

5-7-2011

# A Relational Perspective on Sex Stereotyping

Jessica Kang

*University of Connecticut - Storrs*, [jessica.j.kang@uconn.edu](mailto:jessica.j.kang@uconn.edu)

---

## Recommended Citation

Kang, Jessica, "A Relational Perspective on Sex Stereotyping" (2011). *Master's Theses*. 79.  
[http://digitalcommons.uconn.edu/gs\\_theses/79](http://digitalcommons.uconn.edu/gs_theses/79)

This work is brought to you for free and open access by the University of Connecticut Graduate School at DigitalCommons@UConn. It has been accepted for inclusion in Master's Theses by an authorized administrator of DigitalCommons@UConn. For more information, please contact [digitalcommons@uconn.edu](mailto:digitalcommons@uconn.edu).

A Relational Perspective on Sex Stereotyping

Jessica Kang

B.S., University of Washington, 2009

A Thesis

Submitted in Partial Fulfillment of the

Requirements for the Degree of

Master of Arts

at the

University of Connecticut

2011 \*

\* year of degree completion

APPROVAL PAGE

Master of Arts Thesis

A Relational Perspective on Sex Stereotyping

Presented by

Jessica J. Kang, B.S.

Major Advisor \_\_\_\_\_  
Colin Wayne Leach

Associate Advisor \_\_\_\_\_  
Felicia Pratto

Associate Advisor \_\_\_\_\_  
Janet Barnes-Farrell

University of Connecticut 2011 \*

\* year of degree completion

## Table of Contents

1. Abstract.....	iv
2. Introduction.....	1
2.1 Characteristics: Competence, Warmth and Morality.....	2
2.2 Traditional Sex Stereotyping.....	4
2.3 Traditional In-group Favoring Sex Stereotyping.....	7
2.4 Counter-traditional Sex Stereotyping.....	8
3. Current Study.....	9
3.1 Methods.....	10
3.2 Results and Discussion.....	12
4. General Discussion.....	21
5. References.....	26
6. Table.....	32
7. Figures.....	33

## Abstract

The current study adopts a relational perspective of sex stereotyping by taking into account the perceiver's group membership, the target group, and the content of the stereotype. We asked women and men to report their personal beliefs about men and women on three characteristics: competence, warmth and morality. The results showed that participants were engaging in three different patterns of sex stereotyping: traditional sex stereotyping (both sexes rated similarly by both male and female participants on traditional stereotypes), traditional in-group favoring sex stereotyping (participants favor his/her own group on a stereotype traditionally associated with his/her group), and counter-traditional sex stereotyping (participants favor his/her own group on a stereotype not traditionally associated with his/her group). This suggests that there can be consensus as well as contention on sex stereotypes.

### A Relational Perspective on Sex Stereotyping

Stereotypes have been conceptualized as one social psychological phenomenon that is dynamic, fluid and heavily dependent on the social relational context (Oakes, Haslam, & Turner, 1994; Leyens, Yzerbyt, & Schadron, 1994). Multiple components contribute to this social relational nature of stereotypes. For example, the evaluations of a target are affected not only by the group membership of the target being evaluated (e.g., women target) but also the perceiver's group membership (e.g., female perceiver) and the content of the stereotype (e.g., how warm the women target is perceived to be). Of importance is the group membership of the perceiver. The social groups that one belongs to influences perceptions of other individuals and their group membership (Oakes et al., 1994). For example, a woman's perceptions of men and women are different from a man's perceptions due to her group membership. Being a member of a group such as women will affect female participants' beliefs about groups in a number of ways. In particular, female participants' may exhibit in-group bias by seeing women as much better than men on positive characteristics (e.g., women are much more warm than men and more than male participants' see women) or they may demonstrate dissent against negative societal stereotypes regarding women (e.g., women are less competent than men).

Theoretically, there are at least three general patterns that may be observed in men and women's stereotypes of the two sex groups. One pattern is traditional sex stereotyping. This would be shown if both men and women endorse the traditional stereotypes of the groups. Thus, most participants would view women as more warm than men and view men as more competent than women, regardless of the participants' own sex. Another possible pattern is traditional in-group favoring sex stereotyping. Here men and women view their own group as having much more of the positive characteristics that traditional sex stereotypes ascribe to their in-group.

Thus, women would rate women as much more warm than men, whereas men would rate men as much more competent than women. A third pattern of sex stereotyping is counter-traditional sex stereotyping, in which men and women disagree with the traditional view of their group and instead view their group in a way that challenges traditional sex stereotypes. Such opposition could be seen in women viewing women as more competent than men or in men viewing men as more moral than women. Each of these three patterns is discussed in previous sex stereotyping research, but not necessarily by the same authors. Because each pattern of sex stereotyping has typically been examined in isolation (e.g., only investigating in-group favoring stereotyping), the current study will analyze all three patterns of sex stereotyping together and consider each pattern in more detail than in previous research. Before discussing the three patterns of sex stereotyping, we will discuss the content of stereotypes.

### **Competence, Warmth and Morality**

Researchers have theorized that competence (also known as agency, power) and warmth (also known as benevolence, communion) are the key characteristics on which groups are evaluated (e.g., Eagly & Kite, 1987; Williams & Best, 1982). Much of the previous research has shown that men are associated with competence because competence is an indication of being more successful socio-economically and as having higher status and power (Conway, Pizzamiglio & Mount, 1996; Eagly & Steffen, 1986). Eagly and Mladinic (1994) have argued that although women are generally evaluated more favorably than men, this positive evaluation is driven by a view of women as nurturing and warm. Thus, consistent with traditional sex stereotypes, men are perceived as more competent than women whereas women are perceived a more warm than men (Fiske et al., 2002).

Many researchers have theorized that traditional societal stereotypes lead people to perceive women as more moral than men. For example, Glick and Fiske (2001) argue that women are perceived to be moral than men due to benevolent sexism. Benevolent sexism depicts women as needing to be supported, protected and placed on a pedestal as moral idols. Although benevolent sexism is a more subtle form of prejudice than hostile sexism, it still promotes legitimizing beliefs (Sidanius, Pratto & Levin, 1996) that perpetuate the placement of men above women in a hierarchy. Benevolent sexism privileges men as the dominant group that has the “burden” of protecting women as a subordinate group. Therefore, the high status of men is justified by benevolent sexism. Because the status of men at the top of the hierarchy is justified by their responsibility to protect women, women who seek to gain power or move up the hierarchy are seen as ungrateful and are recipients of backlash (Glick & Fiske, 2001). Conversely, women who utilize men’s power as protectors and providers (i.e., depending on a high status male partner) do not “protest” against benevolent sexism and instead support it. Therefore, although men and women endorse benevolent sexism for different reasons, benevolent sexism is a reason for both men and women engaging in the traditional sex stereotyping of perceiving women as more moral than men.

