and .77, respectively).

Results

As a manipulation check, I conducted an independent samples t-test on perceived endorsement of masculine ideology for the rejection (M = 4.23) and endorsement (M = 4.65) of normative masculine ideology conditions to ensure that they were significantly different, t(92) = 2.09, p < .05. In addition, I conducted separate independent samples t-tests to compare clue difficulty and perceived endorsement scores based on counterbalancing order to ensure that measure order did not affect ratings on either measure. Perceived endorsement of masculinity scores did not significantly differ based on measure order, t(142) = 1.03, n.s. Clue difficulty did not significantly differ by measure order, but there was a marginally significant difference, such that those who completed the endorsement of masculinity measure prior to the backlash measure chose marginally less difficult clues, t(142) = 1.78, p = .10. However, results did not differ when conducted with the full sample and with just the portion of the sample who received the backlash measure prior to the perceived endorsement measure.
Clue difficulty and system justification motives (broad and gender specific) were submitted to separate target sex (male, female) X 2 type of gendered-knowledge test (masculine, feminine) X target endorsement of normative masculine ideology (endorse, reject, no information) between-participants ANOVAs. It was expected that clue difficulty analyses would reveal a significant 3-way interaction between target sex, type of gendered-knowledge test, and endorsement condition such that those who rejected normative masculine ideology would be punished more than those who endorsed normative masculine ideology. It was further expected that those targets without endorsement information would be punished in accordance with prior findings (i.e., those who performed well on opposite-sex-typed tests would be punished more than those who performed well on same-sex-typed tests, for those high in system justification). Based on results from Study 1, it was expected that the two system justification measures would not systematically differ based on stereotypicality or reported endorsement.

Analyses of backlash revealed a marginally significant effect of endorsement manipulation, \( F(1, 132) = 2.29, p < .10, \eta^2 = .02 \) in the opposite direction from that expected; those in the endorsement condition (\( M = 4.31 \)) chose more difficult clues than those in the rejection condition (\( M = 3.70 \)). No other significant effects emerged for backlash in this analysis.

As in Study 1, separate ANOVAs were performed for broad system justification motives and gender-specific system justification motives. No significant effects emerged from either analysis. In addition, neither broad nor gender-specific system justification motives was significantly correlated with clue difficulty (\( r = .03, r = -.01 \), respectively, both ns).

In light of results from Study 1 showing that broad system justification motives were a moderator of backlash effects, subsequent analyses including system justification were conducted. Given the lack of target sex and type of gendered-knowledge test effects, results were
collapsed across target sex and type of gender-knowledge test to create a stereotypicality variable, as in Study 1. That is, participants paired with targets whose sex did not match the type of gendered-knowledge test were coded as being in the counter-stereotypic condition, while participants paired with targets whose sex matched the test were coded as being in the stereotypicality condition. In addition, the median for each variable was calculated (system justification: Med = 4.04; gender-specific system justification: Med = 4.02) and data were split into low and high groups at this level of endorsement.

Separate system justification (low, high) by stereotypicality (counter-stereotypic, stereotypic) by endorsement condition (endorse, reject, no information) ANOVAs were then conducted to examine backlash effects. As in Study 1, no significant effects emerged for gender-specific system justification. For broad system justification motives, the two-way interaction between system justification motives and endorsement condition was significant, $F(1, 123) = 4.87, p < .05, \eta^2 = .04$. Post-hoc comparisons using the Tukey HSD test indicated that participants low in system justification chose significantly more difficult clues when paired with targets who endorsed normative masculine ideology ($M = 4.58$) than participants who rejected ideology ($M = 3.99$) at $p < .05$. Further, post-hoc comparisons revealed that participants high in system justification displayed the opposite pattern, choosing more difficult clues when paired with targets who rejected normative masculine ideology ($M = 4.42$) than targets who endorsed ideology ($M = 4.04$) at $p < .05$. The no information conditions did not differ significantly from the endorsement or rejection conditions for those low in system justification or those high in system justification.
Study 2 Discussion

Study 2 was designed to test two hypotheses. First, targets who endorsed normative masculine ideology were predicted to be punished less than targets who rejected normative masculine ideology. Second, with no information provided about one’s acceptance or rejection of normative masculine ideology, counter-stereotypic targets were predicted to be punished more than stereotypic targets (i.e., the three-way interaction for clue difficulty would be significant). The first hypothesis was not supported in initial planned analyses. A main effect of endorsement condition was marginally significant for clue difficulty, but it was in the opposite direction from that expected. Findings also did not support the second hypothesis; the three-way interaction for clue difficulty was not significant.

