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The Effects of Stereotype Activation on Women’s Reactions to Leadership Situations, or How Reading *Cosmo* Might Prevent You from Becoming CEO

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University of Richmond, VA

Jepson School of Leadership Studies Honors Thesis

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The Effects of Stereotype Activation on Women's Reactions to Leadership Situations, or How Reading Cosmo Might Prevent You from Becoming CEO

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Abstract

The present experimental study investigated the effect of stereotype activation on women's responses to a leadership situation. Participants were exposed to either gender-stereotypic or gender-counterstereotypic magazine advertisements picturing women and then performed a leadership task involving two confederates. Results supported the prediction that participants exposed to stereotypic advertisements would exhibit more negative reactions to the leadership situation than those exposed to counterstereotypic advertisements such that they reported lower perceived performance, self-esteem, and well-being. Sex-role orientation moderated this effect such that advertisements had a stronger effect on feminine-oriented participants' domain identification, intent to lead in the future, and experienced cognitive load than on masculine-oriented participants' responses. In the opposite direction as predicted, participants in the gender-counterstereotypic condition indicated a higher relationship-oriented leadership style than those in the gender-stereotypic condition. Sex-role orientation moderated this effect such that feminine-oriented participants in the gender-counterstereotypic condition indicated a higher relationship-oriented leadership style than participants in any other group.
The Effect of Stereotypes on Women in Leadership Situations, or How Reading Cosmo Might Prevent You from Becoming CEO

*Gender Advertisements*, by Erving Goffman, examines how magazine advertisements display stereotypes concerning differences between sexes, gender patterns prevalent in society, and how women and men ought to behave. Although Goffman (1976) examined advertisements displayed over thirty years ago, his message is equally relevant today. Goffman states that displays, such as advertisements, are expressive behavior conveyed and received as if they are somehow natural, deriving from the way people are and, therefore, do not need to be questioned. However, because these displays only show part of the picture and express socially learned behaviors, he argues that gender expressions are not natural, rather they are a mere show of what our ultimate nature ought to be and how and where this nature ought to be exhibited. The advertisements Goffman includes display men as larger in size and higher in physical space than women and never engaging in a traditional female activity such as cooking or cleaning. Thus, the message conveyed is that men have higher power, authority, and rank than woman, men are of higher social status than women, and men are never to be in a subordinate role to women (Goffman, 1976).

Magazine advertisements are just one way that the mass media express cultural stereotypes of the female gender role. The media also convey messages about what women should and should not be and how they should and should not behave through TV commercials and programs, movies, books, and so on. Because media messages penetrate society so deeply, it is important to examine how the stereotypes they both perpetuate and maintain affect women. One clear effect of stereotypes concerning the female gender role is women's (lack of) attainment of top-level leadership positions. Despite the fact that research has shown no
The Effects of pervasive sex differences in leadership effectiveness, women only hold 6.4% of top earner positions and only eight Fortune 500 companies are run by a woman CEO (Catalyst, 2005). In an effort to understand why such a great disparity exists at top-level leadership positions, the present study examines how stereotypes, displayed through magazine advertisements, affect women's responses to leadership situations.

Role Congruity Theory: Are Women "Fit" to be Leaders?

Eagly and Karau's (2002) role congruity theory provides an explanation for why such a great disparity still exists between women and men in higher level leadership positions. The role congruity theory states that the perceived incongruity between the female gender role and leadership roles creates prejudice toward women in leadership positions. Goffman's (1976) claim that the female gender role better explains social learned information about women and men than how they naturally are mirrors this prejudice that Eagly and Karau describe. Furthermore, Eagly's (1987) social role theory supports Goffman's claim that magazine advertisements express socially learned behaviors by stating that gender roles hold socially shared beliefs that not only describe the attributes of each sex, but also prescribe the qualities and behaviors believed to be desirable of women and men. In other words, gender roles consist of both descriptive and prescriptive norms. The descriptive component of the gender role consists of the beliefs and expectations about the characteristics women and men do possess, while the prescriptive component consists of the beliefs and expectations for the characteristics that women and men ought to possess (Burgess & Borgida, 1999). Eagly's social role theory proposes that the majority of descriptive norms, or stereotypes, about women and men relate to communal and agentic attributes. Communal qualities are mainly applied to women, whereas agentic qualities to men. Communal qualities describe a concern for others, such as:
affectionate, helpful, kind, sympathetic, interpersonally sensitive, nurturant, and gentle. Agentic qualities describe an assertive and confident tendency, such as: aggressive, ambitious, dominant, forceful, independent, and prone to act as a leader (Deaux & Lewis, 1983; Eckes, 1994; Eagly & Karau, 2002). Past research investigating the beliefs that people hold about ideal women and men (Spence & Helmreich, 1978), about their ideal selves (Wood, Christensen, Hebl, & Rothgerber, 1997), and about women and men’s roles and responsibilities (Glick & Fiske, 1996) demonstrates an overall approval of communal qualities in women and agentic qualities in men.

Because the agentic qualities used to describe men are the same as those used to describe effective leaders, men are seen as congruent with the leadership role. On the other hand, the communal qualities used to describe women are incongruent with agentic qualities; therefore, women are viewed as incongruent with the leader role. This perceived inconsistency between women and effective leaders creates a gender leader stereotype held against women. This gender leader stereotype affects how women leaders are perceived and evaluated. Eagly and Karau (2002) describe the biased perception and evaluation of women leaders as two different forms of prejudice. The first type of prejudice stems from the descriptive norms of the female gender role in that stereotypically female qualities are incongruent with those of effective leaders. Thus, individuals perceive women as less likely than men to hold leadership positions because leadership ability is more stereotypic of men than of women. The second type of prejudice stems from the prescriptive norms in that women leaders violate beliefs about how women ought to act by displaying agentic qualities of leader roles. Consequently, individuals evaluate women’s actual leadership behavior less favorably than men’s because leadership behavior is less desirable in women than in men (Eagly & Karau, 2002).
Previous research demonstrates precisely how this gender-leader stereotype alters both the perception and evaluation of women leaders. The studies described below provide empirical evidence revealing that women are less likely to be hired, are perceived less favorably than men, and are less likely to emerge as leaders due to their perceived "lack of fit" in positions characterized by masculine traits. Glick (1991) examined how occupational stereotypes related to sex discrimination in prestige and salaries for male and female sex-typed jobs. He found that masculine traits were a strong predictor of both perceived prestige and salary of jobs. Further research reveals that because women are perceived as lacking masculine traits, they are less likely to attain these high prestige jobs and high salaries. A meta-analysis by Eagly, Karau, and Makhijani (1995) examining the effectiveness of women and men who occupy leadership and managerial roles revealed that men were more effective than women in roles that were defined in more masculine terms, and women were more effective than men in roles defined in less feminine terms. These results are consistent with the assumed necessity of congruence between leadership roles and leaders' gender (Eagly, Karau, & Makhijani, 1995).

Research also supports Eagly and Karau's (2002) role congruity theory's proposition that women leaders who behave with agentic traits are perceived less favorably because these behaviors are incongruent with the communal traits that characterize the female gender role. In a meta-analysis examining literature from 1964-1994, Davison and Burke (2000) found that female and male applicants received lower ratings when being considered for an opposite-sex-type job. This research suggests that the need to fit with one's gender role is applied to both women and men. However, because most leadership roles, particularly elite positions, are sex-typed as masculine, this needed congruence prevents women from attaining leadership positions.
The purpose of the present research is to examine how women respond to this negative gender leader stereotype in leadership situations. Research by Heilman and Kram (1983) suggest that women are aware of and affected by this negative stereotype. In their study, participants performed a decision-making task in which they were led to believe that their fictional co-workers were male or female. Participants were given negative or positive feedback on their performance and asked to indicate their perceptions of how their co-workers viewed them. They found that women anticipated more negative reactions than men by both male and female fictional co-workers (Heilman & Kram, 1983). This study shows that negative stereotypes affect not only how others view women leaders, but also how women view themselves in leadership situations. In another area of research, researchers have examined how stereotype threat can contribute to the underperformance of women and other minorities.

**Stereotype Threat: The Effect of Stereotypes on Targeted Individuals**

Stereotype threat is defined as a type of performance apprehension that individuals experience when they fear they might confirm a negative stereotype about their group (Steele, 1997). The awareness of the negative stereotype arouses apprehension in targeted individuals who fear they will be viewed or treated in a manner consistent with the stereotype, or that they will behave in a way that confirms the stereotype. Stereotype threat is a situational vulnerability that can affect members of any group that is the target of a negative stereotype. The individual does not even need to believe that the stereotype is true for it to be threatening. As long as the stereotype is present in a given situation that is self-relevant, then the targeted individual is vulnerable to stereotype threat (Steele, 1997).

Research on the detrimental effects of stereotype threat shows that if an individual experiences a threat in a performance domain, such as giving a classroom presentation or taking...
a test, the threat can directly interfere with performance (Steele, 1997). Based on the stereotype that African Americans are not very intelligent, Steele and Aronson (1995) demonstrate through a series of studies the negative effect of stereotype threat on African American's verbal test scores. In Study 1, some of the black participants were told that the verbal test they were about to take was diagnostic of their intelligence while others were told it was not diagnostic. The results from this study revealed that black participants in the diagnostic condition performed significantly worse than white participants in the same condition and black participants in the nondiagnostic condition. These findings suggest that those in the diagnostic condition were at risk of confirming a negative stereotype about black individuals having low levels of intelligence.

Spencer, Iserman, Davies, and Quinn (1999) demonstrated the same stereotype threat effect for women on a math test. Based on the negative stereotype that women have weaker math ability, half of the women were told that the math test showed gender differences and half were told it showed no gender differences. The results revealed that women who were told that the test showed gender differences performed significantly worse than men. However, women told that the test showed no gender differences performed equally as well as men (Spencer, Iserman, Davies, & Quinn, 1999). The performance deficits due to stereotype threat are particularly troubling because when this threat becomes chronic in a situation, such as a female student who experiences a male-dominated math environment, the individual may disidentify herself from that particular domain (Steele, 1997). By disidentifying, the domain is no longer self-relevant and, consequently, no long a basis of self-evaluation. Although disidentification is self-protective, it can lead to a lack of motivation in a given domain (Steele, 1997). Steele,
Iserman, Davies and Quinn's (1999) research suggests a lack of women in high-level leadership positions might be due to women's disidentifying from leadership roles in general.

In fact, research by Davies, Spencer, and Steele (2005) demonstrates the detrimental effect that stereotype activation has on women's aspirations to hold leadership positions. Davies, Spencer, and Steele examined whether stereotype activation could persuade women to avoid leadership roles and opt for nonthreatening subordinate roles. Participants were exposed to either gender-stereotypic commercials or gender-neutral commercials and then were asked whether they preferred to assume the leader role or problem-solver (subordinate) role in an upcoming leadership task. Although none of the commercials made any references to leadership, participants in the gender-stereotypic commercial condition strongly preferred the problem-solver role to the leader role, whereas participants in the gender-neutral commercial condition expressed no clear preference (Davies, Spencer, & Steele, 2005). These results suggest that women exposed to gender-stereotypic commercials were vulnerable to stereotype threat, and this apprehension led them to avoid leadership roles in favor of nonthreatening subordinate roles.

Because women in leadership positions are likely to be the only female present, women leaders may also be vulnerable to experiencing detrimental performance effects due to their solo status. Solo status research shows that when women expect to perform a task as the only female member of a group, they desire to change the gender composition of the group, while men do not (Sekaquaptewa and Thompson, 2003). This suggests that women feel apprehensive about being the only member of a group. In this study, Sekaquaptewa and Thompson found that when women were the only female members of a group, they developed lower performance expectancies in anticipation of solo status and, consequently, performed worse on a quantitative task in solo status situations than nonsolo women and male participants. Furthermore,
Sekaquaptewa and Thompson' (2003) demonstrated that the dual influence of solo status and stereotype threat has an additive effect on women's performance: women performed the worst when they were the only female in the group and read information describing the task as being traditional math material, whereas women performed the best when they were not the only female and read information describing the task as being a type of math impervious to gender stereotypes. Thus, women in leadership situations may experience negative performance responses due to the combined effect of stereotype threat and solo status.

Research by Hoyt, Johnson, Murphy, & Skinnell (in preparation) demonstrates how solo status has a negative effect on women's self-efficacy in leadership situations. In this study, participants were either explicitly primed with a negative gender-leader stereotype or were not primed with a stereotype. Participants then were 'randomly chosen' to be the leader of an employee-hiring task involving two other group members. The results from this study revealed that while participants exhibited positive self-efficacy responses to the stereotype when they were not the only female in the group, they showed negative self-efficacy responses to the stereotype when they were the only female in the group (Hoyt, Johnson, Murphy, & Skinnell, in preparation). These results help to further understand Sekaquaptewa and Thompson's (2003) findings by suggesting that participants' low performance expectancies when exposed to a negative stereotype and are the only female member of a group is due to the fact that this situation causes women to experience low self-efficacy for the targeted domain.