Furthermore, Glick & Fiske (2001) have argued that the traditional subtype of women as a housewife is seen as more morally trustworthy (not power seeking) and morally virtuous (sexually chaste) than the career woman or seductress subtype. Men who endorse benevolent beliefs are more likely to view women as housewives and to perceive them as more moral (in both ways). Women also endorse benevolent beliefs particularly when thinking about the traditional housewife subtype of women. Becker (2010) has shown that women who internalize



benevolent sexism beliefs and think of the traditional housewife subtype of women, rather than the non-traditional subtype (e.g., career woman) more strongly endorse benevolent sexism. Moreover, Altermatt and colleagues (2003) found that both men and women perceive women targets as being high in moral virtue (described as “fair” and “honest”) and sexual virtue (described as “believing that sex is appropriate only within a committed relationship”) when the women targets are described as in a nurturing social role, such as homemaker or mother.

Taken together, research on benevolent sexism suggests that both men and women see women who are in traditional roles as more moral than women in non-traditional roles in both morally virtuous and sexually virtuous ways. Thus, men and women participating in traditional sex stereotyping will both stereotype women as more moral than men. However, there is also reason to think that a different pattern of sex stereotyping might be observed for morality. Recent research suggests that morality could be a contentious characteristic because it is a valued characteristic for both low and high status groups (Leach, Ellemers, & Barreto, 2007). Because morality is a treasured characteristic for both low and high status groups, it is possible that men and women would engage in social competition to view their in-group as more moral. Although, women are traditionally associated with morality, men may also see their in-group as moral. Thus, there are competing hypotheses for sex stereotyping on morality. Traditional stereotyping would suggest that both male and female participants would rate women higher than men on morality. However, it is also plausible that male participants may exhibit counter-traditional stereotyping by perceiving men as equally or more moral than women. Female participants may show in-group favoritism by seeing women as more moral than male participants see women. We will now discuss the three patterns of sex stereotyping in more detail.

### **Traditional Sex Stereotyping**

Much of the previous research on sex stereotypes has endorsed the notion that men and women have similar perceptions of the sexes because they share the same societal stereotypes (e.g., Broverman, Vogel, Broverman, Clarkson & Rosenkrantz, 1972; Eagly & Steffen 1984; Williams & Best, 1986). Due to the assumption that men and women share the same societal stereotypes, researchers have collapsed men and women's trait ratings of groups. Thus, it is often unclear how much women and men actually express the same beliefs.

Why is there an assumption that there is consensus between men and women about sex stereotypes? Consider society as a hierarchy where groups continuously act and react to each other depending on their position in the hierarchy. Stereotype content is shared throughout the hierarchy by the different social groups. Sidanius, Levin and Pratto (1996) argued that stereotypes are legitimizing myths that exist to maintain the structure of the hierarchy and, importantly, the positions of high and low status groups. Sidanius and colleagues' theory of legitimizing myths supports the idea that both low and high status groups agree upon their role in the hierarchy. This agreement across groups aids in keeping the stability of the hierarchy and maintaining the positions of the groups within the hierarchy.

According to previous research, low and high status groups have consensual agreement not just on their roles in the hierarchy but also in the stereotypes that are associated with each group (Rosencrantz, Vogel, Bee, Broverman, & Broverman, 1968). Men and women should agree on their stereotypes of each group because men and women are theorized to be high and low status groups respectively (e.g., Eagly & Steffen, 1986). It has been shown that lower status individuals are perceived as more feminine and higher status individuals are perceived as more

masculine despite presentation of these individuals as equal in potency, evaluation or activity (Giannopoulos, Conway, & Mendelson, 2005). Thus, in the case of sex groups, men and women would see men as higher status and women as lower status.

The competence and warmth stereotypes associated with men and women have been investigated by Fiske and colleagues (2002). They asked participants to report what they perceive to be the typical characteristics of men and women “as viewed by society.” For example a question given to participants could be “As viewed by society, how competent are members of this group?” Fiske and colleagues’ (2002) questions asked deliberately about societal stereotypes and not about participant’s personal beliefs regarding women’s and men’s competence and warmth. Fiske and colleagues (2002) stereotype content model suggests that women and men both believe that in societal stereotypes women are perceived as less competent and more warm whereas men are perceived as less warm and more competent.

Although traditional sex stereotyping has been studied extensively (e.g., Eagly & Steffen, 1986; Fiske et al., 2002; Rosenkrantz et al., 1968; Williams & Best, 1986), the prevalence of this pattern of sex stereotyping is unclear. Previous research on traditional sex stereotyping has measured participants’ perceptions of the societal stereotypes of men and women and collapsed the perceptions of male and female participants. Thus, most of this research has not actually measured participants’ personal stereotypes of men and women or compared the personal views of male and female participants.

### **Traditional In-Group Favoring Sex Stereotyping**

As members of their sex group, men and women may have a tendency to perceive their own group as possessing the positive characteristics that traditional sex stereotypes ascribe to

their group. In other words, men and women can use traditional sex stereotypes for in-group favoritism. In-group favoritism is defined as a more favorable view of one's in-group relative to an out-group (Mullen et al., 1992; Tajfel & Turner, 1979). According to social identity theory, in-group favoritism is based on the "status-defining" characteristics for the in-group (Tajfel & Turner, 1979). In other words, a high status group should rate themselves higher on characteristics that are thought to define their status position. Low status groups are thought to do the same. We call this traditional in-group favoritism. In the sex stereotyping literature, women are perceived to be in lower status positions relative to men particularly in organizational settings (Eagly 1987, Powell, Butterfield, & Parent, 2002). Because women and men are perceived to be distributed into status differentiated social roles (e.g., women are homemakers and men are employees), women are perceived as more warm than men and men are perceived as more competent than women (e.g., Eagly & Steffen, 1984). When people are rating their own group and they are engaging in traditional in-group favoritism, they rate their group highly on those positive characteristics that have traditionally defined their group's status. Thus, in a pattern of traditional in-group favoring sex stereotyping, female participants would rate women higher than men on warmth and morality while male participants would rate men higher than women on competence.

Traditional in-group favoritism has been shown with implicit measures. Rudman, Greenwald and McGhee (2001) found that women implicitly associated women with warmth more than men did. Also men implicitly associated men with potency more than women did. In short, each sex had implicit sex stereotypes but only on traditional stereotypes that are favorable. Rudman and colleagues' (2001) interpreted these results as an indication that individuals have

sex stereotypes that are favorable toward their own sex. This may be because individuals have a connection between self and sex that drives people to positively evaluate their sex group as an indirect judgment of the individual self. Thus, they argue that this implicit self-esteem will bias evaluation of implicit sex stereotypes because of tendencies for self-favorable responses.

Notably, both male and female participants explicitly associated men more with potency and associated women more with warmth (Rudman et al., 2001). This is what we call traditional sex stereotyping, as women and men both appeared to endorse the traditional view of the sexes. Thus, Rudman et al. found evidence of traditional sex stereotyping with explicit measures and evidence of traditional ingroup favoring stereotyping with implicit measures. It is plausible that both sex groups can engage in traditional in-group favoring sex stereotyping as well as traditional sex stereotyping even when stereotyping is explicitly measured. The occurrence of both patterns with explicit measures is possible because traditional in-group favoring is in alignment with traditional sex stereotypes. For example, if both male and female participants see women targets as more warm than men then they would be participating in traditional sex stereotyping. However, separating the ratings by participant sex can show different patterns. For male participants, rating women targets higher than men targets would be traditional sex stereotyping. For female participants if they rated women targets much higher than men targets on warmth this would be traditional in-group favoring. However, if female participants rate women targets only slightly higher than men targets then the pattern is more traditional sex stereotyping with possibilities of counter-traditional sex stereotyping.