Following from results in Study 1, clue difficulty was examined by stereotypicality and endorsement conditions with system justification motives included as a moderator. The predicted pattern emerged for those high in system justification, while the opposite of the predicted pattern emerged for those low in system justification motives. Those high in system justification chose more difficult clues when paired with targets who rejected normative masculinity ideology than targets who endorsed normative masculine ideology. Again, this oppositional pattern of effects may help explain the lack of the predicted pattern in initial planned analyses, emphasizing the importance of broad system justification motives as a moderator for this sample.

Importantly, endorsement condition and not stereotypicality predicted clue difficulty when system justification was included as a moderator. While this is a deviation from the initial prediction, it still lends support to study hypotheses. Specifically, it suggests that, for those who are motivated to see the extant social system as just, rejection of normative masculine ideology
leads to punishment. Interestingly, it also suggests that, for those less motivated to see the extant social system as just, endorsement of normative masculine ideology leads to punishment.

Consistent with Study 1, analyses exploring relationships between key constructs and system justification motives (both broad and gender-specific) revealed no significant relationships other than the moderation described above.

Given that only women were included in Study 2, significant clue difficulty results suggest that women are motivated to protect normative masculine ideology. The system justification results are particularly relevant in considering the implications of this result. As has been shown in prior research on system justification motives, even those who are at the bottom of social power hierarchies can be motivated to see those same systems as just (Eagly & Mladinic, 1993; Jackman, 1994; Jost & Banaji, 1994). The results of Study 2 suggest that, as a result of system justification motives, women may engage in backlash against those who do not appear to share similar motivations to support extant gender hierarchies.

One limitation of Study 2 is the manipulation of target endorsement. It is possible that the term “guy” is no longer gender-specific enough that participants would assume the target was writing about men in particular. Additionally, given that the target in the endorsement condition described a somewhat less kind approach to fellow students than the target in the rejection condition, it is possible that target communalism, and thus target stereotypicality, was also manipulated. If this were the case, however, there likely would have been a difference between the endorsement or rejection conditions and the no information condition. Given that this result was not obtained, it suggests that this was not a problem in Study 2.

A further potential problem with the endorsement manipulation is the difficulty of ensuring that one is manipulating helping based on shared ideological beliefs as opposed to
liking based on perceived similarity. That is, in light of the moderating effects of system justification motives, is one more likely to punish or help as a result of perceived ideological beliefs or perceived similarities. In the present research, the two are somewhat confounded, preventing our ability to tease apart these competing hypotheses. For example, for participants higher in system justification, a target who endorses normative masculine ideology may be seen as both similar to the participant and therefore liked as well as supportive of one’s own ideological principles and therefore helped. It may be that these concepts – shared ideology and similarity – are largely inseparable in most contexts. Future research in this area would do well to include measures of perceived similarity to the target as well as liking of the target to begin to tease apart these concepts. Importantly, the present research suggests that, regardless of whether it is due to liking as a result of similarity or shared ideological beliefs, perceived endorsement of ideology (as evidenced by MRNS results in Study 2) impacts helping behaviors.

General Discussion

The present research sought to explain previously established backlash effects via perceptions of endorsement of normative masculinity. Overall, this explanation was not supported. First, consistent traditional gender backlash effects were not replicated. Second, the stereotypicality manipulation used in prior gender backlash research did not produce the predicted effects on perceptions of normative masculine ideology. One potential explanation for both of these issues is that the gender backlash effect has weakened over time.