Mediation: How Stereotype Threat Impairs Performance

Researchers have proposed many different possible explanations for how exactly stereotype threat impairs performance. Steele and Aronson (1995) suggest that increased anxiety due to stereotype threat impairs performance. In the study discussed earlier, the findings suggest
that stereotype threat led participants to try hard but with impaired efficiency (Steele & Aronson, 1995). Research by Blascovich, Spencer, Quinn, and Steele (2001) supports these findings that individuals who experience stereotype threat perform worse due to increased anxiety. In this study, Blascovich, Spencer, Quinn, and Steele (2001) demonstrated that participants who experienced stereotype threat also showed increased physiological arousal, as measured by higher blood pressure levels.

Another possible mediator of stereotype threat effects is reduction in working memory capacity, conceptualized as both one's temporary storage of information and attentional capability (Schmader & Johns, 2003). This is closely related to the anxiety experienced by participants in Steele and Aronson's (1995) study. Participants vulnerable to stereotype threat in Schmader and Johns' (2003) study spent more time doing fewer problems with less accuracy, symptoms indicative of anxiety. These symptoms are also similar to those of reduced working memory capacity. Research suggests that one's ability to focus attention on a given task is reduced when an individual experiences stereotype threat. This reduction in working memory capacity is because the stereotype acts as a stressor by threatening one's identity. Stereotype threat also causes a reduction in working memory capacity because more cognitive resources are needed in order to process additional information pertaining to the activated stereotype (Schmader & Johns, 2003). In their study, Schmader and Johns (2003) showed that induced stereotype threat led to lower working memory capacity among targeted individuals but not among those not targeted by the stereotype. Furthermore, the results revealed that a reduction in working memory capacity due to stereotype threat mediated the reduction in test performance (Schmader & Johns, 2003). These findings are particularly relevant to leaders who are likely to experience a reduced working memory capacity from dealing with multiple sources.
simultaneously in order to lead effectively. Therefore, one of the responses the present study measures is self-reported cognitive load in order to examine whether exposure to a negative stereotype in a leadership situation increases individuals’ experienced cognitive load.

Unlike Schmader and Johns’ (2003) study, research by Aronson, Lustina, Good, Keough, Steele, and Brown (1999) examining white male’s math performance when threatened by Asian’s superior math ability did not find any effects of distraction items or anxiety. However, the findings from this study did suggest another potential mediator of stereotype threat effects. The results revealed that performance impairments from stereotype threat were due to evaluation apprehension, a term referring to the self-conscious state in which one experiences increased arousal about being evaluated (Aronson, Lustina, Good, Keough, Steele, & Brown, 1999; Myers, 2005). The difficulty in pinpointing the exact mediation of stereotype threat effects suggests that many mediational pathways exist and several may be at play simultaneously. Particularly for leaders, it is easy to imagine how individuals working in such cognitively busy situations as leadership situations may experience anxiety and a reduced working memory capacity. It is just as easy to understand how leaders might experience evaluation apprehension about a performance upon which an entire group of individuals is depending.

Moreover, women are likely to experience these performance-inhibiting symptoms due to stereotype threat. Goffman (1976) states that gender is conveyed fleetingly in any social situation and yet strikes at the most basic characterization of the individual. Thus, the beliefs and expectations for women and men are easily and automatically activated (Eagly & Karau, 2002). This statement is especially true for women in leadership situations based on that fact that individuals often see themselves in terms of the social identity most stigmatized in a given context (Davies, Spencer, & Steele, 2005). Thus, because women leaders are the target of a
negative stereotype, women’s gender identity is likely to be activated even more strongly in leadership situations than in other nonthreatening domains.

Stereotype Reactance: Positive Responses to Stereotype Activation

While an abundance of research demonstrates the negative effects due to stereotypes, still other research demonstrates that individuals can exhibit more positive responses to stereotypes. According to Brehm’s (1966) psychological reactance theory, when individuals perceive a threat to their freedom, they react by asserting their freedom more forcefully than they would otherwise. Building off of Brehm’s reactance theory, Kray, Thompson, and Galinsky (2001) theorized that psychological reactance also occurs when individuals perceive limitations to their ability to perform. Since negative stereotypes held by others are one example of a limitation that can affect performance of those targeted by the stereotype, Kray, Thompson, and Galinsky expected reactance to occur when an individual was explicitly told, “Because these personality characteristics tend to vary across gender, male and female students have been shown to differ in their performance on this task” (Kray, Thompson, & Galinsky 2001). They predicted that when women read this statement, making them explicitly aware of the correspondence between stereotypes of women and ineffective negotiators, they would react by engaging in counterstereotypic behaviors. The results supported their predictions, revealing that women performed better than men on a negotiation task after they were explicitly reminded of gender differences in negotiation skills; however, women performed worse than men when they were implicitly primed with a gender stereotype (Kray, Thompson, & Galinsky, 2001). In subsequent study, Kray, Reb, Galinsky (2004) tested the boundaries for women’s ability to react to a negative stereotype by manipulating the amount of power women had. They found that women with a power disadvantage did not react to the explicit stereotype, whereas women with a power
advantage did outperform men. These findings suggest that explicit activation of stereotypes does not always lead to stereotype reactance, but only when women have sufficient power in the negotiation (Kray, Reb, & Galinsky, 2004).

Hoyt and Blascovich (2007) hypothesized that when participants were exposed to the gender leader stereotype in an explicit manner, they would display reactance responses. More specifically, they predicted that self-efficacy, defined as beliefs in one’s capabilities to act effectively, would moderate the performance effects of stereotype activation. Based on research demonstrating that individuals with high self-efficacy cope with stressors with a problem-focused coping strategy, whereas individuals with low self-efficacy cope with stressors with an emotion-focused strategy, Hoyt and Blascovich predicted that high self-efficacy individuals would exhibit more positive responses to stereotype activation and that low self-efficacy individuals would exhibit more negative responses. In order to explicitly prime the gender leader stereotype, participants read through a folder which contained media images of male leaders and information about the gender gap in top leadership positions. The results supported these predictions in that high self-efficacy individuals exhibited reactance on a leadership task after the explicit stereotype prime on a leadership task. These participants performed better, rated their own performance more favorably, identified with the leadership role more, and indicated a higher well-being than low self-efficacy individuals (Hoyt & Blascovich, 2007).

The use of explicit primes in both Hoyt and Blascovich (2007) and Kray et al.’s (2001, 2004) studies suggest that in order for stereotype reactance to occur, individuals must be exposed to an explicit prime. In other words, in order for women to act in counterstereotypic ways, the negative stereotype must be blatantly communicated. On the other hand, stereotype threat responses occur when individuals are exposed to an implicit prime. As seen in the research on
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stereotype threat discussed earlier, activating a stereotype leads people to behave in stereotype-consistent ways. This is similar to the assimilation effect, or when the priming of a stereotype leads to behavior that is in line with the activated stereotype (Wheeler & Petty, 2001). The stereotype reactance responses refer to instances when individuals’ behaviors are inconsistent with the activated stereotype. This response is similar to the contrast effect (Wheeler & Petty, 2001). Research by Stoddard, Kliengklom, and Ben-Zeev (2003) clearly shows the difference between stereotype threat and stereotype reactance responses, or assimilation and contrast effects. They found that women exposed to blatant stereotype activation exhibited stereotype reactance in that they were more likely to desire a leadership position, whereas women exposed to subtle stereotype activation exhibited stereotype threat responses in that they were less likely to desire a leadership position (Stoddard, Kliengklom, & Ben-Zeev, 2003). In the research discussed earlier, Kray et al. (2001, 2004) also demonstrate the different effects of implicit versus explicit stereotype activation: women performed worse than men on a negotiation task when they were exposed to an implicit stereotype activation prime but performed better on a negotiation task when they were explicitly told that researchers have found gender differences in performance.

Can Women Show Positive Responses to Implicit Positive Stereotypes?

Although research on stereotype reactance provides evidence that women do possess the ability to overcome the harmful effects of stereotypes, it is unlikely that women will be exposed to blatant discrimination and prejudice described in these studies. Explicit primes resemble old-fashioned forms of prejudice, which have since decreased in occurrence due to laws making such discrimination based on gender illegal, as well as some actual attitude change in society’s beliefs and expectations of women (Nelson, 2002). What women are likely to face are more subtle
The Effects of 17 forms of discrimination such as lower salaries, fewer opportunities for promotion, and lower likelihood of being hired. This type of discrimination stems from less favorable attitudes and evaluations of women leader (Nelson, 2002). These subtle forms of prejudice closely resemble the stereotype activation primes in stereotype threat research. While research has clearly shown that implicit activation of negative stereotypes lead to detrimental effects for women in leadership situations, the purpose of the present study is to examine whether the subtle activation of positive images of women can remove these detrimental effects or even produce positive effects. Therefore, this study examines the effects of gender-stereotypic versus gender-counterstereotypic images on women's responses to a subsequent leadership task.

According to the ideomotor theory, women's leadership performance should assimilate to the stereotypes activated by the magazine advertisements (Wheeler & Petty, 2001). Based on cognitive theory, the ideomotor approach proposes that stereotypes impact judgment, perception, and behavior by making mental contents differentially accessible. Thus, priming an individual with a trait or stereotype leads to automatic behavior in line with the activated construct (Dijksterhuis & van Knippenberg, 1998). Dijksterhuis and van Knippenberg (1998) demonstrated this effect by priming participants with the stereotype of professors or that of soccer hooligans. Their results showed that priming the stereotype of professors enhanced participants' performance on a general knowledge test, while priming the stereotype of soccer hooligans reduced participants' performance (Dijksterhuis & van Knippenberg, 1998).

The ideomotor perspective can also explain the results found by Shih, Pittinsky, and Ambady (1999). Based on the stereotype that Asians have superior quantitative skills compared to other ethnic groups and that women have inferior quantitative skills compared to men, this study demonstrated that Asian-American women performed better on a math test when their
ethnic identity was activated, but worse when their gender identity was activated (Shih, Pittinsky, & Ambady, 1999). The ideomotor perspective can explain both positive and negative behavioral responses: women with their Asian-identity salient assimilated to a positive stereotype about Asians and superior quantitative ability, whereas women with their female-identity salient assimilated to a negative stereotype about women and inferior quantitative ability.

Based on the research discussed above, the ideomotor approach predicts that in the present study women exposed to gender-stereotypic magazine advertisements will exhibit more negative responses and those exposed to gender-counterstereotypic advertisements will exhibit more positive responses to the leadership task. Past research looking at the effects of traditional versus nontraditional gender roles portrayed in commercials supports this prediction. A study by Geis, Brown, Jennings, and Corrado-Taylor (1984) investigated whether occupying high or low status roles would cause the same attribution of stereotypic traits as gender. Participants viewed traditional commercials portraying a man as a dominant, rational, independent, and ambitious leader and untraditional commercials portraying a woman as having these traits. Participants then rated the man and woman in each on sex-stereotyped personality dimensions. The results revealed that stereotypic traits associated with gender were more determined by the actor’s role status portrayed in commercials than the actor’s actual sex. These findings suggest that the portrayal of women in counterstereotypic status roles is more of a determinant of traits they are associated with than being a woman is (Geis, Brown, Jennings, & Corrado-Taylor, 1984).

Research by Jennings-Walstedt, Geis, and Brown (1980) and Geis, Brown, Walstedt-Jennings, and Porter (1984) provides evidence suggesting that the attribution of stereotypically masculine traits to women can also have positive effects on women’s behavior and aspirations for the future. In a study by Jennings-Walstedt, Geis, and Brown, women viewed one of two
identical series of commercials with the only difference being the sex of the individual in the commercial. One series portrayed traditional gender roles and the other portrayed reversed-gender roles. The results showed that women exposed to nontraditional versions showed more independence of judgment and greater self-confidence when delivering a speech. In a replication of this study by Geis, Brown, Walstedt-Jennings, and Porter, women were asked to write an essay imagining their lives in ten years. The results showed that women who viewed traditional commercials favored homemaking and deemphasized achievement compared to women and men who viewed reversed role commercials. No sex differences were found among women and men who viewed reversed role commercials (Geis, Brown, Walstedt-Jennings, & Porter, 1984). This research provides optimistic evidence for the present study that women who view counterstereotypic magazine advertisements will view women as more fitting for leadership roles and, consequently, exhibit more positive performance effects.