### **Counter-Traditional Sex Stereotypes**

Men and women may not always rate their sex group solely on traditional characteristics.

Again consider men and women as high and low status groups respectively. As noted previously, researchers have argued that both high and low status agree on their roles (as high and low status) in the hierarchy (Sidanius et al., 1996). Consequently, low status groups would acknowledge and accept their lower status. In contrast, other researchers have argued that low status individuals do not necessarily accept their “inferior” status in the hierarchy (Spears, Jetten, & Doosje, 2001). According to Spears and colleagues (2001), the resistance of low status groups to their “inferior” status may have been underestimated in previous research on ingroup favoritism. This is because of the assumption that both high and low status groups mutually agree in their position in the hierarchy (Sidanius et al., 1996).

In fact, social identity theory allows for the possibility that low status groups could even dissent regarding traditional stereotypes and move into “social competition” against the high status groups on the attributes considered typical of the high status group (Tajfel & Turner, 1979). “Social competition” can be defined as a low status group directly competing with the high status group on a characteristic that defines high status such as competence. Social competition is likely when the hierarchy is thought to be unstable and thus open to social change. In terms of sex groups, this could mean that women would not necessarily accept their position as a low status group and thus not accept the traditional stereotype that they are less competent than men. Thus, women could contest a traditionally “male” characteristic like competence. Although research on social identity theory focused on low status groups contending for characteristics, it is possible that high status groups such as men could compete for a characteristic such as morality. Thus, men can also dissent against traditional stereotypes by rating themselves higher on warmth or morality than women.

### **Current Study**

Individuals' personal stereotypes are important to consider because they may differ greatly from the stereotypes that society or the average person is thought to hold. Devine (1989) showed that when participants were given the opportunity to express their personal beliefs rather than reporting the cultural stereotypes of Black Americans, those who were low on prejudice expressed less racist personal beliefs. Examining personal beliefs rather than perceptions of cultural stereotypes allows for the investigation of participants' actual beliefs about men and women. This assessment of personal beliefs provides a way to look at how membership in one sex group affects perceptions of one's own group as well as the other group.

In the present study, we strive to understand the personal beliefs of men and women. Rather than assuming that women and men endorse traditional sex stereotypes to the same degree, we believe that men and women may engage in all three patterns of sex stereotyping to some degree: traditional, traditional in-group favoring, and counter-traditional. The current study will investigate these three patterns of sex stereotyping by considering the interaction of the target, perceiver, and characteristic in participant's personal beliefs about each sex group.

### **Method**

#### **Participants**

Participants were 1,786 undergraduate students in an introductory psychology course from the University of Connecticut ( $M_{\text{age}} = 18.56$ ,  $SD = 1.57$ , 1,029 females, 757 males). Of this sample, 1,427 identified as White, 84 identified as Black, 136 identified as Asian and 118 identified as other. Given the ethnic diversity of the sample, we first examined whether participant ethnicity moderated the effects of participant sex. The interactions between sex and

ethnicity on each characteristic were not statistically significant. Thus, ethnicity did not serve as a moderator for the effect of sex.<sup>1</sup> This test was affected by the relatively small numbers in the ethnic minority groups.

### **Procedure**

As part of a larger study on a variety of issues, participants completed a questionnaire that asked them to rate men and women on a wide variety of traits used in previous stereotyping research (see Leach, Ellemers & Barreto, 2007). Participants were asked to report their personal beliefs about each group (not the societal stereotypes of men and women). Participants read a brief prompt, “Below is a list of characteristics. Please click on one box to indicate to what degree you think each group is like this in general.” Participants saw the open ended sentence: “Men are...” followed by a list of traits. The same was repeated for ratings about women. Participants rated each target group on scales ranging from 0 (not at all) to 5 (extremely). The current study will analyze the traits that Leach and colleagues (2007) used to assess three characteristics: competence, warmth and morality. Thus, each characteristic was measured with three traits: competence -- competent, intelligent, and skilled ( $\alpha = .78$ ), warmth – warm, likeable, friendly ( $\alpha = .73$ ), and morality – sincere, honest, and trustworthy ( $\alpha = .73$ ).

The characteristic scales were only moderately correlated (see Table 1). In general, there are quite similar correlations between male and female participants for the characteristics of warmth and morality. For example, there was a medium size positive relationship between men’s perceived competence and warmth by both female participants ( $r = .478$ ) and male participants ( $r = .493$ ). There are a few instances of greater differences between male and female participants in competence. For example, women’s competence was more related to women’s morality for male



participants ( $r = .552$ ) than female participants ( $r = .377$ ). Also women's competence was more related to women's warmth for male participants ( $r = .601$ ) than female participants ( $r = .494$ ). These differences between female and male participants' correlations were statistically different due to the large sample size; however, the difference in the size of these correlations was small. Hence, the difference between male and female participants' correlations will not be considered further.

### **Analysis Plan**

Participants' ratings were analyzed as a function of three variables: participant sex (female or male), target sex (woman or man) and characteristic (competence, warmth, or morality). These three variables interact to produce each of the three theoretical patterns of sex stereotyping: traditional, traditional in-group favoring, and counter-traditional. Traditional sex stereotyping would be shown by a sizeable two-way interaction between target sex and characteristic that takes the following form. Both male and female participants may rate women targets as more warm and moral than men targets. In contrast, men targets may be rated as more competent than women targets.

Both traditional in-group favoring sex stereotyping and counter-traditional sex stereotyping would be shown by a three-way interaction between participant sex, target sex, and characteristic. However, each pattern of stereotyping should produce a particular form of interaction. In other words, each pattern of sex stereotyping should affect some characteristics and not others. Female participants rating women targets higher than men targets on warmth and morality is traditional in-group favoring sex stereotyping because warmth and morality are traditional characteristics for women. Also male participants rating men targets higher than

women targets on competence is traditional in-group favoring sex stereotyping. Female participants rating women targets higher than men targets on competence is counter-traditional sex stereotyping because competence is not a characteristic traditionally associated with women. For male participants, rating men targets higher on warmth and morality than women targets would be counter-traditional sex stereotyping.

The data were analyzed with a 2 x 2 x 3 mixed model ANOVA with one between participant factor (participant sex) and two within participant factors (target sex and characteristic). To distinguish the three patterns of sex stereotyping we examined all the simple contrasts by each characteristic. To understand the direction and form of the expected three-way interaction we examine the interaction of participant sex and target sex within each characteristic. Pairwise comparisons between means are presented with the use of effect sizes,  $d$  (Cohen, 1988). Effect sizes were used because the large sample size caused mean differences to be statistically significant even when small. In accordance with Cohen (1988), effect sizes are usually classified as small at  $d = .20$ , medium at  $d = .50$ , and large at  $d = .80$ .