I am not suggesting that gender backlash has been eradicated. Rather, it is possible that, among college students, the stereotypicality manipulation used is no longer sufficient to produce adequate perceptions of counter-stereotypicality. That is, perhaps performing well on an opposite-gender-typed knowledge test is no longer a cue to counter-stereotypicality to the extent
required to produce backlash. In particular results from Pilot A and study 1 suggest that the stereotypicality manipulation has little impact on punishment for male targets. Perhaps stereotypes of men have shifted among college students to include knowledge of topics generally associated with femininity. Alternately, given that including system justification as a moderator in Study 1 eliminated this lack of effects for male targets, it is possible that the lack of results for male targets in Pilot A can be accounted for by the oppositional pattern of results found when system justification was included as a moderator. Similarly, as has been suggested in prior research, under certain circumstances, women may be more likely to be punished than men (Swim, Borgida, Maruyama, & Myers, 1989).

Although perceptions of endorsement of normative masculine ideology were not shown to explain the relationship between stereotypicality and punishment, there was evidence in Study 2 that there is a relationship between perceived endorsement of normative masculine ideology and clue difficulty. These findings suggest that perceived endorsement may play a role in gender backlash regardless of perceptions of stereotypicality. That is, while stereotypicality may not be a cue to one’s endorsement or rejection of normative masculine ideology, endorsement information can lead to backlash.

Unexpectedly, the results of Studies 1 and 2 highlight the importance of considering system justification as a moderator in examinations of backlash. It follows from system justification research that those on either end of the system justification motivation spectrum would have different goals regarding extant hierarchies. The present research suggests that future studies exploring gender backlash should consider system justification motives as a moderator of backlash effects. In addition, that broad and not gender-specific system justification motives moderated effects is notable. Given that the key concepts in the present research dealt directly
with gender, it might be surprising that gender-specific system justification motives did not moderate effects. One potential explanation for this is that gender-specific system justification is too explicit a measure in a study that already deals explicitly with gender. That is, items that directly address gender relations may have been too reactive in this context. It may have been easier for participants to freely endorse broad system justification motives than gender-specific motives in a gender-relevant study.

One important implication of this research (and Study 2 in particular) is that masculinity functions not merely as an identity, but as an ideology that serves to legitimize the position of White men as powerful and women as subordinate. Within this masculine ideology, the low status of women and subordinate males is perpetuated by backlash behavior. In addition, the fear of backlash, as mentioned above, can serve to maintain the illusion that descriptive stereotypes are accurate. Future studies should further explore how masculinity functions as a legitimating ideology, allowing for explorations of alternative masculinities (see, e.g., Connell, 1992; Connell & Messerschmidt, 2005) and non-White participants and targets.
References


Prentice, D. A. & Carranza, E. (2002). What women should be, shouldn't be, are allowed to be, and don't have to be: The contents of prescriptive gender stereotypes. *Psychology of Women Quarterly, 26*, 269-281.


Appendix A

Male Knowledge Test

1. Anfernee Hardaway’s nickname is (Penny vs. Doc).
2. 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)
6–8. The next trials will show pictures of cars or motorcycles that you must identify. (Lamborghini vs. Ferrari) (Porsche vs. Mazda) (Honda vs. Suzuki)
9. A motorcycle engine turning at 8000 rpms generates an exhaust sound at (4000 rpms vs. 8000 rpms).
10. To help an engine produce more power you should (inject the fuel vs. reduce displacement).
11. In nature, the best analogy for a spark plug is (solar fire vs. lightning).
12. Karate originated in martial arts developed in (Japan vs. China).
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. Identify the machine gun depicted on the next screen. (M240G vs. M16A2)
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 (high vs. low).
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. By Olympic rules, boxing gloves for all weight classes weigh (12 ounces vs. 10 ounces).
27. When punching someone, you should aim your fist (a foot beyond optimal target vs. directly at target).
28. When punching someone, the majority of the force comes from (the speed of your fist vs. your upper arm and shoulder).
29. What’s the best way to deflect a punch? (use the forearm to block it vs. use hand to catch it).
30. When ramming a car to disable it, you should aim for the (rear passenger’s tire vs. front driver’s tire).