However, the ideomotor perspective ignores the main tenet of the stereotype threat approach, which states that targets need to be aware of the negative stereotype held against them in order to be vulnerable to stereotype threat effects (Steele, 1997). Indeed, the stereotype threat research suggests that more than mere assimilation to activated constructs is at work. If the ideomotor approach were supported, all individuals should be equally vulnerable to the negative effects (Davies, Spencer, and Quinn, 2002). However, as research to be discussed in the next section demonstrates, the degree of identification to one's social identity moderates the experience of stereotype threat effects (Schmader, 2001; Bergeron, Block, & Echtenkamp, 2006). This suggests that individuals are more aware of activated stereotypes than the ideomotor suggests.
Even so, stereotype threat research does provide evidence suggesting that positive stereotypes should facilitate performance. For example, Davies, Spencer, and Quinn (2002) demonstrated that women exposed to gender-stereotypic TV commercials performed worse than men on a subsequent math test, whereas women exposed to gender-neutral TV commercials performed equally as well as men. In a similar study by Davies, Spencer, and Steele (2005), discussed earlier, looking at gender-stereotypic and neutral TV commercials effects on women’s aspirations to take on leadership roles, results showed that women exposed to gender-neutral TV commercials showed no clear preference between the leadership role and subordinate role, whereas women exposed to gender-stereotypic TV commercials significantly preferred the subordinate role. This research demonstrating the ability of gender-neutral images to nullify vulnerability to stereotype threat implies that gender-counterstereotypic images might actually facilitate positive responses from women in leadership situation. The present study investigates this possibility by examining the effect of gender-counterstereotypic images of women on participants’ responses to a leadership situation.

Research by Dasgupta and Asgari (2003) provides further evidence that exposure to counterstereotypic women will have positive effects on women in leadership situations. In one study, they demonstrated that exposure to women in counterstereotypic leadership positions such as judges, business leaders, scientists, and politicians weakened women’s implicit stereotypic beliefs and activated their counterstereotypic beliefs. Although the priming of famous women leaders used in this study is a more blatant prime than the counterstereotypic advertisements prime used in the present study, Dasgupta and Asgari’s research also suggests that the exposure to counterstereotypic women in everyday life also affects women’s automatic beliefs about gender. In a second study, they found that women who attended an all women’s college
expressed less automatic gender stereotypes than those who attended a coeducational college (Dasgupta & Asgari, 2003). These findings suggest that exposure to gender-counterstereotypic women in everyday life can decrease the perceived incongruity between leadership roles and the female gender role by altering automatic beliefs about what women are and how women should behave.

**Moderation: Variation of Stereotype Threat Effects**

In an effort to predict exactly how individuals will respond to stereotypes, it is important to note that not everyone responds to stereotype threat to the same degree. For example, Davies, Spencer, and Steele (2005) demonstrate that altering the domain in which the task is performed moderates the effects of stereotype threat. Their research suggests that the domain of the task itself can determine whether the social identity is activated in a negative or positive manner. In a subsequent study to the one previously discussed, Davies, Spencer, and Steele demonstrated that this vulnerability to stereotype threat can be removed by making the leadership task identity-safe. In order to make the task identity-safe, women read the following sentence,

> There is a great deal of controversy in psychology surrounding the issue of gender-based differences in leadership and problem-solving ability; however, our research has revealed absolutely no gender differences in either ability on this particular task.

The results revealed that women who were exposed to gender-stereotypic TV commercials and then read the identity-safe sentence revealed the same leadership aspirations as men. These findings show that although these women were primed with stereotype activation, they were no longer vulnerable to stereotype threat because the leadership domain was now identity-safe (Davies, Spencer, & Steele, 2005).

Bergeron, Block, and Echtenkamp’s (2006) research also demonstrate that making the performance domain identity-safe to women can remove negative stereotype threat effects. In this study, Bergeron, Block, and Echtenkamp manipulated whether the managerial task was
masculine sex role-typed or feminine sex role-typed. As predicted, women in the masculine sex
role-typed condition performed worse than men whereas women performed equal to men in the
feminine sex role-typed condition (Bergeron, Block, & Echtenkamp, 2006). The research
discussed suggests that depending on various situational and individual factors, targeted
individuals may experience stereotype threat effects to varying degrees. While some may
experience severe performance impairments, in other situations, they may only suffer moderately
or not at all.

Kray, Thompson, and Galinsky’s (2001) research demonstrating women’s ability to
exhibit positive reactance responses also demonstrates the varying effects of stereotype threat
based on the activation of social identities. Specifically, Kray, Thompson, and Galinsky
examined the effects of activating one’s social identity on performance on a negotiation task.
Because stereotypical male traits are linked to effective negotiators, a negative stereotype exists
for women negotiators parallel to the gender-leader stereotype. The results revealed that when
gender was implicitly activated, women performed worse than men. More interestingly, this
research also demonstrated that performance differences between women and men disappeared
when a superordinate identity that transcends gender was activated. They primed participants
with a “student” identity with the following statement:

The key difference in terms of who displays these skills is almost entirely determined by
college education and professional aspirations. Simply put, people who are in
competitive, academic environments, like you, do exceptionally well in the negotiations.
This is true for men and women alike.

Thus, by activating a common identity that applied to both genders, women and men
perceived fewer differences and were able to work cooperatively. Their cooperation
resulted in a better performance for both negotiators.
Not only does activation of one’s social identity affect performance, but research has also shown that level of identification with one’s stereotyped group affects reactions to stereotype activation. Research suggests that a social identity might be a more important source of identity to some group members than for others (Schmader, 2001). Schmader (2001) examined whether individual differences in the extent to which women consider the social category “women” to be an important part of their self-identity moderate stereotype threat effects. Because highly identified group members are more likely to be motivated to protect and maintain that social identity, negative stereotypes present more of a threat to these group members than to those who are not highly identified. Thus, Schmader predicted that women would perform more poorly on a math test to the extent that they perceive gender to be important to their self-identity. The results supported this prediction: when primed with stereotype activation women performed worse than men, but only when they considered gender to be an important part of their self-definition; women who did not consider gender to be central to their self-concept performed equally to men (Schmader, 2001).

Sex-Role Orientation

The research discussed above shows that both activation of individuals’ gender identity and level of identification to that identity affect the direction and degree of their responses to stereotypes. Therefore, gender identity is an important topic for the present research to consider in examining how individuals will respond to stereotypes. Gender identity can also be thought of in terms of the sex role characteristics that individuals believe they possess. Since masculine qualities, such as assertiveness and aggressiveness, stereotype effective leadership, women may be more or less vulnerable to the gender-leader stereotype depending on whether they perceive themselves as possessing more masculine or feminine characteristics. Using Bem’s (1974) Sex-
Role Inventory, the present study examines whether sex-role orientation accentuates or buffers the negative effects of stereotype threat. The Bem Sex-Role Inventory (BSRI) measures masculinity and femininity on independent dimensions, unlike other scales that conceptualize masculinity and femininity as polar opposites of a single continuum (Bem, 1974). Thus, the BSRI allows for individuals to be categorized as feminine (high scores on the feminine measure and low scores on the masculine measure), masculine (high scores on the masculine measure and low scores on the feminine measure), androgynous (high scores on both feminine and masculine measures) or undifferentiated (low scores on both measures).

Past research has used the BSRI to demonstrate how individuals’ perceptions of themselves as possessing masculine and/or feminine characteristics have a stronger effect on their reactions in leadership situations than biological sex. Kent and Moss (1994) examined the effects of sex and gender role on self and group perceptions of leader emergence. In their study, students participated in group projects throughout a semester. After completion of the project, students responded to the BSRI and to three items assessing their own and other group members’ leadership behaviors; these three items were used to measure leader emergence. Their results showed that masculinity was positively and significantly correlated with both self-perceived leader emergence and group-perceived leader emergence, while there were no significant correlations with sex. These results demonstrated that participants with androgynous and masculine sex-role orientations were most likely to emerge as leaders (Kent & Moss, 1994).

Bergeron, Block, and Echtenkamp’s (2006) study previously discussed also demonstrates how one’s sex-role orientation moderates the effect of stereotype threat on women’s leadership performance. Based on past research indicating that masculine gender role predicts positive outcomes such as preference for challenging activities, managerial aspirations, and career
success, Bergeron, Block, and Echtenkamp (2006) hypothesized that identification with the masculine gender role may lessen the effects of stereotype threat for women on a managerial task. Their predictions were supported, revealing that masculine gender role identification moderated the effects of the stereotype on women's performance. Women highly identified with the masculine gender role, as measured by the Bem Sex Role Inventory, performed equally as well as men, whereas women with low identification to the masculine gender role performed worse than men.

The research discussed here suggests that individuals' responses to stereotypes may differ due to sex-role orientation. Since the purpose of the present study is to examine the effect of stereotype activation on individuals' responses in leadership situations, it is also important to examine whether individuals' sex-role orientation affects the way in which they process information about stereotypes. Therefore, the present study looks at how feminine-oriented and masculine-oriented women who view either gender-stereotypic or gender-counterstereotypic magazine advertisements of women respond in a leadership situation. Bem's (1981) gender schema theory proposes that sex-typed individuals (i.e. feminine-oriented women and masculine-oriented men) have schemas, cognitive structures of organized information, about gender that are easily accessible for processing new information. Bem derives her gender schema theory in part from the fact that one's self-concept gets assimilated into the gender schema, meaning that individuals choose only the subset of personality traits that are defined as applicable to his or her gender. The other part of the gender schema theory Bem derives from children's learning to evaluate the appropriateness of their thoughts, attitudes, and behaviors according to a prescriptive standard, the standard being their gender schema.
Thus, in the present study, exposure to gender-stereotypic advertisements is likely to have a strong effect on sex-typed individuals (feminine-oriented participants) because they will process information from these images according to their gender schema, resulting in high accessibility, and will evaluate their own behavior based on how well they adhere to the female gender role. Even though the gender-counterstereotypic images of women will not fit in with their own sex-typed gender schema, they will still prime women with traits related to gender. Since feminine-oriented women have a strong tendency to process information according to gender, exposure to gender-counterstereotypic advertisements is still likely to activate traits associated with these images that will affect participants’ subsequent responses.

On the other hand, exposure to either set of magazine advertisements is not likely to have any noticeable effects on masculine-oriented women. When viewing the advertisements, these participants will not be likely to process the images they see according to a gender schema. Bem (1981) points out that while many non-sex-typed (i.e. masculine-oriented women) may describe themselves with characteristics such as dominant, they do so without implicating gender stereotypes. Moreover, because masculine-oriented women are not so focused on gender, they may focus their attention more closely to other aspects of the advertisements, such as the actual product. Therefore, the advertisements may not succeed in priming these participants with the desired constructs.

Hypotheses

Based on the research discussed, the present research tested the following hypotheses:

1. Gender-stereotypic magazine advertisements will have a negative effect on women’s responses and counter-stereotypic magazine advertisements will have a positive effect on women’s responses to the leadership situation, as assessed by their self-reported
perceived performance, self-esteem, well-being, intent to lead in the future, identification to the leadership role, and experienced cognitive load.

2. The impact of the magazine advertisements will be greater for feminine-oriented participants than masculine-oriented participants, such that gender-stereotypic magazine advertisements will have more negative effects and gender-counterstereotypic magazine advertisements will have more positive effects on feminine-oriented participants’ responses than masculine-oriented participants’ responses. This hypothesis is based on Bem’s (1981) gender schema research as well as research discussed implying that counterstereotypical images of women will have positive effects on participants’ responses (Jennings-Walstedt, Geis, & Brown, 1980; Geis, Brown, Walstedt-Jennings, & Porter, 1984; Dasgupta & Asgari, 2003).

3. Participants exposed to gender-stereotypic magazine advertisements will indicate higher intended relationship-oriented leadership style than those exposed to gender-counterstereotypic magazine advertisements. Furthermore, it is hypothesized that sex-role orientation will moderate this effect such that feminine-oriented participants in the gender-stereotypic condition will exhibit a stronger intention for relationship-oriented leadership style than masculine-oriented participants in this condition.

This hypothesis is based on the ideomotor theory previously discussed in this section, which predicts that images of women from the magazine advertisements will impact participants’ thoughts, attitudes, and behaviors by making mental contents of either gender-stereotypic or gender-counterstereotypic women more readily available. Furthermore, because the relationship-oriented leadership style corresponds with prototypes associated with typical female behaviors and the task-oriented leadership style
corresponds with typical male behaviors, it follows that participants in the gender-stereotypic condition will have more stereotypic views of women accessible, and consequently will assimilate to these images by indicating an intended relationship-oriented leadership style (Hall, Workman, & Marchioro, 1998). On the other hand, participants in the gender-counterstereotypic condition will have more counterstereotypic views of women accessible, and consequently assimilate to these images by indicating a lower intended relationship-oriented leadership style.