### **Results and Discussion**

In the mixed model ANOVA, there was a significant but very small main effect of participant sex, female participants ( $M = 3.5$ ,  $SE = .017$ ) generally rated targets higher than male participants ( $M = 3.41$ ,  $SE = .019$ ),  $F(1, 1690) = 10.46$ ,  $p < .01$ ,  $\eta_p^2 = .006$ . There was also a significant but small main effect of target sex, women targets ( $M = 3.58$ ,  $SE = .016$ ) were generally rated higher than men targets ( $M = 3.33$ ,  $SE = .014$ ),  $F(1, 1960) = 255.53$ ,  $p < .01$ ,  $\eta_p^2 = .131$ . There was a significant, medium-sized, main effect of characteristic,  $F(1.85, 3128.84) = 1478.53$ ,  $p < .01$ ,  $\eta_p^2 = .467$ .<sup>2</sup> Test of within-participants contrasts indicated that competence

received higher trait ratings than warmth ( $p < .001$ ,  $\eta_p^2 = .061$ ) and morality ( $p < .001$ ,  $\eta_p^2 = .551$ ). Warmth had higher ratings than morality ( $p < .001$ ,  $\eta_p^2 = .515$ ).

The main effects of participant sex, target sex, and characteristic were qualified by three two-way interactions. There was a significant interaction between target sex and participant sex ( $F(1, 1690) = 11.20$ ,  $p < .01$ ,  $\eta_p^2 = .467$ ); between characteristic and participant sex ( $F(1.85, 3128.84) = 15.14$ ,  $p < .01$ ,  $\eta_p^2 = .009$ ); and between target sex and characteristic ( $F(1.93, 3252.77) = 90.39$ ,  $p < .01$ ,  $\eta_p^2 = .051$ ). Finally, there was a significant three-way interaction between target sex, characteristic and participant sex,  $F(1.93, 3252.77) = 268.41$ ,  $p < .01$ ,  $\eta_p^2 = .137$ .

Figure 1 shows all of the means of all four types of ratings (female participants rating women and men; male participants rating women and men) on each of the three characteristics. From this bar graph, we can see general patterns across the four bars on each characteristic (e.g., women targets are rated higher). But to distinguish the three patterns of sex stereotyping we examined all the simple contrasts by each characteristic. To understand the direction and form of the three-way interaction we will examine the interaction of participant sex and target sex within each characteristic.

### Competence

For competence, there was a significant main effect of participant sex ( $F(1, 1691) = 26.88$ ,  $p < .01$ ,  $\eta_p^2 = .016$ ) and of target sex ( $F(1, 1691) = 12.76$ ,  $p < .01$ ,  $\eta_p^2 = .007$ ). These were qualified by the interaction between target sex and participant sex ( $F(1, 1691) = 209.91$ ,  $p < .01$ ,  $\eta_p^2 = .110$ ). Notably, the effect size for the interaction is greater than the size of the main effects.

**Traditional sex stereotyping.** Traditional sex stereotyping is shown where men and

women are rated similarly by both male and female participants on characteristics traditionally associated with each sex. For this pattern to emerge, both male and female participants should rate men targets as more competent than women targets. In fact, women targets ( $M = 3.8$ ,  $SD = .75$ ) were rated slightly higher than men targets ( $M = 3.7$ ,  $SD = .66$ ) on competence ( $d = -.15$ ). Thus, there was no evidence of traditional sex stereotyping on competence. In Figure 1, there is not much general difference between the first two bars (ratings of women) and last two bars (ratings of men). This is because female and male participants had different beliefs about women and men's competence, as shown in the target sex and participant sex interaction for competence. The simple contrasts discussed below offer a more detailed examination of the differences in ratings and showcase the other two patterns of sex stereotyping.

**Traditional in-group favoring sex stereotyping.** Traditional in-group favoring stereotyping is shown when participants rate their own in-group higher than the out-group on the characteristics traditionally associated with their in-group. This pattern would be exhibited if male participants rated men targets higher than women targets on competence. This is traditional in-group favoring sex stereotyping because men are traditionally associated with competence. Thus, there is evidence of traditional in-group favoring sex stereotyping for men on competence. In Figure 1, we can see that male participants rated men targets ( $M = 3.76$ ,  $SD = .68$ ) higher than women targets ( $M = 3.56$ ,  $SD = .83$ ) on competence ( $d = .26$ ). We can also compare male and female participants' ratings of men targets to see if male participants rated men targets higher than female participants. Figure 2 shows both male and female participants' ratings of only men targets across the characteristics. In Figure 2, we can see that male participants rated men targets ( $M = 3.76$ ,  $SD = .68$ ) higher on competence than female participants rated men targets ( $M =$

3.65,  $SD = .64$ ,  $d = -.17$ ). This was a small effect of traditional in-group favoring for male participants.

**Counter-traditional sex stereotyping.** Counter-traditional sex stereotyping is shown when participants rate their in-group higher on a characteristic that is not traditionally ascribed to their in-group. This pattern would show that female participants rate women targets higher than men targets on competence. Again men more often than women are traditionally associated with competence and so female participants rating women targets as more competent is against the traditional stereotype. There was evidence of counter-traditional sex stereotyping for competence among women. Revisiting Figure 1, we can see that female participants are rating women targets higher than men targets. Female participants rated women targets ( $M = 3.98$ ,  $SD = .64$ ) higher than men targets ( $M = 3.65$ ,  $SD = .64$ ) on competence with a medium sized effect ( $d = .51$ ). To further this point we can look at the difference between male and female participants' ratings of women targets. Figure 3 shows both male and female participants' ratings of only women targets across the characteristics. We can see in Figure 3 that female participants rate women targets ( $M = 3.98$ ,  $SD = .64$ ) higher than male participants rate women targets ( $M = 3.56$ ,  $SD = .83$ ) on competence ( $d = .55$ ). This is an indication of counter-traditional sex stereotyping because women are not traditionally stereotyped as high in competence yet female participants rated women targets higher than men targets and female participants rated women targets higher than male participants rated women targets.

Traditional sex stereotyping did not occur for competence primarily because female participants engaged in counter-traditional sex stereotyping and rated women targets as more competent than men targets. This lack of traditional sex stereotyping is a departure from previous

findings that asked women and men to report the social stereotype of each sex group's competence. In research on societal stereotypes men are often seen as higher in competence whereas women are seen as lower in competence (Fiske et al., 2002). It is possible that there was no consensus on this particular characteristic because participants were asked about their personal beliefs instead of cultural stereotypes. Participants believed that women and men are both quite competent. Although the cultural stereotypes of men and women may still persist, the personal beliefs about the competence of men and women may be changing. Previous research has supported this idea that personal beliefs and cultural stereotypes may be separate concepts in people's minds (Devine & Elliot, 1995). Also the reason for the counter-traditional sex stereotyping shown by female participants could be female participants dissenting against the traditional stereotype of women and engage in social competition against the high status members (men). Together with male participants rating men targets higher than women targets and female participants rating women targets higher than men targets, there is evidence that for the characteristic competence there is contention over the ascribing of this characteristic.

### **Warmth**

For warmth, there was a significant main effect of participant sex ( $F(1, 1690) = 12.22, p < .01, \eta_p^2 = .007$ ) and of target sex ( $F(1, 1690) = 384.89, p < .01, \eta_p^2 = .185$ ). These main effects were qualified by the interaction between target sex and participant sex ( $F(1, 1690) = 201.94, p < .01, \eta_p^2 = .107$ ).