Female Knowledge Test

1. You wear Manolo Blahniks on your (head vs. feet).
2. Botox temporarily erases wrinkles by (skin hydration vs. muscle paralysis).
3. The designer of the handbags shown on the next screen is (Kate Spade vs. Ralph Lauren).
4. The company first to develop hair coloring was (Clairol vs. L’Oreal).
5. What is the woman in the next photo most likely using for a facial? (yogurt vs. egg whites)
6. Identify the designer of the evening gowns shown on the next four screens. (Valentino vs. Vera Wang) (Karl Lagerfeld vs. Oscar De La Renta)
7. The TV show “Sex in the City” popularized which drink? (Cosmopolitan vs. Manhattan)
8. Children typically start to teethe when they are (over vs. under) 1 year old?
9. Toilet training should start around the age of (36 months vs. 12 months).
10. Children should not be given which medication? (ibuprofen vs. aspirin)
11. How many cups of water does it take to cook 1 cup of rice? (2 cups vs. 3 cups)
12. Leftovers can be safely kept at room temperature for up to (4 hours vs. 2 hours).
13. If you don’t have baking powder, you substitute baking soda plus (salt vs. cream of tartar).
14. A roux is best described as a (sauce vs. cake).
15. Compared to men, women need more (iron vs. zinc).
16. Which of these contains a natural mood enhancer? (chocolate vs. caviar)
17. During pregnancy, morning sickness usually occurs in which trimester? (second vs. first)
18. What was the first website devoted to women? (Glamnet.com vs. Ivillage.com)
19. Who has written the most romance novels? (Betty Hale Hyatt vs. Dame Barbara Cartland)
20. As the best friend of the bride-to-be, you are most obligated to (be
the bridesmaid vs. host the shower).
22. What is the most common request from male sexual partners? (share your sexual fantasies vs. put on sexy lingerie)
23. Exercises that improve a woman’s sex life are called (Kegels vs. Pilates).
24. How far in advance should you send out your wedding invitations? (4 weeks vs. 6 weeks)
25. If a party invitation reads “festive casual,” you should wear (slacks and a blouse vs. cocktail dress).
26. According to The Rules, if you are in a long distance relationship, how many times should a man visit you before you visit him? (3 times vs. 1 time)
27. According to The Fabulous Girl’s Guide, if you’ve spent the night with a bad lover, in the morning you should (politely ask him to leave vs. feed him breakfast).
28. The photo on the next screen depicts the former CEO of Hewlett-Packard. Who is she? (Carly Fiorina vs. Debra L. Dunn)
29. Articles about parenting are more likely to be found in which magazine? (Cosmopolitan vs. Red Book).
30. The next 4 screens depict fashion “DO” and “DON’T” pictures. Which is the fashion “DO” (according to E!s Fashion Police)? (Catherine Zeta Jones vs. Ivana Trump) (Heather Graham vs. Kristin Davis) (Amanda Peet vs. Cindy Crawford) (Heather Graham vs. Britney Spears)
Appendix B

Correct Answer: I wouldn’t touch it with a 10-foot pole.
   a. It expresses revulsion.
   b. It expresses an unwillingness to touch.
   c. It mentions a 10-foot pole.
2. Gibberish: Let her chafe, Mankari.
Correct Answer: Better safe than sorry.
   a. It is something risky.
   b. Maybe you shouldn’t do it.
   c. The last word is a board game.
Correct Answer: Speak now or forever hold your peace.
   a. You might hear this in church.
   b. You might hear this during a wedding.
   c. It is a suggestion of speaking now.
Correct Answer: Pork: the other white meat.
   a. slogan for a type of meat
   b. type of meat from a pig
   c. have some pork tonight
5. Gibberish: No cuticle, more gracious thighs.
Correct Answer: Oh beautiful, for spacious skies.
   a. At school you sang it standing up.
   b. It’s a song about amber grain fields.
   c. It’s a song that has to do with fruited planes.
Correct Answer: The few, the proud, the Marines.
   a. It’s from a TV commercial.
   b. You might see it on a recruiting poster.
   c. It’s for a branch of the military.
7. Gibberish: Surly Hugh said “curly new thighs”.
Correct Answer: Early to bed, early to rise.
   a. It’s a rule for staying fit.
   b. It’s a rule for staying rich and smart.
   c. It makes night owls look bad.
Correct Answer: All’s well that ends well.
   a. It’s a Shakespeare comedy.
   b. It’s a well-known cliché.
   c. It’s all OK if it ends OK.
Correct Answer: Mary, Mary quite contrary.
   a. It’s from a nursery rhyme.
   b. It’s about a girl who gardens.
c. How DOES her garden grow?