Study Overview

The present study tested these hypotheses using two ostensibly separate studies. In Study 1, participants viewed and rated 19 magazine advertisements. Participants were randomly assigned to view gender-stereotypic or gender-counterstereotypic advertisements. Study 1 served as the stereotype activation prime, whereby magazine advertisements activated stereotypic or counterstereotypic images of the female gender role.

In Study 2, participants were “randomly” selected to be the leader of a 3-person group, in which the other two group members were female research confederates. Participants were responsible for leading a discussion about a controversial issue and arriving at a consensus. The effects of the magazine advertisements on women were assessed by several self-report measures, including perceived performance, self-esteem, well-being, intent to lead, domain identification, and intended relationship-oriented leadership style.

Method

Participants

Sixty female University of Richmond students, ages 18-23, participated in this study. Participants were recruited through email and sign-up sheets. Participants received $10 for their
participation and completed the study individually at their appointed time.

Design

The experiment employed a 2 (stereotype activation: gender-stereotypic or gender-counterstereotypic) X 2 (sex-role orientation: masculine-oriented or feminine-oriented) between-subjects design. The dependent variables were perceived performance, self-esteem, well-being, intent to lead in the future, domain identification, experienced cognitive load, and intended relationship-oriented leadership style.

Categorization of Participants by Sex-Role Orientation. As is typically done in sex-role search, I created a median split based on the abbreviated BSRI scores in order to categorize participants as feminine-oriented or masculine-oriented. The median score for masculine items was 5.44 and the median score for feminine items was 5.6. Participants were categorized in 1 of 4 different sex-role orientations based on these scores: masculine-oriented, feminine-oriented, androgynous, or undifferentiated. Participants who scored greater than or equal to the median on masculine items and less than or equal to the median on feminine items were categorized as masculine-oriented. Those who scored greater than or equal to the median on feminine items and less than or equal to the median on masculine items were categorized as feminine-oriented. Those who scored greater than or equal to the median on both feminine and masculine items were categorized as androgynous, and those who score less than or equal to the median on both were categorized as undifferentiated. However, based on the theoretical research and hypotheses provided in the previous section, I only examined the masculine-oriented and feminine-oriented groups for the purpose of this study. The median split yielded 17 masculine-oriented participants and 18 feminine-oriented participants.
Pre-Experimental Self-Report Measure

Participants responded to items on the following pre-experimental self-report measure on a 7-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). The same scale was used for all self-report measures used throughout this study.

*Abbreviated BEM Sex Role Orientation.* Sex-role orientation was assessed using an abbreviated form of Bem's (1974) Sex-Role Inventory. The original form of the Bem Sex-Role Inventory (BSRI) uses 60 items to independently measure masculinity and femininity. Past research has demonstrated that the short form of the BSRI, like the one used in the present study, is even more reliable than the longer form (Campbell, Gillaspy, & Thompson, 1997). Participants responded to 30 items on a 7-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). These items included 10 masculine items, 10 feminine items, and 10 neutral items. Examples of masculine items include: “Defsends own beliefs,” “Independent,” and “Assertive.” Examples of feminine items include: “Tender,” “Sympathetic,” and “Sensitive to the needs of others.” Examples of neutral items include: “Conscientious,” “Unpredictable,” and “Reliable.”

Post-Experimental Self-Report Measures

Participants responded to items on the following post-experimental self-report measures on the same Likert-type scale mentioned above.

*Perceived performance.* Participants rated their own performance by indicating their agreement to 4 items on the Likert-type scale. These items included: “I performed well on the task I just completed,” “I felt a lot of pressure during this task,” “I was nervous about completing this task,” and “I was anxious about completing this task.” Items were reverse coded such that a higher score indicated a better perceived performance.
**Self-Esteem.** Self-esteem was assessed using a modified version of Heatherton and Polivy’s (1991) state self-esteem measure. Participants indicated their agreement to 4 items on the same Likert-type scale. These items included: “I feel self-conscious,” “I am worried about what other people think of me,” “I feel inferior to others at this moment,” and “I am concerned about the impression I am making.” Items were reverse coded such that a higher score indicated a higher level of self-esteem.

**Well-Being.** This scale was created using a modified version of Lubin, Zuckerman, & Woodward’s (1985) MAACL depressed affect scale. 5 items from the MAACL assessed participants’ well-being. On each item, participants reported how they felt at that time by indicating their agreement to each item on the same Likert-type scale. These items included: “Tired or sluggish,” “Like a failure,” “Sad,” “Blue,” and “Hopeless.” Items were coded so that higher numbers indicated a greater well-being.

**Intent to Lead.** Participants’ intent to lead in the future was assessed using 2 items for which participants indicated their agreement on the same Likert-type scale. These items included: “I will actively pursue leadership positions in the future” and “I would like to be selected as the leader of a group.”

**Domain identification.** Domain identification was operationalized as the extent to which the participants identified with being, and saw themselves as, a leader. A modified version of the scale developed by Hoyt and Blascovich (2007) based on Steele and Aronson’s (1995) academic identification measure was used in this study. Participants indicated their agreement to 2 items on the Likert-type scale. These items included: “I would work hard to be selected as leader” and “I hope that I am NOT selected as leader.” Items were reverse coded such that a higher score indicated a higher level of domain identification.
Experienced Cognitive Load. This scale was adapted from Chun and Kruglanski's (2006) measure assessing difficulty in concentrating and the presence of distracting thoughts. Participants' cognitive load was assessed by 1 item for which participants indicated their agreement on the same Likert-type scale. This item was: "There were too many thoughts going through my head during the task."

Behavioral Intentions

Participants responded to items on the following mid-experimental self-report measure on the same 7-point Likert-type scale described above.

Intended Relationship-Oriented Leadership Style. Participants responded to 3 items assessing their intent to use a relationship-oriented leadership style in their upcoming leadership task. This scale was developed using items from a leadership style questionnaire in Northouse (2007) assessing task-oriented and relationship-oriented leadership style behaviors. Items included: As a leader of the upcoming group task, "I am going to act friendly with members of the group," "I am going to help the group members feel comfortable," and "I am going to help group members get along during the discussion."

Stereotype Activation and Pretesting

The first task that participants completed, described to participants as Study 1, served to activate either a stereotypical female gender role or a counterstereotypical female gender role. Participants were randomly assigned to one of two conditions. Participants in the stereotypic female gender role condition viewed a set of 19 magazine advertisements consisting of 10 gender-stereotypic advertisements and 9 gender-neutral advertisements. The gender-stereotypic magazine advertisements pictured women in stereotypic female gender roles, such as taking care of families, shopping, cooking, wearing lingerie, and dieting. Participants in the
The Effects of 33 counterstereotypic female gender role condition viewed a set of 19 magazine advertisements consisting of 10 gender-counterstereotypic advertisements and 9 gender-neutral advertisements. The gender-counterstereotypic magazine advertisements pictured women in counterstereotypic gender roles, such as playing basketball, being an entrepreneur, making millions of dollars, and working as doctors. The same 9 gender-neutral advertisements were used in both sets; these advertisements served as filler items to avoid demand characteristics. Advertisements were randomly ordered for both conditions (see Appendix A for magazine advertisements).

To ensure that the two sets of magazine advertisements activated the desired stereotypes, I pretested the magazine advertisements of 20 female University of Richmond undergraduate students. Pre-test participants were randomly assigned to view one of two sets of advertisements. Participants in the stereotypic female gender role condition viewed 16 magazine advertisements: 10 gender-stereotypic advertisements and 6 neutral advertisements; participants in the counterstereotypic female gender role conditions viewed 16 magazine advertisements: 10 gender-counterstereotypic advertisements and the same 6 neutral advertisements used in the other condition. The experimenter instructed participants to pay close attention to each advertisement, as they would be asked to recall information later.

After viewing the advertisements, pre-test participants responded to 13 items from Spence and Helmreich's (1973) Attitude Towards Women Scale (AWS), which asked them to indicate their agreement to items on a 7-point Likert-type scale ranging from -3 (strongly disagree) to 3 (strongly agree). Examples of items include: “Swearing and obscenity are more repulsive in the speech of a woman than of a man”; Women should take increasing responsibility for leadership in solving the intellectual and social problems of the day; “Women should be concerned with their duties of childbearing and house tending rather than with desires for
professional or business careers"; and "The modern girl is entitled to the same freedom from regulation and control that is given to the modern boy." Items were recoded such that lower scores indicated weaker support for the stereotypic female gender role. Results confirmed that participants who viewed the gender-counterstereotypic magazine advertisements (M = -1.66, SD = .38) disagreed more with traditional views of the female gender role than those who viewed the gender-stereotypic advertisements (M = -1.10, SD = .59), F(1,18) = 6.66, p < .05, $\eta^2 = .27$ (see Appendix A for AWS items).

Additionally, pre-test participants were asked to spend a few minutes writing down everything they could remember about the magazine advertisements they viewed. The experimenter encouraged participants to write down both specific details and general themes they noticed. Participants who viewed gender-stereotypic magazine advertisements wrote that most of the advertisements pictured attractive women in domestic roles or romantic roles. Participants who viewed the gender-counterstereotypic advertisements noted that the advertisements focused on women achieving success and in strong positions. In general, those who viewed the gender-stereotypic advertisements explicitly noted the gender roles women depicted, whereas those who viewed the counterstereotypic advertisements noted the specific actions that women were displayed as performing and did not note that women were displayed in counterstereotypic gender roles.

*Research Confederates*

For the group task, described to participants as Study 2, two female research confederates acted as two other participants. Four female University of Richmond students worked as research confederates in total for this study. The goal of the task for participants was to successfully lead the group to a unanimous consensus about whether the University of Richmond
should keep or get rid of its coordinate college system. Confederates were trained to speak
according to a set script advocating either for or against the coordinate system. The coordinate
college system at the University of Richmond consists of the Richmond College for men and
Westhampton College for women. Confederates were randomly assigned to advocate either side
on a given day (see Appendix A for confederate script). Confederates were trained such that
they started out on opposing sides of the argument (one advocating for and the other against the
coordinate system) and ended up on the same side by the end of the discussion.

In order to make this task difficult for the participants, confederates always ended up
advocating the point of view that was opposite of the participant's position; for example, if the
participant advocated for the coordinate system, then both confederates ended up advocating
against it. The participant's viewpoint on the coordinate system was obtained through her
response to two items on the UR Attitude Questionnaire. The first item asked participants to
indicate their level of agreement on the same 7-point Likert-type scale used throughout the
experiment to the following statement: "UR should keep its current Coordinate system." The
second item asked participants to circle yes or no to the following statement: "I like the
coordinate system at the University of Richmond the way it currently is." The second item forced
participants to advocate either for or against the coordinate system even if they indicated that
they were neither for nor against the system on the first item (see Appendix A for UR Attitude
Questionnaire).

Procedure

Participants were informed that they signed up to participate in two ostensibly separate
studies. The experimenter informed the participants that the first study was looking at the
relationship between personality characteristics and the tendency for people to like or dislike
certain magazine advertisements. Once participants read over and signed the consent form, they completed several pre-experimental self-report measures, described to them as personality assessments. These measures included the abbreviated Bem sex-role inventory (BSRI), Self-Efficacy for leadership, gender identification, Creativity, and Inventory of Polychronic Values. All items were scored on the same Likert-type scale as previously described. Except for the abbreviated BSRI, these measures were not used for the purpose of this study and served as filler items as to avoid demand characteristics (see Appendix A for all measures). All questions were answered on a laptop computer.

After participants completed the pre-measure questionnaires, they read instructions telling them about the set of magazine advertisements they were about to view. Participants viewed one of two sets of magazine advertisements: participants either viewed a set of gender-stereotypic advertisements or gender-counterstereotypic advertisements depending on their randomly assigned condition. The instructions explained that each advertisement would be displayed for 12 seconds and that they should jot down any notes they wanted to during the slideshow. After the slideshow was over, the experimenter returned to the room with a binder containing a copy of all 19 advertisements the participants just viewed and a sheet of paper on which participants were instructed to rank order their top 6 favorite advertisements from 1-6. Participants had two minutes to complete this task (see Appendix A for advertisement rating sheet).

The experimenter returned to the room after the two minutes were up and asked participants to follow her into another room where the other participants were waiting to begin the second study. Participants were led to believe that they would now be participating in a 3-person group study. The group consisted of one participant and 2 female research confederates.
who were believed to be the other two participants. The experimenter asked the participant and 2 confederates to sign a consent form and fill out a short questionnaire examining their attitudes on several aspects of life at UR. The questionnaire consisted of 10 items but only the two regarding their attitude toward the coordinate system were relevant (see Appendix A for consent form). After participants filled out the UR Attitude Questionnaire, the experimenter noted whether the participant was an advocate for or against the coordinate system and informed the confederates so that they could follow the script accordingly.