**Traditional sex stereotyping.** For traditional sex stereotyping to occur for warmth, both male and female participants should rate women targets higher on warmth than men targets. In Figure 1, we can see that traditional sex stereotyping did occur for warmth, but mainly for male

participants. Both male and female participants rated women targets ( $M = 3.79$ ,  $SD = .71$ ) higher than men targets ( $M = 3.44$ ,  $SD = .71$ ) on warmth ( $d = -.48$ ). The first and third bars (bars that indicate women as targets) are higher than the second and fourth bars (bars that indicate men as targets), which shows the main effect of target sex. Male and female participants rated women targets higher than men targets at different magnitudes. Male participants rated women targets ( $M = 3.89$ ,  $SD = .72$ ) much higher than men targets ( $M = 3.23$ ,  $SD = .72$ ) on warmth ( $d = -.92$ ). In contrast, female participants rated women targets ( $M = 3.71$ ,  $SD = .69$ ) only slightly higher than men targets ( $M = 3.6$ ,  $SD = .65$ ) on warmth ( $d = .16$ ). Both participant sex groups engage in traditional sex stereotyping but to varying degrees, male participants more than female participants, which accounts for the interaction between participant sex and target sex.

**Traditional in-group favoring sex stereotyping.** Traditional in-group favoring sex stereotyping would occur if female participants rated women targets higher than men targets on warmth. There is not much evidence of traditional in-group favoring sex stereotyping for female participants on warmth. In Figure 1, we can see that female participants rated women targets as only slightly more warm than men targets ( $d = .16$ ). This effect was quite small. In fact, women saw women as much less warm than men saw women. Furthermore, when comparing female participants ratings of women to male participants ratings of women in Figure 3, we can see that male participants ( $M = 3.89$ ,  $SD = .72$ ) actually rate women higher than female participants ( $M = 3.71$ ,  $SD = .69$ ) rated women ( $d = -.25$ ).

**Counter-traditional sex stereotyping.** Counter-traditional sex stereotyping would be evidenced by male participants rating men targets higher than women targets on warmth or by female participants rating women as less warm than men. We can see that this is not the case in

Figure 1. Male participants rated women targets as much more warm than men targets. Male participants were not engaging in counter-traditional sex stereotyping but expressing traditional sex stereotypes. Although female participants did not view women targets as less warm than men targets, female participants appeared to counter the traditional stereotype by viewing women as only slightly more warm than men.

There was evidence of traditional sex stereotyping and slight evidence of traditional in-group favoring for warmth. On average, both male and female participants rated women targets higher on warmth than men targets. This echoes previous literature that has investigated sex stereotypes where women are believed to be more warm and communal than men (e.g., Eagly & Steffen, 1984). Male participants rated women targets higher than female participants rated women targets on warmth. At the same time, female participants only showed slight in-group favoritism and rated women only a little higher than men on warmth. Because male participants rated women targets so much higher than female participants rated women targets, male participants were the main reason why overall women targets were rated higher than men targets on warmth and the traditional sex stereotyping pattern emerged. The small degree of in-group favoritism by female participants and the great degree of traditional stereotyping by male participants may imply that women are actually going against the traditional stereotype of being overly warm while men are still seeing this traditional stereotype as true of women.

### **Morality**

For morality, the main effect of participant sex was not significant ( $F(1, 1692) = .001, p = .976, \eta_p^2 < .001$ ). There was a significant main effect of target sex ( $F(1, 1692) = 143.54, p < .01, \eta_p^2 = .078$ ). This main effect was qualified by the significant interaction between target sex



and participant sex ( $F(1, 1692) = 47.75, p < .01, \eta_p^2 = .027$ ).

**Traditional sex stereotyping.** Traditional sex stereotyping would be exhibited if both male and female participants rated women targets higher than men targets on morality. In Figure 1, we can see that traditional sex stereotyping occurred for morality with a medium-sized effect as both sex groups rated women targets ( $M = 3.19, SD = .88$ ) higher than men targets ( $M = 2.86, SD = .85$ ) on morality ( $d = -.39$ ). Again we see that the first and third bars are higher than the second and fourth, which is the main effect of target. Again male and female participants had a difference in the magnitude in which they rated women targets higher than men targets. Female participants rated women targets ( $M = 3.27, SD = .84$ ) moderately higher than men targets ( $M = 2.78, SD = .86$ ) on morality ( $d = .58$ ). Male participants, however, rated women targets ( $M = 3.09, SD = .91$ ) slightly higher than men targets ( $M = 2.96, SD = .84$ ) on morality ( $d = .15$ ). This difference between participant sex groups accounts for the interaction between participant sex and target sex.

**Traditional in-group favoring sex stereotyping.** Traditional in-group favoring sex stereotyping for morality would occur if female participants rated women targets higher than men targets on morality. There was traditional in-group favoring sex stereotyping for morality. As we can see in Figure 1, there is a medium effect for morality as female participants rated women targets ( $M = 3.27, SD = .84$ ) higher than men targets ( $M = 2.78, SD = .86$ ) on morality ( $d = .58$ ). Female participants also rated women targets ( $M = 3.27, SD = .84$ ) as more moral than male participants ( $M = 3.09, SD = .91$ ) rated women targets ( $d = .20$ ).

**Counter-traditional sex stereotyping.** The pattern of counter-traditional sex stereotyping would occur if male participants rated men targets higher than women targets on

morality. This did not occur, as male participants did not rate men targets ( $M = 2.96$ ,  $SD = .84$ ) higher than women targets ( $M = 3.09$ ,  $SD = .91$ ) on morality ( $d = -.15$ ). However, it is clear that men did not endorse the traditional stereotype by viewing women as more moral than men. Some small sign of counter-traditional sex stereotyping among men may be seen in Figure 2. Here, male participants rated men targets ( $M = 2.96$ ,  $SD = .84$ ) higher than female participants rated men targets ( $M = 2.78$ ,  $SD = .86$ ) on morality ( $d = -.22$ ).

### **Discussion.**

Similar to warmth, the traditional sex stereotyping pattern occurred for morality where both female and male participants rated women targets higher than men targets. This pattern was consistent with previous literature that indicated that women are usually seen as moral individuals (Glick & Fiske, 2001). There are slight differences when considering how participant sex interacted with participant sex on stereotypes of morality. The interaction effects suggest that morality is another characteristic that participants contended.

Female participants engaged in traditional in-group favoring sex stereotyping with a medium sized effect. Female participants also rated women targets slightly higher than male participants rated women targets. This effect was small. Although, male participants also rated women targets higher than men targets on morality this effect was quite small. Thus, there is some in-group favoritism by female participants, but male participants are engaging in some counter-traditional sex stereotyping by not seeing much difference between the target groups. Morality appears to be something that male participants similarly ascribe to both sexes. Thus, it seems that morality is a contentious characteristic that men want to associate with their own group, despite traditional stereotypes that men are less moral than women. This is similar to

previous findings on perceptions of group morality in a high status group (Leach et al., 2007).