10. Gibberish: Let's buy whey for the Thai day.
   Correct Answer: It's my way or the highway.
   a. It's said by a leader.
   b. It's said by someone who's unwilling to change.
   c. Hit the highway.
Appendix C

Instructions: Using the below scale, please respond to each item as you believe the other participant would respond. Consider each item from the perspective of the other participant and circle the response that you believe he/she is most likely to choose. If you have any questions, please ask the experimenter.

1. Success in his work has to be man’s central goal in this life.

   1----------------2-----------------3------------------4--------------------5--------------------6---------------------7
   Strongly               Neither Agree                                Strongly
   Disagree               nor Disagree                      Agree

2. The best way for a young man to get the respect of other people is to get a job, take it seriously and do it well.

   1----------------2-----------------3------------------4--------------------5--------------------6---------------------7
   Strongly               Neither Agree                                Strongly
   Disagree               nor Disagree                      Agree

3. A man owes it to his family to work at the best-paying job he can get.

   1----------------2-----------------3------------------4--------------------5--------------------6---------------------7
   Strongly               Neither Agree                                Strongly
   Disagree               nor Disagree                      Agree

4. A man should generally work overtime to make more money whenever he has the chance.

   1----------------2-----------------3------------------4--------------------5--------------------6---------------------7
   Strongly               Neither Agree                                Strongly
   Disagree               nor Disagree                      Agree

5. A man always deserves the respect of his wife and children.

   1----------------2-----------------3------------------4--------------------5--------------------6---------------------7
   Strongly               Neither Agree                                Strongly
   Disagree               nor Disagree                      Agree

6. It is essential for a man to always have the respect and admiration of everyone who knows him.

   1----------------2-----------------3------------------4--------------------5--------------------6---------------------7
   Strongly               Neither Agree                                Strongly
   Disagree               nor Disagree                      Agree

7. A man should never back down in the face of trouble.

   1----------------2-----------------3------------------4--------------------5--------------------6---------------------7
   Strongly               Neither Agree                                Strongly
   Disagree               nor Disagree                      Agree
8. I always like a man who’s totally sure of himself.

1
Strongly Agree
2
Neither Agree
3
nor Disagree
4
5
6
Strongly
Disagree
7

9. A man should always think everything out coolly and logically, and have rational reasons for everything he does.

1
Strongly Agree
2
Neither Agree
3
nor Disagree
4
5
6
Strongly
Disagree
7

10. A man should always try to project an air of confidence even if he really doesn’t feel confident inside.

1
Strongly Agree
2
Neither Agree
3
nor Disagree
4
5
6
Strongly
Disagree
7

11. A man must stand on his own two feet and never depend on other people to help him do things.

1
Strongly Agree
2
Neither Agree
3
nor Disagree
4
5
6
Strongly
Disagree
7

12. When a man is feeling a little pain he should try not to let it show very much.

1
Strongly Agree
2
Neither Agree
3
nor Disagree
4
5
6
Strongly
Disagree
7

13. Nobody respects a man very much who frequently talks about his worries, fears, and problems.

1
Strongly Agree
2
Neither Agree
3
nor Disagree
4
5
6
Strongly
Disagree
7

14. A good motto for a man would be “When the going gets tough, the tough get going.”

1
Strongly Agree
2
Neither Agree
3
nor Disagree
4
5
6
Strongly
Disagree
7

15. I think a young man should try to become physically tough, even if he’s not big.

1
Strongly Agree
2
Neither Agree
3
nor Disagree
4
5
6
Strongly
Disagree
7

16. Fists are sometimes the only way to get out of a bad situation.

1
Strongly Agree
2
Neither Agree
3
nor Disagree
4
5
6
Strongly
Disagree
7
17. A real man enjoys a bit of danger now and then.