The experimenter then returned to the room and informed participants that they would be participating in a group discussion of the coordinate system at the University of Richmond. Participants were led to believe that the University of Richmond had recently engaged the Psychology Department to help get a better sense of students' feelings about the coordinate system. In addition, the experimenter explained that she was using this opportunity to observe interactions between individuals discussing controversial issues. The experimenter then informed participants that, because this is a controversial issue, there would need to be a leader to effectively mediate and guide the discussion. Participants then chose their role assignments out of a hat; the true participant always selected the role of leader.

The experimenter then led participants into a separate room where they answered questions pertaining to their intended relationship-oriented leadership style (see Appendix A for Intended Relationship-Oriented Leadership Style questionnaire). All items were answered on the same Likert-type scale. After they completed these items, participants listened to an audio file describing their task as the leader. When the audio file ended, the experimenter returned the room with a description of the coordinate system and informed participants that they had 5 minutes to prepare using this description. The experimenter also told participants that they
would be allowed to use any notes they chose to make during their preparation (see Appendix A for task instructions and coordinate system description). After 5 minutes, the experimenter brought the participants back into the room with the 2 confederates so that they could begin the group task. Participants were informed that it was their task to lead the group to a unanimous consensus on whether the University of Richmond should keep or get rid of its coordinate system in a 10-minute discussion.

When the 10 minutes were up, the experimenter returned to the room and asked the participant to formally state the group’s consensus into an audio recorder. Participants then returned to their original room where they completed several post-experimental self-report questionnaires on the same Likert-type scale. These measures included: perceived performance, self-esteem, well-being, intent to lead in the future, domain identification, and experienced cognitive load. At this point, the 2 confederates rated participants on several items assessing leadership performance. This measure was not used for the purpose of this study (see Appendix A for confederate coding sheet).

After participants completed the final questionnaires, the experimenter thoroughly debriefed them about the true purpose of the experiment. The experimenter explained that the purpose of the first task was to activate either stereotypic or counterstereotypic views of women and that the purpose of the second task was to examine how this activation affected their responses to a leadership situation. Participants were probed for suspicion and were told that the other two participants were research confederates. Participants received $10 for their time and signed a receipt for their participant payment. Participants also signed a sheet agreeing to not talk with others about the true purpose of this study because the participant pool at the University
of Richmond is so small. The experimenter then thanked participants and showed them out of
the laboratory.

Results

The Effect of Stereotype Activation on Post-Experimental Self-Report Measures

In hypothesis 1, I proposed that participants would respond negatively to gender-
stereotypic advertisements and positively to gender-counterstereotypic advertisements on post-
experimental self-report measures. In order to assess the effects of stereotype activation on
women’s responses to self-report measures, I conducted a one-way multivariate analysis of
variance in which stereotype activation was the independent variable (stereotype activation:
gender-stereotypic or gender-counterstereotypic) and the dependent variables were perceived
performance, self-esteem, well-being, intent to lead, domain identification, and experienced
cognitive load. All self-report measures asked for participants to indicate their agreement to
items on a 7-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree) (See
Table 1 for descriptives, including scale means, standard deviations, and intercorrelations).

Table 1 Cronbach’s α’s, Means, Standard Deviations, and Intercorrelations Among All Self-

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Performance</td>
<td>4.19</td>
<td>1.67</td>
<td>.79</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>4.57</td>
<td>1.26</td>
<td>.55**</td>
<td>.80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Well-Being</td>
<td>5.27</td>
<td>.76</td>
<td>.54**</td>
<td>.65**</td>
<td>.74</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intent to Lead</td>
<td>4.66</td>
<td>1.48</td>
<td>.38**</td>
<td>.35**</td>
<td>.56**</td>
<td>.85</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domain Identification</td>
<td>4.85</td>
<td>1.42</td>
<td>.33*</td>
<td>.35**</td>
<td>.57**</td>
<td>.85**</td>
<td>.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experienced Cognitive Load</td>
<td>2.80</td>
<td>1.51</td>
<td>-.35**</td>
<td>-.36**</td>
<td>-.43**</td>
<td>-.19</td>
<td>-.16</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Relationship-Oriented Style</td>
<td>6.10</td>
<td>.48</td>
<td>.15</td>
<td>-.06</td>
<td>.26*</td>
<td>.37**</td>
<td>.42**</td>
<td>.07</td>
<td>.57</td>
</tr>
</tbody>
</table>

** Correlation is significant at the .01 level
* Correlation is significant at the .05 level
Note: Cronbach’s α’s are on the diagonal in Table 1.
Perceived performance. This analysis supported the hypothesis revealing a significant main effect of stereotype activation on participants' responses on perceived performance items, $F(1,58) = 4.95, p < .05, \eta^2 = .079$ (see Figure 1), with gender-stereotypic participants indicating a lower perceived performance ($M = 3.87, SD = 1.26$) than gender-counterstereotypic participants ($M = 4.52, SD = .99$).

Self-Esteem. This analysis supported the hypothesis, revealing a significant main effect of stereotype activation on participants' responses to self-esteem items, $F(1,58) = 4.33, p < .05, \eta^2 = .07$ (see Figure 1), with gender-stereotypic participants indicating lower self-esteem ($M = 4.24, SD = 1.30$) than gender-counterstereotypic participants ($M = 4.9, SD = 1.15$).

Well Being. This analysis supported the hypothesis, revealing a significant main effect of stereotype activation on participants' responses to well-being items, $F(1,58) = 4.08, p < .05, \eta^2 = .066$ (see Figure 1), with gender-stereotypic participants indicating lower well-being ($M = 5.08, SD = .80$) than gender-counterstereotypic participants ($M = 5.47, SD = .68$).

Figure 1. The mean self-reported scores on perceived performance, self-esteem, well-being measures by participants in the gender-stereotypic condition ($n = 30$) and participants in the gender-counterstereotypic condition ($n = 30$) respectively.
Intent to Lead. No main effects of stereotype activation were found on responses to items questioning participants’ intent to lead in the future.

Domain identification. No main effects of stereotype activation were found on responses to items questioning participants’ domain identification.

Experienced Cognitive Load. No main effects of stereotype activation were found on responses to items questioning participants’ experienced cognitive load.

Moderating Effect of Sex-Role Orientation on Post-Experimental Self-Report Measures

In hypothesis 2, I proposed that gender-stereotypic magazine advertisements would have more negative affects whereas gender-counterstereotypic magazine advertisements would have more positive effects on feminine-oriented women’s responses than for masculine-oriented women’s responses. In order to test whether women’s sex-role orientation had a moderating affect on their responses to post-experimental self-report measures, I conducted a two-way multivariate analysis of variance in which stereotype activation (stereotype activation: gender-stereotypic or gender-counterstereotypic) and sex-role orientation (masculine-oriented or feminine-oriented) were the independent variables. The same dependent variables were used as in the former analysis: perceived performance, self-esteem, well-being, intent to lead, domain identification, and experienced cognitive load.

Perceived performance. There were no main effects of stereotype activation or sex-role orientation and no significant interactions between the two independent variables on responses to items questioning participants’ perceived performance.

Self-Esteem. There were no main effects of stereotype activation or sex-role orientation and no significant interactions between the two independent variables on responses to items questioning participants’ self-esteem.
The Effects of Well-Being. This analysis revealed a significant main effect of sex-role orientation on well-being, \( F(1,31) = 5.03, p < .05, \eta^2 = .14 \), with feminine-oriented participants indicating lower well-being \((M = 4.97, SD = 1.02)\) than masculine-oriented participants \((M = 5.71, SD = .56)\). There was no main effect of stereotype activation and no interaction between stereotype activation and sex-role orientation.

Intent to Lead. There was no main effect of stereotype activation on responses to items questioning participants' intent to lead. However, there was a significant main effect for sex-role orientation on intent to lead, \( F(1,31) = 11.05, p < .05, \eta^2 = .26 \), with feminine-oriented participants indicating lower intent to lead scores \((M = 4.11, SD = 1.32)\) than masculine-oriented participants \((M = 5.59, SD = .96)\). The analysis also revealed a significant interaction between stereotype activation and sex-role orientation, \( F(1,31) = 4.64, p < .05, \eta^2 = .13 \) (see Figure 2). In order to examine where significant differences occurred, I performed simple effects tests which revealed a significant difference \((p = .02)\) for feminine-oriented participants across conditions such that those in the gender-stereotypic condition \((M = 3.67, SD = 1.11)\) reported lower intent to lead scores than those in the gender-counterstereotypic condition \((M = 5.00, SD = 1.34)\). This analysis also revealed a significant difference \((p = .00)\) for participants in the gender-stereotypic condition with feminine-oriented women \((M = 3.67, SD = 1.11)\) indicating lower intent to lead scores than masculine-oriented women \((M = 5.75, SD = .71)\).

Figure 2. The effect of stereotype activation and sex-role orientation on intent to lead.
Domain identification. The analysis revealed a significant main effect for stereotype activation on domain identification, $F(1, 31) = 5.78$, $p < .05$, $\eta^2 = .16$, with participants in the gender-stereotypic condition reporting lower domain identification scores ($M = 4.68$, $SD = 1.55$) than those in the gender-counterstereotypic condition ($M = 5.80$, $SD = .92$). There was a significant main effect for sex-role orientation, $F(1, 31) = 8.41$, $p < .05$, $\eta^2 = .21$, with feminine-oriented participants reporting lower domain identification scores ($M = 4.47$, $SD = 1.5$) than masculine-oriented participants ($M = 5.88$, $SD = .96$). This analysis also revealed a significant interaction between stereotype activation and sex-role orientation, $F(1, 31) = 7.18$, $p < .05$, $\eta^2 = .19$ (see Figure 3). Simple effects tests revealed a significant difference between feminine-oriented participants ($p = .001$) with those in the gender-stereotypic condition indicating lower domain identification scores ($M = 3.38$, $SD = 1.29$) than those in the gender-counterstereotypic condition ($M = 5.75$, $SD = .82$). There was also a significant difference for the gender-stereotypic condition ($p = .00$) with feminine-oriented participants indicating lower domain identification scores ($M = 3.83$, $SD = 1.29$) than masculine-oriented women ($M = 5.94$, $SD = .94$).

Figure 3. The effect of stereotype activation and sex-role orientation on domain identification.

Experienced Cognitive Load. There was no main effect of stereotype activation on experienced cognitive load. A main effect for sex-role orientation was revealed $F(1, 31) = 15.55$, 
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$p<.05$, $\eta^2 = .33$, with feminine-oriented participants reporting higher experienced cognitive load scores ($M= 3.67, SD = 1.6$) than masculine-oriented participants ($M = 2.18, SD = 1.29$).

Additionally, the analysis revealed a significant interaction between stereotype activation and sex-role orientation, $F (1,31) = 6.68, p<.05, \eta^2 = .33$ (see Figure 4). Simple effects tests revealed a significant difference in the opposite direction as predicted between feminine-oriented participants ($p = .05$): those in the gender-counterstereotypic condition reported higher experienced cognitive load ($M = 5.00, SD = 1.1$) than those in the gender-stereotypic condition ($M = 3.00, SD = 1.4$). Simple effects tests also revealed a significant difference between participants in the gender-counterstereotypic condition ($p = .00$) with feminine-oriented participants indicating higher experienced cognitive load ($M= 5.00, SD= 1.1$) than masculine-oriented women ($M = 2.00, SD = 1.22$).

*Figure 4. The effect of stereotype activation and sex-role orientation on experienced cognitive load.*

*The Effect of Stereotype Activation on Behavioral Intention*

In hypothesis 3, I proposed that women exposed to gender-stereotypic magazine advertisements would indicate a higher intended relationship-oriented leadership style than those exposed to gender-counterstereotypic magazine advertisements. In order to assess the effects of stereotype activation on women’s intended relationship-oriented leadership style, I conducted a univariate analysis of variance in which stereotype activation was the independent variable.
(stereotype activation: gender-stereotypic or gender-counterstereotypic) and the dependent variable was intended relationship-oriented leadership style.

This analysis revealed a marginally significant main effect of stereotype activation on participants' intended relationship-oriented leadership style in the opposite way as predicted, $F(1,58) = 2.85, p = .097, \eta^2 = .047$ (see Figure 5), with gender-counterstereotypic participants indicating a higher intended relationship-oriented leadership style ($M = 6.10, SD = .56$) than gender-stereotypic participants ($M = 5.87, SD = .51$).