### **General Discussion**

The present study examined how both male and female participants may participate in various patterns of sex stereotyping when asked about their personal beliefs regarding the traits of men and women. In the current study, there is evidence that participants engaged in traditional sex stereotyping, traditional in-group favoring sex stereotyping and counter-traditional sex stereotyping depending on the characteristic examined. Instances of these different patterns of sex stereotyping can highlight the importance of investigating personal beliefs rather than the societal stereotypes associated with social groups. Sex stereotypes can still be prominent in people's minds (i.e., everyone knows what the stereotypes are) but they are not necessarily endorsed. Devine and Elliot (1995) suggested that there is a difference between personal beliefs and the perception of societal stereotypes about Black Americans. Although there seems to be a contemporary negative stereotype associated with Black Americans, there also seems to be a set of personal beliefs about Black Americans that are positive. Devine and Elliot (1995) argued that this difference between personal beliefs and societal stereotypes is apparent in people who are low in prejudice. Low-prejudiced people are more likely to have personal beliefs that are different to the perceived societal stereotype whereas high-prejudiced people are not likely to have this difference. The level of prejudice is an individual variable where low prejudice people are contrasted to high prejudice people. In the current study, personal beliefs were analyzed and we were able to show that women and men do not necessarily endorse the societal stereotypes of their group. They have discrepant personal beliefs.

Although people may not personally endorse a societal stereotype, the knowledge of the

stereotype may still have detrimental effects. Devine (1989) showed that individuals have the same stereotype congruent evaluations of an ethnic minority target after racial stereotype primes regardless of how low or high they are in prejudice. Thus, the racial stereotype prime still had a negative effect for both low and high prejudice participants on their evaluations of a target. Targets of prejudice may also have negative experiences due to the knowledge of stereotypes. Previous research has shown that when individuals are aware of the negative stereotypes associated with their group in a domain, they perform worse in that domain (stereotype threat: Steele & Aronson, 1995). Spencer, Steele, & Quinn (1999) showed that when women were told that there were gender differences in math ability, they underperformed drastically compared to men on a math test. The knowledge of the negative stereotype that women performed worse than men in math caused women to experience stereotype threat and to perform worse than men. Thus, even if women may personally believe that they themselves are good at math (and indeed they were as only participants with strong math backgrounds were chosen in the study), they still experience stigma due to the negative stereotypes of women in math.

#### *Future Directions*

As the current study is a single study to evaluate several patterns of sex stereotyping, much more can be done on the topic from a relational standpoint. One possibility is tying gender identification with sex stereotyping. Gender identification and sex stereotypes research has shown a variety of results. For example, Stout, Dasgupta, Hunsinger, & McManus (2011) showed that exposing women to female experts in science and engineering can foster greater identification with the discipline math, perceived efficacy and future performance. Female participants also showed greater subjective identification with the female experts in science and

engineering. Perceived negative stereotypes of women however in the sciences still remain. Stout and colleagues (2011) argue that these changes in attitude and identification can be critical steps in seeing more women in the domains such as science and engineering. This research is similar to the current work because of the possibilities of counter-traditional stereotyping. By exposing women to female experts, women are able to see that the social group of women can be associated with a non-traditionally female domain such as engineering. Here women may be able to engage in more counter-traditional stereotyping. The current research can expand on this idea by seeing how gender identification could possibly affect identification with a traditional or non-traditional female domain and perceived stereotype content such as warmth and competence.

Also Oswald (2008) has shown that strongly identified women had significantly greater liking for a feminine occupation after being exposed to gender stereotypes whereas weakly identified women did not show this. Thus, stereotype activation had a differential effect on women depending on their gender identification. It could have been the case in this study that strongly identified women identified with a particular subgroup of women (e.g., women who fit traditional roles) and therefore had a liking for a feminine occupation. This research is similar to the current work because it showcases the possibility that women will engage in traditional in-group favoring sex stereotyping by liking a more traditionally feminine occupation and therefore associating women with traditional sex stereotypes (such as warmth). Different subgroups of women and identification to these different subgroups of women can be investigated along with perceptions of gender stereotypes. In conclusion, future research could try to understand this link between gender identification and perceptions of sex stereotyping through various methods.

Also, implicit measures of all three types of sex stereotyping can be utilized. Sex

stereotypes have been measured implicitly in previous literature to show implicit in-group favoritism (Rudman et al., 2001) and the effect of traditional role primes on implicit gender stereotypes (Rudman & Phelan, 2010). More can be investigated by analyzing any differences between people's implicit and explicit ratings of men and women. No previous research has examined implicit stereotypes in terms of stereotype content (e.g., competence, warmth and morality). More light can be shed on how people perceive the relationship between men and women by investigating the specific characteristics perceived to be associated with each gender group (i.e., people implicitly may see women are more warm than men because they are seen as more nurturing).

Future research could also compare between participants' explicit reports of their personal beliefs and their beliefs about societal stereotypes. As mentioned before, Devine and Elliott (1995) have found that there are differences between people's societal stereotypes and personal beliefs when assessing stereotypes of racial groups. Sex stereotyping researchers have not investigated that difference between people's actual personal beliefs about men and women and their societal stereotypes. This difference could give more evidence for the occurrence of all three types of sex stereotyping patterns: traditional, traditional in-group and counter-traditional sex stereotyping.

### *Implications*

Tying this relational perspective of sex stereotyping to more real world implications, identification to a group can have major implications for social movements. Previous research has shown that ethnic identity politics can be the basis for socio-political movement for both majority and minority groups (Leach, Brown, & Worden, 2008). This same concept can be

applied to gender identity politics. For example, women who identify strongly as women could engage in collective behavior to promote women in higher positions of power in jobs. This would be actively counteracting the traditional stereotype where men are more associated with competence relative to women.

It is particularly important that minority groups such as women begin to see that other women are also reporting these personal beliefs that counter traditional stereotypes. Individuals who are perceived to fit the traditional gender stereotype face negative consequences (e.g., Rudman & Fairchild, 2004). Rudman and Fairchild (2004) show that atypical men and women targets were subject to more sabotage, unfavorable competence ratings and lower likeability compared to typical men and women targets. If people who counter traditional stereotypes receive backlash, they may be able to remedy or fight against the backlash by joining forces with others who also counter traditional stereotypes.

All in all, different models of sex stereotyping need to be considered all at once. Given that multiple variables such as the perceiver, target and content are all interacting with one another, it is possible that these different patterns of sex stereotyping could be occurring simultaneously. Furthermore, we need to take into account the strong influence that belonging to a social group can have on perceptions of other social groups. Being a woman has great bearing on perceptions of other women and men, quite different than a man's perceptions.