1----------------2-----------------3------------------4--------------------5--------------------6---------------------7
Strongly               Neither Agree                                Strongly Disagree                                                       nor Disagree                      Agree

18. In some kinds of situations a man should be ready to use his fists, even if his wife or his girlfriend would object.

1----------------2-----------------3------------------4--------------------5--------------------6---------------------7
Strongly               Neither Agree                                Strongly Disagree                                                       nor Disagree                      Agree

19. A man should always refuse to get into a fight, even if there seems to be no way to avoid it.

1----------------2-----------------3------------------4--------------------5--------------------6---------------------7
Strongly               Neither Agree                                Strongly Disagree                                                       nor Disagree                      Agree

20. It bothers me when a man does something that I consider “feminine.”

1----------------2-----------------3------------------4--------------------5--------------------6---------------------7
Strongly               Neither Agree                                Strongly Disagree                                                       nor Disagree                      Agree

21. A man whose hobbies are cooking, sewing, and going to the ballet probably wouldn’t be my kind of guy.

1----------------2-----------------3------------------4--------------------5--------------------6---------------------7
Strongly               Neither Agree                                Strongly Disagree                                                       nor Disagree                      Agree

22. It is a bit embarrassing for a man to have a job that is usually filled by a woman.

1----------------2-----------------3------------------4--------------------5--------------------6---------------------7
Strongly               Neither Agree                                Strongly Disagree                                                       nor Disagree                      Agree

23. Unless he was really desperate, I would probably advise a man to keep looking rather than accept a job as a secretary.

1----------------2-----------------3------------------4--------------------5--------------------6---------------------7
Strongly               Neither Agree                                Strongly Disagree                                                       nor Disagree                      Agree
24. If I heard about a man who was a hairdresser and a gourmet cook, I might wonder how masculine he was.

1____________2______________3_____________4______________5___________________6________________7
Strongly             Neither Agree                  Strongly
Disagree            nor Disagree                  Agree

25. I think it’s extremely good for a boy to be taught how to cook, sew, clean the house, and take care of younger children.

1____________2______________3_____________4______________5___________________6________________7
Strongly             Neither Agree                  Strongly
Disagree            nor Disagree                  Agree

26. I might find it a little silly or embarrassing if a male friend of mine cried over a sad love scene in a movie.

1____________2______________3_____________4______________5___________________6________________7
Strongly             Neither Agree                  Strongly
Disagree            nor Disagree                  Agree
Appendix D

Instructions: Using the below scale, please respond to each item. Consider each item and circle the response that best represents how you feel. If you have any questions, please ask the experimenter.

1. In general, you find society to be fair

   1----------------2-----------------3------------------4--------------------5--------------------6---------------------7
   Strongly               Neither Agree                                Strongly
   Disagree               nor Disagree                      Agree

2. In general, the American political system operates as it should

   1----------------2-----------------3------------------4--------------------5--------------------6---------------------7
   Strongly               Neither Agree                                Strongly
   Disagree               nor Disagree                      Agree

3. American society needs to be radically restructured (R)

   1----------------2-----------------3------------------4--------------------5--------------------6---------------------7
   Strongly               Neither Agree                                Strongly
   Disagree               nor Disagree                      Agree

4. The United States is the best country in the world to live in

   1----------------2-----------------3------------------4--------------------5--------------------6---------------------7
   Strongly               Neither Agree                                Strongly
   Disagree               nor Disagree                      Agree

5. Most policies serve the greater good

   1----------------2-----------------3------------------4--------------------5--------------------6---------------------7
   Strongly               Neither Agree                                Strongly
   Disagree               nor Disagree                      Agree

6. Everyone has a fair shot at wealth and happiness

   1----------------2-----------------3------------------4--------------------5--------------------6---------------------7
   Strongly               Neither Agree                                Strongly
   Disagree               nor Disagree                      Agree

7. Our society is getting worse every year (R)
---2---3---4---5---6---7
| Strongly | Neither Agree | Strongly |
| Disagree | nor Disagree  | Agree    |

8. Society is set up so that people usually get what they deserve

---2---3---4---5---6---7
| Strongly | Neither Agree | Strongly |
| Disagree | nor Disagree  | Agree    |
Appendix E

Instructions: Using the below scale, please respond to each item. Consider each item and circle the response that best represents how you feel. If you have any questions, please ask the experimenter.