Figure 5. The mean self-reported scores on intended relationship-oriented leadership style measure by participants in the gender-stereotypic condition ($n = 30$) and participants in the gender-counterstereotypic condition ($n = 30$) respectively.

I also proposed in hypothesis 3 that feminine-oriented participants would exhibit a stronger intention for relationship-oriented leadership style than masculine-oriented participants in the gender-stereotypic condition. In order to test whether women's sex-role orientation had a moderating effect on their intended relationship-oriented leadership style, I conducted a two-way multivariate analysis of variance in which stereotype activation (stereotype activation: gender-stereotypic or gender-counterstereotypic) and sex-role orientation (masculine-oriented or feminine-oriented) were the independent variables and intended relationship-oriented leadership style was the dependent variable.

This analysis revealed a significant main effect for stereotype activation on participants' intended relationship-oriented leadership style, $F(1,31) = 4.39, p < .05, \eta^2 = .12$, in the opposite
direction as predicted such participants in the gender-counterstereotypic condition indicated a stronger intended relationship-oriented leadership style ($M = 5.27, SD = .61$) than those in the gender-stereotypic condition ($M = 5.07, SD = .80$). There was no main effect of sex-role orientation on participants' intended relationship-oriented leadership style.

The analysis revealed a marginally significant interaction between stereotype activation and sex-role orientation on participants' intended relationship-oriented leadership style, $F(1,31) = 2.16, p = .09, \eta^2 = .07$ (see Figure 6). Simple effects tests revealed a significant difference ($p = .016$) between feminine-oriented participants with those in the gender-counterstereotypic condition indicating higher intended relationship-oriented scores ($M = 6.39, SD = .39$) than those in the gender-stereotypic condition ($M = 5.83, SD = .50$).

**Figure 6.** The effect of stereotype activation and sex-role orientation on intended relationship-oriented leadership style.

**Discussion**

The purpose of the present study was to examine how stereotypes affect women in leadership situations. Eagly and Karau's (2002) role congruity theory states that the perceived incongruity between the female gender role and the leader role creates a prejudice toward women that negatively affects how women are perceived and evaluated in leadership positions. Based on Goffman's (1976) assessment of how magazine advertisements display stereotypes concerning gender roles in society, the present study looked at women's responses to leadership
situations after viewing magazine advertisements depicting either gender-stereotypic or gender-counterstereotypic images of women.

The Effect of Stereotype Activation

It was hypothesized that the gender-stereotypic magazine advertisements would have a negative effect on women and counterstereotypic magazine advertisements would have a positive effect on women’s responses to the leadership situation. The results supported this hypothesis on three outcome measures, with participants who viewed gender-stereotypic magazine advertisements reporting significantly lower perceived performance, lower self-esteem, and lower well-being than those who viewed gender-counterstereotypic magazine advertisements. These results support past research demonstrating how negative stereotypes have detrimental effects on targeted individuals’ performance. Steele (1997) states that when individuals perceive that they are at risk of confirming a negative stereotype about their group, they are vulnerable to experiencing a type of performance apprehension called stereotype threat. An abundance of research has supported the effects of stereotype threat demonstrating that individuals who are the target of a negative stereotype perform worse than nontargeted individuals, but perform just as well when they are not made aware of the negative stereotype (Steele & Aronson, 1995; Spencer, Iserman, Davies & Quinn, 1999; Sekaquaptewa & Thompson, 2003). In the present study, women were the targets of the negative gender leader stereotype held against women in leadership positions.

The results from this study extend past research by Davies, Spencer, and Steele (2005), which demonstrated that women exposed to gender-stereotypic commercials were vulnerable to stereotype threat, whereas those exposed to gender-neutral commercials were not. The magazine advertisements in this study were a more subtle stereotype activation prime than in this past
study because the images displayed information visually, rather than both visually and aurally. Thus, the present study extends past research by suggesting that magazines containing gender-stereotypic advertisements, which individuals merely flip through, are enough to have negative effects on women in leadership situations. Moreover, while Davies, Spencer, and Steele (2005) examined individuals' preference for a leadership role or subordinate role, the present study examined the actual effect of stereotypes on targeted individuals in leadership situations. Therefore, this study builds off of past research by demonstrating that, not only do gender-stereotypic images persuade women to avoid leadership roles, but when forced into this role, they exhibit more negative responses than those who are exposed gender-counterstereotypic images of women.

**Moderating Effects of Sex-Role Orientation on Self-Reported Responses**

The present study also looked at how participants' sex-role orientation moderates the effect of stereotype activation on women's responses in leadership situations. It was hypothesized that the magazine advertisements would have a stronger effect on feminine-oriented participants than masculine-oriented participants, meaning that the gender-stereotypic magazine advertisements would have a more negative effect whereas gender-counterstereotypic magazine advertisements would have a more positive effect on feminine-oriented participants than masculine-oriented participants. In support of this prediction, the results revealed significant interactions on participants' reported intent to lead, domain identification, and experienced cognitive load.

The results from simple effects tests supported the hypothesis for participants' reported intent to lead and domain identification. Whereas feminine-oriented participants who viewed gender-stereotypic magazine advertisements reported significantly lower intent to lead and
domain identification scores than feminine-oriented participants who viewed gender-counterstereotypic advertisements, masculine-oriented participants in either condition did not significantly differ from each other. Moreover, for participants who viewed gender-stereotypic magazine advertisements, feminine-oriented individuals indicated lower intent to lead and domain identification scores than masculine-oriented individuals in this condition.

The fact that masculine-oriented participants' scores did not differ significantly as a function of stereotype activation suggests that the magazine advertisements had no effect on their responses to leadership situations. One possible interpretation of these findings is that these participants did not perceive the negative stereotype elicited from the advertisements to be self-relevant. According to Steele (1997), individuals experience stereotype threat when they perceive that they are at risk of confirming a negative stereotype about their group. Steele stresses that, in order for a negative stereotype to be threatening, it must be self-relevant. Although these participants viewed images of women (a group to which all participants belong), they may not have found these particular images of women (gender-stereotypic) to be representative of the type of women they are. This interpretation suggests that masculine-oriented women did not perceive the stereotype as self-relevant and, therefore, were not vulnerable to stereotype threat on the leadership task. Rather it is likely that they perceived themselves as fit for the leadership role because their sex-role orientation includes masculine qualities.

Past research examining the effect of sex-role orientation on leadership also supports these findings. Research has consistently shown that masculine traits are positively correlated with leadership. Results from a survey study of a large organization by Fagenson (1990) revealed that perceptions of masculine attributes were related to individuals' level in the
organizational power hierarchy such that upper level men and women reported possessing more 
masculine characteristics than did lower level individuals. In a study by Goktepe and Schneier 
(1989), masculine participants, regardless of sex, were more likely to emerge as leaders than 
feminine, androgynous, and undifferentiated participants for tasks performed throughout a 
semester. Moreover, Ledet and Henley's (2000) research demonstrates that leaders are also 
perceived as possessing masculine traits. In this study, participants rated female and male 
vignette characters in varying positions within an organization on a list of adjectives. The results 
demonstrated that women in high positions were rated as more masculine than men and women 
in low positions and as masculine as men in high positions (Ledet & Henley, 2000).

In the present study, masculine-oriented women were not only unaffected by the gender-
stereotypic magazine advertisements, but actually exhibited more positive responses than 
participants in any other condition. Although their scores did not significantly differ from 
masculine-oriented participants in the gender-counterstereotypic condition, these findings still 
suggest that masculine-oriented women exhibit more positive responses to leadership situations 
because they are not vulnerable to the gender-leader stereotype, and if anything, may react to 
negative stereotype by indicating more positive responses. These results support Bergeron, 
Block, and Echtenkamp's (2006) study which predicted that identification with the masculine 
gender role might lessen the effects of stereotype threat for women on a managerial task. Their 
results revealed that women highly identified with the masculine gender role performed equally 
as well as men, whereas those weakly identified with the masculine gender role performed worse 
than men when exposed to a negative stereotype (Bergeron, Block, and Echtenkamp, 2006).

However, feminine-oriented participants who viewed gender-stereotypic images of 
women reported lower intent to lead and domain identification scores than any other group.
These findings build on past stereotype threat research by demonstrating that sex-role orientation moderates responses to negative stereotypes such that feminine-oriented participants exhibit threat responses while masculine-oriented participants do not. These results suggest that these participants did perceive the gender-stereotypic advertisements of women to be self-relevant and, consequently, were vulnerable to stereotype threat when asked to perform a leadership task. These results are also in line with Bem’s (1981) gender schema theory stating that sex-typed individuals (i.e. feminine-oriented women and masculine-oriented men) have a greater readiness to process information in terms of the gender schema. This suggests that these images easily activated gender schemas for how women are supposed to act and behave (i.e. not as effective leaders) and, consequently, negatively affected their responses to the leadership situation.

On the other hand, feminine-oriented participants in the gender-counterstereotypic condition indicated almost equally high domain identification and intent to lead scores as masculine-oriented participants. One interpretation of these results is that a more flexible gender schema (i.e. images of the female gender role including masculine traits) was activated for these participants who suffered no performance deficits. As previous stereotype threat research has shown, these results also demonstrate that stereotype threat is situationally induced such that exposure to a negative stereotype leads to performance deficits, but as soon as the stereotype, or “threat,” is removed, performance deficits are eliminated (Steele, 1997). In the present study, the counterstereotypic advertisements elicited a counterstereotypic view of women which may have succeeded in removing the threat of leadership situations that inherently exists. In past studies, researchers have examined different methods of nullifying the harmful effects of stereotypes. Davies, Spencer, and Steele (2005) found that they could eliminate vulnerability to stereotype threat by creating what they termed an identity-safe environment. Their results demonstrated
that the negative effects of stereotypes induced by gender-stereotypic TV commercials can be eliminated by explicitly telling participants that research reveals no gender-based differences in ability on the leadership task. Since a threat to women inherently exists in any leadership situation due to the gender-leader stereotype, these results suggest that the gender-counterstereotypic magazine advertisements had the same nullifying effect as in the study mentioned above. That is, all participants in this study were vulnerable to stereotype threat simply because they are women placed in a leadership situation. However, the gender-counterstereotypic advertisements succeeded in making the leadership domain safe for these participants by eliciting counterstereotypical images of women and, consequently, creating a situation where women are believed to be just as fit to be leaders as men are.

Research by Pittinsky, Shih, and Ambady (1999) on what they term “identity adaptiveness” adds further support to this interpretation. Identity adaptiveness refers to the extent to which a social identity is associated with positive stereotypes in a given domain (Pittinsky, Shih, & Ambady, 1999). In their study, Asian American women reported their affect for their memories in contexts for which their ethnic identity was favorable or unfavorable and for which their gender identity was favorable or unfavorable. The findings from this study revealed that participants generate more positive ethnicity-related memories than gender-related memories in contexts for which their ethnic identity was adaptive. On the other hand, they generated more positive gender-related memories than ethnicity-related memories in contexts for which their gender identity was adaptive (Pittinsky, Shih, & Ambady, 1999). These findings suggest that stereotype-relevant contexts prompt an implicit reorientation of individuals’ affect across their many identities. While the present study looks at two aspects of one’s gender identity, rather than two distinct social identities, these findings suggest that the gender-
counterstereotypic images of women may have helped to prompt a reorientation of participant’s typically feminine-oriented gender identity to one that was more adaptable for the given leadership situation.

Another interpretation of these results is that the gender-counterstereotypic advertisements actually had a positive effect on their responses to the leadership situation. These findings extend research by Bergeron, Block, and Echtenkamp (2006) by demonstrating that vulnerability to stereotype threat can be eliminated when feminine-oriented women are exposed to gender-counterstereotypic images. While this study does not reveal whether the gender-counterstereotypic advertisements resulted in participants exhibiting more positive responses than they normally would, the results still provide suggestive evidence. As previously mentioned earlier in the discussion, a significant amount of research on sex-role orientation demonstrates that masculine-oriented individuals exhibit more positive responses in leadership situations than feminine-oriented individuals. The results from this study contradict these findings with feminine-oriented individuals in the gender-counterstereotypic condition showing no significant differences from masculine-oriented individuals. If the gender-counterstereotypic advertisements simply had no effect on feminine-oriented participants, they still would be expected to respond more negatively to the leadership situation than masculine-oriented participants. Thus, these results suggest that the gender-counterstereotypic advertisements improved feminine-oriented participants’ responses such that they responded equally as positive as masculine-oriented participants in either condition.