## References

- Altermatt, T. W., DeWall, C. N., & Leskinen, E. (2003). Agency and virtue: Dimensions of female stereotypes. *Sex Roles, 49*, 631–641.
- Becker, J. C. (2010). Why do women endorse hostile and benevolent sexism? The role of salient female subtypes and internalization of sexist contents. *Sex Roles, 62*, 453-467.
- Broverman, I. K., Vogel, S. R., Broverman, D. M., Clarkson, F. E., & Rosenkrantz, P. S. (1994). Sex-role stereotypes: A current appraisal. In B. Puka (Ed.), *Caring voices and women's moral frames: Gilligan's view* (191-210). New York, NY, US: Garland Publishing.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). New York: Academic Press.
- Conway, M., Pizzamiglio, M. T., & Mount, M. (1996). Status, communality, and agency: Implications for stereotypes of gender and other groups. *Journal of Personality and Social Psychology, 71*, 25–38.
- Devine, P. (1989). Stereotypes and prejudice: Their automatic and controlled components. *Journal of Personality and Social Psychology, 56*(1), 5-18.
- Devine, P. & Elliot, A. (1995). Are racial stereotypes really fading? The Princeton trilogy revisited. *Personality and Social Psychology Bulletin, 21*(11), 1139-1150.
- Eagly, A. H. (1987). *Sex differences in social behavior: A social-role interpretation*. Hillsdale, NJ: Erlbaum.
- Eagly, A. & Kite, M. (1987). Are stereotypes of nationalities applied to both women and men? *Journal of Personality and Social Psychology, 53*, 451-462.
- Eagly, A. & Mladinic, A. (1994). Are people prejudiced against women? Some answers from



- research on attitudes, sex stereotypes, and judgments of competence. *European Review of Social Psychology*, 5, 1-35.
- Eagly, A. & Steffen, V. (1984). Gender stereotypes stem from the distribution of women and men into social roles. *Journal of Personality and Social Psychology*, 46, 735-754.
- Eagly, A. & Steffen, V. (1986). Gender and aggressive behavior: A meta-analytic review of the social psychological literature. *Psychological Bulletin*, 100, 309-330.
- Fiske, S. T., Cuddy, A. J. C., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology*, 82(6), 878-902.
- Giannopoulos, C., Conway, M., & Mendelson, M. (2005). The sex of status: The laypersons' perception of status groups is sex-typed. *Sex Roles*, 53(11-12), 795-806.
- Glick, P. & Fiske, S. T. (2001). An ambivalent alliance: Hostile and benevolent sexism as complementary justifications for gender inequality. *American Psychology*, 56, 109-118.
- Leach, C. W., Brown, L. M., & Worden, R. E. (2008). Ethnicity and identity politics. In *Encyclopedia of Violence, Peace, & Conflict* (Vol. 1, pp. 758-768). Oxford: Elsevier.
- Leach, C. W., Ellemers, N., & Barreto, M. (2007). Group virtue: The importance of morality (vs. competence and sociability) in the positive evaluation of in-groups. *Journal of Personality and Social Psychology*, 93(2), 234-249.
- Leyens, J.P., Yzerbyt, V., & Schadron, G. (1994) *Stereotypes and social cognition*. London: Sage.
- Mullen, B., Brown, R., & Smith, C. (1992). Ingroup bias as a function of salience, relevance, and status: An integration. *European Journal of Social Psychology*, 22, 103-122.

- Oakes, P.J., Haslam, S.A., & Turner, J.C. (1994). *Stereotyping and social reality*. Oxford: Blackwell.
- Oswald, D. (2008). Gender stereotypes and women's reports of liking and ability in traditionally masculine and feminine occupations. *Psychology of Women Quarterly*, 32, 196-203.
- Powell, G. N., Butterfield, D. A., & Parent, J. D. (2002). Gender and managerial stereotypes: Have the times changed? *Journal of Management*, 28, 177–193.
- Rosenkrantz, P., Vogel, S., Bee, H., Broverman, I., & Broverman, D. M. (1968). Sex-role stereotypes and self-concepts in college students. *Journal of Consulting and Clinical Psychology*, 32, 287-295.
- Rudman, L. A. & Fairchild, K. (2004). Reactions to counterstereotypic behavior: The role of backlash in cultural stereotype maintenance. *Journal of Personality and Social Psychology*, 87, 157-176.
- Rudman, L. A., Greenwald, A. G., & McGhee, D. E. (2001). Implicit self-concept and evaluative implicit sex stereotypes: Self and ingroup share desirable traits. *Personality and Social Psychology Bulletin*, 27(9), 1164-1178.
- Rudman, L. A. & Phelan, J. E. (2010). The effect of priming gender roles on women's implicit gender beliefs and career aspirations. *Social Psychology*, 41, 192-202.
- Sidanius, J., Levin, S., & Pratto, F. (1996). Consensual social dominance orientation and its correlates within the hierarchical structure of American society. *International Journal of Intercultural Relations*, 20(3-4), 385-408.
- Spears, R., Doosje, B., & Ellemers, N. (1999). Commitment and the context of social perception. In N. Ellemers, R. Spears & B. Doosje (Eds.), *Social identity: Context, commitment,*

- content* (pp. 59-83). Oxford: Blackwell.
- Spears, R., Jetten, J., & Doosje, B. (2001). The (Il)legitimacy of ingroup bias: From social reality to social resistance. In J. Jost, & B. Major (Eds.) *The psychology of legitimacy: Emerging perspectives on ideology, justice, and intergroup relations* (pp. 332-362). Cambridge, UK: Cambridge University Press.
- Spencer, S., Steele, C. M., & Quinn, D. M. (1999). Under suspicion of inability: Stereotype threat and women's math performance. *Journal of Experimental Social Psychology, 35*, 4–28.
- Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology, 69*, 797–811.
- Stout, J. G., Dasgupta, N., Hunsinger, M., & McManus, M. A. (2011). STEMing the tide: Using ingroup experts to inoculate women's self-concept in science, technology, engineering, and mathematics (STEM). *Journal of Personality and Social Psychology, 100*, 255-270.
- Tajfel, H. & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The Social Psychology of Intergroup Relations*. Monterey, CA: Brooks-Cole .
- Turner, J. C. (1999). Some current themes in research on social identity and self-categorization theories. In N. Ellemers, R. Spears, & B. Doosje (Eds.), *Social identity: Context, commitment, content*. Oxford: Blackwell .
- Williams, J. E., & Best, D. L. (1982). *Measuring sex stereotypes: A multination study*. Thousand Oaks, CA: Sage.
- Williams, J.E. & Best, D. L. (1986). Sex stereotypes and intergroup relations. In S. Worchel & W.G. Austin (Eds.), *Psychology of intergroup relations*. Chicago: Nelson-Hall.

## Footnotes

<sup>1</sup> This was found after running a between subjects two factor ANOVA with gender and ethnicity of the participant as the two factors and each trait as the dependent variable.

<sup>2</sup> The main effect of characteristic did not meet the assumption of sphericity using the Mauchly's Test of Sphericity ( $\chi^2(2) = 141.33, p < .001$ ), therefore the Greenhouse-Geisser corrected degrees of freedom were used.