1. In general, relations between men and women are as they should be

1----------------2-----------------3------------------4--------------------5--------------------6---------------------7 Strongly
Neither Agree nor Disagree
Disagree Strongly Agree

2. In general, men’s and women’s roles operate as they should

1----------------2-----------------3------------------4--------------------5--------------------6---------------------7 Strongly
Neither Agree nor Disagree
Disagree Strongly Agree

3. Gender relations need to be radically restructured (R)

1----------------2-----------------3------------------4--------------------5--------------------6---------------------7 Strongly
Neither Agree nor Disagree
Disagree Strongly Agree

4. Men and women have the same shot at wealth and happiness

1----------------2-----------------3------------------4--------------------5--------------------6---------------------7 Strongly
Neither Agree nor Disagree
Disagree Strongly Agree

5. Society is set up so that men and women usually get what they deserve

1----------------2-----------------3------------------4--------------------5--------------------6---------------------7 Strongly
Neither Agree nor Disagree
Disagree Strongly Agree
Appendix F

Getting to Know You Questionnaire

1) Are you more of a night owl or an early bird? ___night owl_____________________

2) What is your favorite campus building? _____the hub__________________________

3) How do you feel about your major? _______i like it most of the time, but sometimes i think about switching. it’s good though ______________________

4) What’s your favorite class? ___comm 150 it’s a cinema class so we watch a lot of movies __________________________

5) How do you feel about group projects in classes?

[endorsement condition] it’s fine i just think that when guys are sick or something or can’t work they should just suck it up and do their job

[rejection condition] it’s fine i think it’s good for guys to just be ok with it if they can’t do their work when they’re sick though and not try to push themselves so much

[no information condition] it’s fine i don’t really mind it

6) Do you like college? ____yeah it’s good __________________________
Appendix G

1) rain
   a. drizzle
   b. shower
   c. precipitation
   d. deluge
   e. water
   f. storm
   g. pour
   h. flood
   i. volley
   j. spate

2) book
   a. novel
   b. writing
   c. volume
   d. paperback
   e. hardcover
   f. publication
   g. softcover
   h. monograph
   i. lexicon
   j. opus

3) pale
   a. colorless
   b. pasty
   c. ashen
   d. white
   e. faded
   f. bleached
   g. dull
   h. sallow
   i. wan
   j. pallid

4) bright
   a. sunny
   b. light
   c. shiny
   d. sparkly
   e. glaring
   f. aglow
   g. ablaze
   h. luminous
   i. radiant
   j. effulgent
5) loud
   a. noisy
   b. booming
   c. roaring
   d. deafening
   e. resonant
   f. crashing
   g. deep
   h. boisterous
   i. resounding
   j. sonorous

6) small
   a. little
   b. tiny
   c. short
   d. petite
   e. miniature
   f. runty
   g. inconsequential
   h. trifling
   i. scanty
   j. diminutive

7) street
   a. lane
   b. avenue
   c. boulevard
   d. route
   e. trail
   f. drive
   g. highway
   h. thoroughfare
   i. passage
   j. turf

8) sleep
   a. snooze
   b. doze
   c. nap
   d. slumber
   e. rest
   f. siesta
   g. dream
   h. repose
   i. lethargy
   j. torpidity

9) big
   a. large
b. bulky
c. huge
d. jumbo
e. massive
f. gigantic
g. enormous
h. substantial
i. prodigious
j. voluminous

10) talk
a. chat
b. speak
c. speech
d. conversation
e. dialogue
f. discussion
g. discourse
h. monologue
i. palaver
j. screed
Di Leone Vita

**Education**
The Pennsylvania State University, University Park, PA
PhD in Psychology 2012

The Pennsylvania State University, University Park, PA
M.S. in Psychology 2008

City University of New York, New York, NY
Graduate courses in psychology 2001-2002

Binghamton University, Binghamton, NY
B.A. in Philosophy and Comparative Literature 2000

**Research Positions**
Research Psychologist 2010-present
Women’s Health Sciences Division, National Center for PTSD
VA Boston Healthcare System

Research Assistant and Biomarker Specialist 2001-2004
HIV Center: Healthy Living Project
NY State Psychiatric Institute

**Publications**


**Teaching**
The Pennsylvania State University, University Park, PA:
Graduate Instructor: PSYCH 432 – Multicultural Psychology FA 2009 & SP 2010
Graduate Instructor: PSYCH 221 – Online Introduction to Social Psychology SU 2009
Graduate Instructor: PSYCH 221 – Introduction to Social Psychology SP 2009