Previous research by Dasgupta and Asgari (2003) demonstrating that exposure to women in counterstereotypic leadership positions weakened women’s implicit stereotypic beliefs and activated counterstereotypic beliefs supports these findings. Moreover, because Dasgupta and
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Asgari's study used explicit primes (famous women leaders), the present studied also extends their research by demonstrating that more subtle primes (gender-counterstereotypic advertisements) may have the same positive effect on women's beliefs. In another study, Dasgupta and Asgari found that women who attended an all women's college expressed less automatic gender stereotypes than those who attended a coeducational college. In the same way that their results suggest that exposure to gender-counterstereotypic women in everyday life can decrease the perceived incongruity between women and leaders, the results from the present study also suggest that exposure to more gender-counterstereotypic magazine advertisements can have the same positive effect on women in leadership situations.

The results from simple effects tests revealed findings in the opposite direction for participants' reported experienced cognitive load. The results showed that feminine-oriented participants who viewed gender-counterstereotypic magazine advertisements reported greater experienced cognitive load than those who viewed gender-stereotypic advertisements. Also, for participants who viewed gender-counterstereotypic magazine advertisements, feminine-oriented individuals indicated greater experienced cognitive load than masculine-oriented individuals. Although these results are opposite of the interaction effects for domain identification and intent to lead, the implications become more clear when examined in terms of gender schemas. Feminine-oriented participants who viewed gender-stereotypic magazine advertisements viewed images of women fitting with their sex-typed gender schema, whereas feminine-oriented participants who viewed gender-counterstereotypic advertisements saw images of women contrary to their cross-typed gender schema. According to Schmader and Johns' (2003) research, stereotype activation increases individuals' cognitive load because processing this information uses up cognitive resources. In view of Bem's (1981) gender schema theory
previously discussed, Schmader and Johns' (2003) research suggests then that feminine-oriented participants in the gender-counterstereotypic condition may have expended more cognitive resources in order to process information contrary to their gender schema and, therefore, experienced a greater cognitive load during the leadership task.

Social cognition and social perception research by Fiske (1993) further supports this interpretation. According to Fiske's top-down model of person perception, activated schemas guide cognitive processing such that individuals try to categorize others according to their schemas. In order to make this process easy, individuals are motivated to maintain stereotypes so that others fit nicely into categorized groups. However, if others do not fit into the activated schema, individuals must do additional cognitive work to recategorize or subtype others in order to retain their schema. While the participants in the present study were not processing information about other people, they were paying close attention to the women displayed in the magazine advertisements. Thus, Fiske's research implies that feminine-oriented women in the present study, who have easily accessible sex-typed gender schemas, had to do additional cognitive work to categorize the gender-counterstereotypical women they saw in the magazine advertisements. On the other hand, feminine-oriented participants in the gender-stereotypic condition did not need to expend a great deal of cognitive resources in order to process information in terms of their readily accessible gender schema. As Fiske states, assimilation is the cognitively easier default option when there is no reason to discredit the categorization. This research helps to explain why feminine-oriented women in the gender-counterstereotypic condition reported a higher experienced cognitive load than feminine-oriented participants in the gender-stereotypic condition.
Although participants did not report their experienced cognitive load after viewing the magazine advertisements, but after completing the leadership task, the pretesting data from this study revealing that participants who saw the gender-stereotypic advertisements had more traditional views of women than those who saw the gender-counterstereotypic advertisements suggests these images of women were still active in participants' minds. Because exposure to the two sets of magazine advertisements resulted in significant differences in participants' responses to the leadership situation, it is likely that the experienced cognitive load participants reported also reflects the amount of cognitive resources needed to process information from the either set of magazine advertisements during the leadership task.

The Effect of Stereotype Activation on Intended Relationship-Oriented Leadership Style

It was also hypothesized that participants exposed to gender-stereotypic magazine advertisements would indicate a higher intended relationship-oriented leadership style than those exposed to gender-counterstereotypic magazine advertisements. Based on past research demonstrating that priming an individual with a stereotype leads to behavior in accordance to the activated construct, participants were expected to assimilate to either gender-stereotypic or gender-counterstereotypic images of women, depending on whether they were assigned to one condition or the other (Wheeler & Petty, 2001; Dijksterhuis & van Knippenberg, 1998). The ideomotor theory suggests that the images of women from the magazine advertisements should impact participants' thoughts, attitudes, and behaviors by making mental contents of either gender-stereotypic or gender-counterstereotypic women more readily available (Wheeler & Petty, 2001). Because the relationship-oriented leadership style corresponds with prototypes associated with typical female behaviors and the task-oriented leadership style corresponds with typical male behaviors, it was predicted that participants in the gender-stereotypic condition
would have more stereotypic views of women accessible, and consequently indicate an intended relationship-oriented leadership style (Hall, Workman, & Marchioro, 1998). On the other hand, participants in the gender-counterstereotypic condition were expected to have more counterstereotypic views of women accessible and consequently were expected to present themselves in a manner counterstereotypical to the female gender role by indicating a lower relationship-oriented leadership style. However, the results revealed findings contrary to predictions: participants exposed to gender-counterstereotypic magazine advertisements reported a higher intended relationship-oriented leadership style than those exposed to gender-stereotypic advertisements.

One possible explanation for these findings is that the gender-stereotypic images prompted more stereotypical thinking in general for women, whereas the gender-counterstereotypic images prompted counterstereotypical thinking. In other words, the gender-stereotypic magazine advertisements may have activated more stereotypic schemas relating how leaders ought to act and the traits that effective leaders possess. As previously mentioned, leaders are stereotypically thought to possess such agentic qualities as dominance, assertiveness, and independence (Eagly & Karau, 2002). Moreover, an abundance of research pertaining to the trait approach to leadership studies suggests that agentic qualities are indicative of how individuals perceive leaders. The trait approach to leadership focuses on identifying innate qualities and characteristics leaders possess (Northouse, 2007). Trait research by Lord, DeVader, and Alliger (1986) found in a meta-analysis that intelligence, masculinity, and dominance were significantly related to how individuals perceive leaders (as cited by Northouse, 2007). If gender-stereotypic magazine advertisements primed individuals’ stereotypic thoughts about leaders, then it follows that they would be less likely to intend to display a relationship-
oriented leadership style. Therefore, it is possible that the participants in the gender-stereotypic condition assimilated to stereotypical leadership behavior by intending to portray less of a relationship-oriented leadership style.

On the other hand, participants in the gender-counterstereotypic condition were not confined to traditional views of leadership and may have even been primed to use innovative leadership styles. Because the actual leadership task was to bring disagreeing group members to a unanimous decision, a relationship-oriented leadership style was an appropriate style to portray. While task behaviors facilitate goal accomplishment by helping group members achieve their objectives, relationship behaviors help group members feel comfortable and build trust (Northouse, 2007). Thus, participants may have been primed, as at least inspired, from the gender-counterstereotypic images of women to use a leadership style effective for the given leadership task.

*Moderating Effect of Sex-Role Orientation.* The moderating effect of sex-role orientation also revealed findings in the opposite direction as predicted. While it was hypothesized that feminine-oriented participants would exhibit a stronger intention for relationship-oriented leadership style than masculine-oriented participants in the gender-stereotypic condition, simple effects tests revealed that feminine-oriented participants who viewed gender-counterstereotypic magazine advertisements indicated significantly higher relationship-oriented leadership style scores than masculine-oriented participants.

In fact, the feminine-oriented participants in the gender-counterstereotypic condition reported highest intended relationship-oriented leadership style than any other group. Their high intended relationship-oriented style further implies that the gender-counterstereotypic images of women had a positive effect on feminine-oriented (sex-typed) participants. As mentioned
before, the leadership task clearly called for this type of leadership style. According to these results, feminine-oriented participants in the gender-counterstereotypic condition indicated the greatest intent to “act friendly with members of the group,” “help group members feel comfortable,” and “help group members get along during the discussion” during the leadership task. When looking at these responses in terms the information participants were given about the leadership task, it is clear that a relationship-oriented leadership style would be effective (see Appendix A for task instructions).

Furthermore, recent research by Hollander (2007) on inclusive leadership suggests that individuals prefer leaders who are relationship-oriented. Inclusive leadership, defined by Hollander as a leadership style that accounts for the needs and expectations of followers, is similar to the relationship-oriented leadership style described in the present study because both styles emphasize the development of mutual trust and a two-way communication between leaders and followers. Hollander surveyed 293 organizationally-based respondents asking them to describe “good” and “bad” leadership experiences with a person in a leader role. The results from this study revealed that relational factors, such as supportiveness, sensitivity to followers’ needs, open communication, and fairness best discriminated between “good” and “bad” leadership (Hollander, 2007). Contrary to the stereotypical belief individuals hold that effective leaders possess task-oriented or agentic qualities, these findings suggest that the relationship-oriented leadership style was not only more effective in the present study, but is also more indicative of what followers’ define as “good” leadership in actual leadership situations. Therefore, feminine-oriented participants in the gender-counterstereotypic condition may have been actively trying to adopt the best possible leadership style for the leadership task.
While no empirical data supports this claim, the interaction effects for experienced
cognitive load helps to support this interpretation. As stated earlier, feminine-oriented
participants in the gender-counterstereotypic condition also reported the highest experienced
cognitive load score, significantly higher than feminine-oriented participants in gender-
stereotypic condition and masculine-oriented participants in the gender-counterstereotypic
condition. The high experienced cognitive load suggests that these participants may have been
thinking hard about what the best leadership behavior and traits to display during the leadership
task. Another possibility is that the high experienced cognitive load was due to inconsistent
stereotype activation of women, as described in the discussion of the cognitive load results
above. However, these two possibilities are not mutually exclusive; thus the high experienced
cognitive load for these participants might also represent a combination of these to mental
stressors.

Limitations and Future Research

One limitation of the present study is the small number of participants in each group used
when examining the moderating effect of sex-role orientation. The median split I created based
on participants' responses to the abbreviated BSRI yielded 17 masculine-oriented women (8 in
the gender-stereotypic condition and 9 in the gender-counterstereotypic condition) and 18 total
feminine-oriented women (12 in the gender-stereotypic condition and 6 in the gender-
counterstereotypic condition). Although the small sample size weakens the ability to generalize
the findings from this study, it also suggests that the magazine advertisements served as a strong
manipulation based on the fact that significant differences between groups did occur despite the
small sample size.
Another limitation of this study regarding the participants is that the participants are somewhat unrepresentative of the normal population. The women who participated attend a small, liberal arts college that offers unique leadership opportunities to students. For example, the University of Richmond's coordinate college system, mentioned in the description of the leadership task, offers male and female students equal leadership opportunities. This also means that more leadership positions exist in general for men and women. Therefore, more women are likely to hold leadership positions or see other women in leadership situations than the general population. As Dasgupta and Asgari's (2003) findings demonstrate, women's stereotypic beliefs about the female gender role weaken when they observe women in counterstereotypic roles on a daily basis, such as at an all women's college. However, this limitation once again only points to the strength of the study's manipulation. Even though most of the mean scores for this study were above 4 (the average score on the Likert-type scale used in this study), exposure to the different sets of magazine advertisements still resulted in significant differences between the two conditions. Thus, it is likely that a more representative sample would only reveal stronger differences between the gender-stereotypic and gender-counterstereotypic conditions.

Due to limited time and resources and the need for a sufficient sample size for each condition, this study was purposefully designed without a condition for participants exposed to gender-neutral magazine advertisements. In this study, a gender-neutral condition would have consisted of participants who either viewed all gender-neutral advertisements or viewed no advertisements at all before completing the leadership task. The results from this group would help to figure out the baseline response women exhibit to the leadership situation and, consequently, help to better understand the effect of the experimental conditions.
However, the results from pretesting data revealed that participants who viewed gender-
stereotypic magazine advertisements reported stronger agreement to traditional views of the
female gender role on Spence and Helmreich's (1973) Attitude Towards Women Scale (AWS)
than those who viewed gender-counterstereotypic advertisements. These results suggest that
magazine advertisements were successful in priming participants with the intended view of
women (either gender-stereotypic or gender-counterstereotypic). Based on the abundance of
research demonstrating the negative effects of stereotypes on targeted individuals, the results
from the present study suggest that the gender-stereotypic magazine advertisements primed
participants with the female stereotype which then made participants vulnerable to experiencing
stereotype threat in the leadership situation.