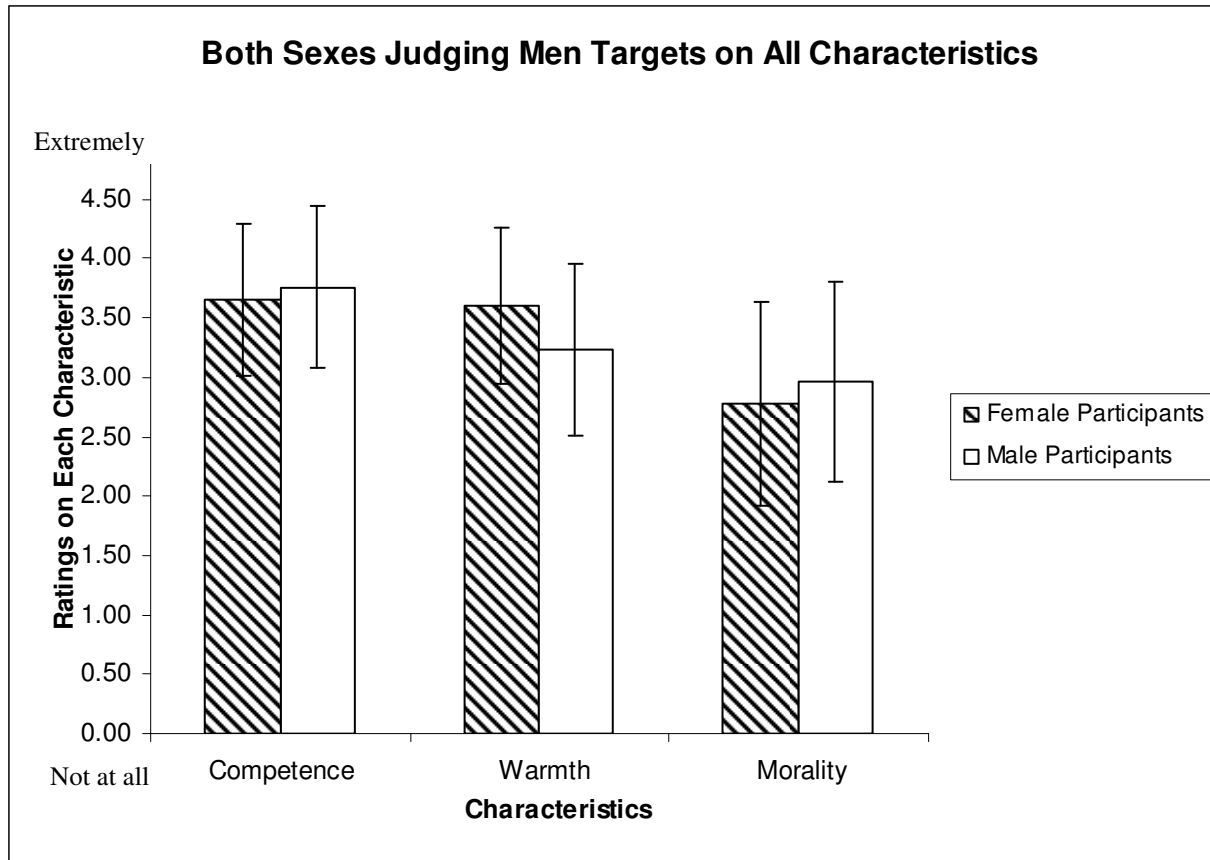
Table 1

*Female and Male Participants' Correlations of Characteristics by Target*

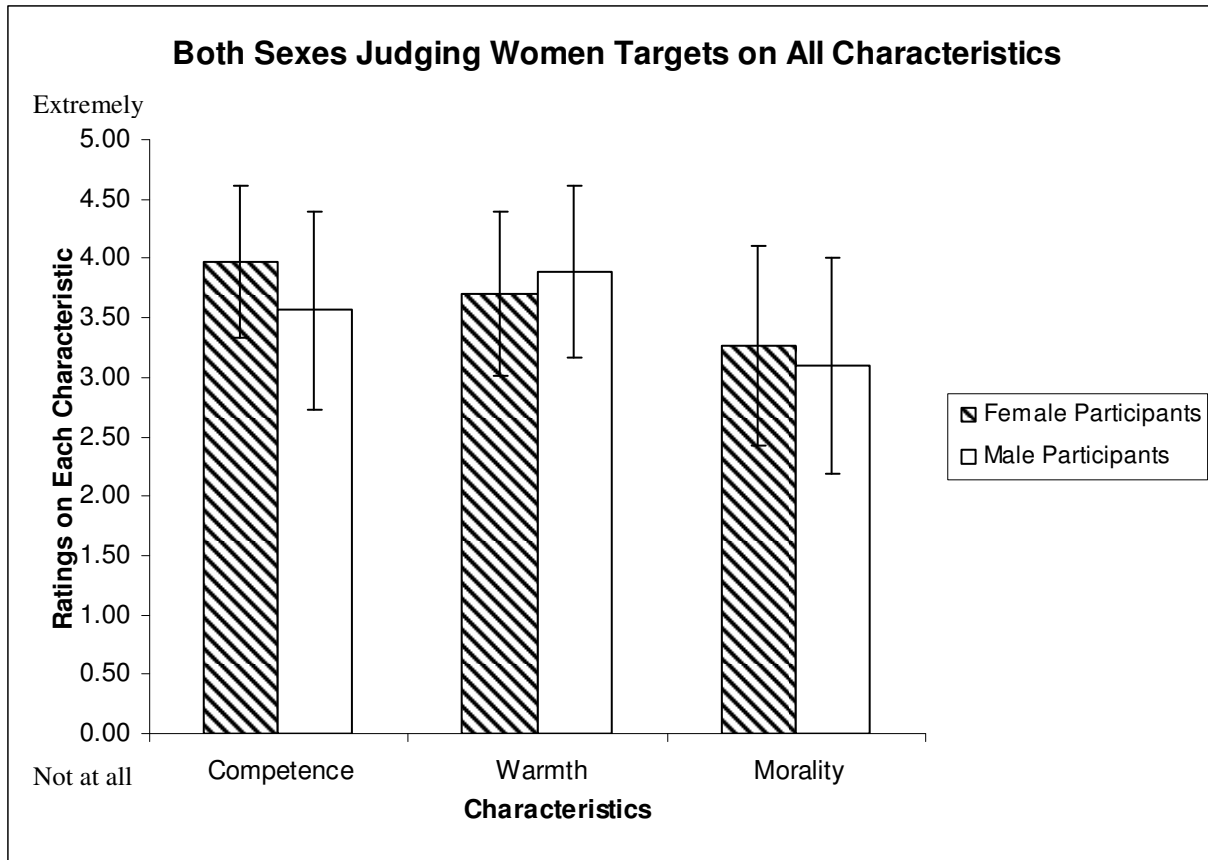
Female Participant		Competence		Warmth		Morality	
		Women	Men	Women	Men	Women	Men
Competence	Women						
	Men	0.532					
Warmth	Women	0.494	0.365				
	Men	0.338	0.478	0.356			
Morality	Women	0.377	0.299	0.614	0.321		
	Men	0.187	0.378	0.198	0.478	0.281	
Male Participant		Competence		Warmth		Morality	
		Women	Men	Women	Men	Women	Men
Competence	Women						
	Men	0.266					
Warmth	Women	0.601	0.422				
	Men	0.311	0.493	0.304			
Morality	Women	0.552	0.238	0.502	0.246		
	Men	0.279	0.412	0.2	0.57	0.208	



Figure 1. Both female and male participants' ratings of both men and women targets on competence, warmth and morality. The error bars indicate standard deviations.



*Figure 2.* Both female and male participants' ratings of men targets on competence, warmth and morality. The error bars indicate standard deviations.



*Figure 3.* Both female and male participants' ratings of women targets on competence, warmth and morality. The error bars indicate standard deviations.