What remains less clear is whether the gender-counterstereotypic magazine
advertisements simply nullified the negative stereotype by making the leadership role
nonthreatening, or whether these advertisements actually had a positive effect on participants by
making the leadership role more accessible to women. The rationale behind the positive effect
proposition was that participants viewed counterstereotypic women and, consequently, were able
to think about women in counterstereotypic roles, such as leadership positions. The results from
this study suggest that these images do have a positive effect on women, based on the feminine-
oriented participants in the gender-counterstereotypic condition, but not the gender-stereotypic
condition, responding equally as positively as masculine-oriented participants in both conditions.
These findings suggest that the positive effect of gender-counterstereotypic images is moderated
by sex-role orientation, such that the positive effect only exists for feminine-oriented
participants. However, future research should test the relative strength of gender-
counterstereotypic images by creating a gender-neutral condition.
In order to examine the effects that magazine advertisements have on women leaders in real-life situations without their awareness, the present study had to compromise a certain amount of experimental control and understanding of the process. The use of magazine advertisements was instrumental to attaining the desired level of external validity. Since the magazine advertisements from this study were taken from real magazines, the results are more generalizable to the effects that magazine advertisements have on individuals' everyday life. In this way, the present study was successful in demonstrating that gender-stereotypic magazine advertisements negatively affect women in leadership situations, whereas gender-counterstereotypic ones do not. However, because each advertisement displayed different women, roles, products, colors, etc, it is impossible to discern precisely what constructs were activated. Moreover, individual differences of activated constructs may have occurred depending on the varying degree of attention participants gave to different advertisements and different aspects of each advertisement. Thus, in order to better understand the exact process that leads to individuals' responses, future research should investigate the different constructs that specific magazine advertisements elicit.

The inability to determine activated constructs also makes it difficult to explain with certainty why participants in the gender-counterstereotypic condition indicated a more relationship-oriented leadership style than those in the gender-stereotypic condition. However, results from the pretesting data with gender-stereotypic advertisements eliciting more traditional views of women and gender-counterstereotypic ones eliciting less traditional views of women support the interpretation provided in this discussion. Perhaps a more important limitation relating to leadership style is that this measure only assessed the type of leadership style participants intended to use rather than assessing their perceived leadership style after the task or
having outside raters assess participants' actual leadership style. In fact, the use of self-reported data instead of actual behavioral assessments of participants represents another limitation of this study. However, due to the researcher's limitations, self-reported measures provided the best data for the purposes of this study. Future research should further examine not only participants' self-reported responses, but also their actual behavioral responses in leadership situations.

**Conclusion**

The number of limitations in this study simply points to the high level of complexity involved in examining the effect of stereotypes on women in leadership situations. Despite these limitations, the present study still offers several promising findings that help to better understand women's responses in leadership situations and that lead to further lines of research. In order to investigate more subtle ways that negative stereotypes affect women leaders, this study exposed participants to either gender-stereotypic or gender-counterstereotypic magazine advertisements. The findings from this study suggest that gender-stereotypic images of women do have negative effects on women's responses to leadership situations.

Since the majority of images displayed of women are, by nature, stereotypical representations, these findings have important implications for all forms of media. The findings suggesting that gender-counterstereotypic advertisements do not result in the same negative effects and may, in fact, promote more positive responses from women have important implications for the type of changes that need to occur in the media. While media images of women in gender-counterstereotypic roles do exist, they are few and far between. Dove is the most prominent example today of an organization dedicated to changing the portrayal of women in the media. Dove recently launched its *Campaign for Real Beauty* in an effort to help affect this change. Instead of displaying advertisements of only tall, thin, beautiful women. Dove
strives to portray women how they are in true form in order to build self-esteem and positive attitudes. The findings from the present study demonstrating the feminine-oriented women exposed to gender-counterstereotypic magazine advertisements exhibited equally as positive responses to the leadership situation as masculine-oriented women clearly illustrates the need for more advertisements, such a Dove's, that display women in a counterstereotypical manner.

This study also illustrates the need for more encompassing sex-role orientations. As Bem (1974) points out, femininity and masculinity are not necessarily directly related to biological sex. As the BSRI indicates, both men and women can possess masculine or feminine characteristics, or both (Kent & Moss, 1994). Considering that the present study, as well as previous research, demonstrates that masculine-oriented women exhibited the most positive responses in the leadership situation, one way women may attain more top-level leadership positions is by possessing more masculine characteristics in their gender schema. Research demonstrating the positive effects of an androgynous sex-role orientation on leadership responses suggests that a combination of both masculine and feminine characteristics may be beneficial for women (Hall, Workman, & Marchioro, 1998; Kent & Moss, 1994).

According to Bem's gender schema theory (1981), as children learn the contents of society's gender schema, they learn which attributes are associated with their own sex. Bem states that children simultaneously learn to evaluate their adequacy in terms of the gender schema so that it becomes a prescriptive guide for action. Consequently, individuals begin to regulate their behavior so that it conforms to the culture's definitions of maleness and femaleness. Bem's gender schema theory suggests an interdependent relationship between gender-counterstereotypic media images and the development of flexible gender schemas, such that the medias' portrayal of women can help young girls develop a more adaptable gender
schema consisting of both masculine and feminine characteristics. Likewise, the development of more adaptable gender schemas may lead to a decrease in gender-stereotypic media images of women because they will cease to be perceived as the norm. The media greatly influences how individuals in society think about the world around them. Therefore, an integral step towards closing the gender gap between men and women lies in the media's ability to portray women in such a way that allows women to perceive themselves (and others to perceive women) not just as fashion-icons, sex-objects, and mothers, but also as doctors, presidents, and CEO's.

Summary

Using gender-stereotypic and gender-counterstereotypic magazine advertisements, the present study examined the effect of these images on women's responses to leadership situations. The results from this study demonstrated that women who viewed gender-stereotypic magazine advertisements exhibited more negative responses to the leadership situation than those who viewed gender-counterstereotypic advertisements. Women in the gender-stereotypic condition reported that they performed worse on the leadership task, had lower self-esteem, and had lower well-being than women in the gender-counterstereotypic condition. Interaction effects between stereotype activation and sex-role orientation demonstrated that the gender-stereotypic magazine advertisements harmed feminine-oriented women's identification to the leadership domain and intent to lead in the future, whereas the gender-counterstereotypic magazine advertisements promoted their behavioral intentions with these participants indicating higher intended relationship-oriented leadership style. However, this improvement came with the sacrifice of a greater cognitive load.

The findings from this study point to many important implications about the way in which the media display women. These findings suggest that the gender-stereotypic images
encourage a rigid sex-typed view of gender roles that prevents women from excelling in traditionally male-dominated domains, such as leadership. On a positive note, these findings also suggest that counterstereotypic images encourage a flexible sex-role orientation, including more masculine traits, that may help women gain entry into these male-dominated domains and close the gender gap between men and women at top-level leadership positions.
References


Catalyst (2005). *Catalyst census of women corporate officers and top earners of the Fortune*


salary, and hiring. *Sex Roles, 25*(5-6), 351-378.


and contrast effects, and subtlety of priming, or: You say “Bitch” like it’s a bad thing.

Paper presented at the annual Society for Personality and Social Psychology conference, Los Angeles, California.


APPENDIX A

Consent Form

Principle Investigator
Stefanie Simon. If you have any questions or concerns, please email stefanie.simon@richmond.edu.

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Voluntary Participation
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Pre-testing Self-Report Measure

Attitude Towards Women Scale (AWS)

Please indicate how much you agree or disagree with the following statements according to the scale seen below:

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2. Both husband and wife should be allowed the same grounds for divorce.
3. Under modern economic conditions with women being active outside the home, men should share in household tasks such as washing dishes and doing the laundry.
4. It is insulting to women to have the "obey" clause remain in the marriage service.
5. There should be a strict merit system in job appointment and promotion without regard to sex.
6. A woman should be free as a man to propose marriage.
7. Women earning as much as their dates should bear equally the expense when they go out together.
8. Women should assume their rightful place in business and all the professions along with men.
9. A woman should not expect to go to exactly the same places or to have quite the same freedom of action as a man.
10. The husband should not be favored by law over the wife in the disposal of family property or income.
11. Economic and social freedom is worth far more to women than acceptance of the ideal of femininity which has been set up by men.
12. Women should be given equal opportunity with men for apprenticeship in the various trades.
13. The modern girl is entitled to the same freedom from regulation and control that is given to the modern boy.

**Pre-Experimental Self-Report Measures**

**Self-Efficacy of Leadership**

Please indicate how much you agree or disagree with the following statements according to the scale seen below:

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1. Being a woman is an important part of my self-image.
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1. Defends own beliefs
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The 80

Effects of
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26. Love children
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30. Conventional
The Effects of 80

Self-Esteem

1. I feel self-conscious.
2. I am worried about what other people think of me.
3. I feel inferior to others at this moment.
4. I am concerned about the impression I am making.

Well-Being

1. Tired or sluggish
2. Like a failure
3. Sad
4. Blue
5. Hopeless

Intent to Lead

1. I will actively pursue leadership positions in the future.
2. I would like to be selected as the leader of a group.

Domain identification

1. I would work hard to be selected as leader.
2. I hope that I am NOT selected as leader.

Experienced Cognitive Load

1. There were too many thoughts going through my head during the task.
Behavioral Intentions

Intended Relationship-Oriented Leadership Style

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1. As the leader of the upcoming group task, I am going to act friendly with members of the group.

2. As the leader of the upcoming group task, I am going to help the group members feel comfortable.

3. As the leader of the upcoming group task, I am going to help group members get along during the discussion.

Task 1 Instructions

This task is designed to examine what types of magazine advertisements people like best. You will now view a slide show demonstration that will display 19 magazine advertisements for 12 seconds each.

When the presentation is over, your experimenter will return to the room with a binder which has a copy of the advertisements you just viewed. On a sheet of paper that your experimenter will give you, you will then rank order the 6 advertisements you liked the most. You will only be given 2 minutes to look through the binder and rate the 6 advertisements.

Therefore, as you view the slideshow now, please feel free to take notes on the paper provided so that it is easier for you to remember what you liked or disliked about each advertisement. Please note that each advertisement is labeled with a letter that you will use to identify the specific advertisement when ranking them after the slideshow.

Please click Continue to begin viewing the advertisements. When the presentation is over, your experimenter will return to the room.
**UR Attitude Questionnaire**

Please respond to the following questions regarding your attitude about several aspects of life at the University of Richmond.

<table>
<thead>
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Please write the number that corresponds to your level of agreement with the following statements:

1. Current meal plans available to me fit my needs.
2. The Safety Shuttle should be offered to male students.
3. UR should keep its current Coordinate system.
4. The housing available on campus at UR is equal or better than most other colleges.
5. UR should get rid of its Greek system.
6. 

Please circle “Yes” or “No” in response to the statement below:

YES/ NO 1. I would like it if there were more on campus apartments.
YES/ NO 2. UR should have an on campus football stadium.
YES/ NO 3. There should be more course offerings available every semester.
YES/ NO 4. I regularly attend Richmond sporting events.
YES/ NO 5. I like the coordinate system at the University of Richmond the way it currently is.

**Rating Sheet**

Please rank order your top 6 favorite advertisements out of the 19 you just viewed by writing the letter of the chosen advertisement next to the number.

1. __________________________
2. __________________________
3. __________________________
4. __________________________
5. __________________________
6. __________________________
Task 2 Instructions

As a leader, your task is to lead a discussion on whether or not the group thinks that the University of Richmond should get rid of its coordinate system and become more like other universities. Your job is to effectively lead the discussion for 10 minutes and try to come to a unanimous decision amongst the group. When you begin the group discussion, your group members will not be aware of the group’s task.

Group members’ opinions may differ on this issue, so as a leader, it is important for you to lead the discussion in a way that allows everyone to state their own opinion. On the other hand, as a leader, it is also important for you to express your own opinion to the group, so don’t hesitate to support your own beliefs.

When 10 minutes are up or you have reached a consensus, please knock on the door and your experimenter will return to the room. At this point, your experimenter will ask you to state the group’s consensus into an audio recorder. This statement should formally express the group’s consensus and main reasons why the group came to this decision. This statement will be used to evaluate your group’s performance.

Your experimenter will give you description of the coordinate system, similar to the one that the University of Richmond uses on its website. You will have 5 minutes to prepare for your leadership role using this description. Please read it over so you have a better understanding of what exactly the coordinate system entails. You can also use this time to make any notes you choose to. You will be able to use these notes during the discussion. Your experimenter will return to the room shortly.
Confederate Coding Sheet

I. Objective Scores
   A. General Greeting (Hello)  
   B. Introduce self by name  
   C. Introduce task/problem  
   D. Explain their role vs. Followers’ role  
   E. Does she assume the followers already know what to do?  
   F. Does she use the term “we”?  

II. Subjective Scores (1=lowest, 9=highest)
   A. Oral Communication (articulateness, no stuttering, etc.)  
   B. Nervousness/ Anxiety  
   C. How well do they explain problem/task?  
   D. Friendliness (is she approachable/ familiar?)  
   E. Authority (down to business, knowledgeable, direct)  
   F. Redundancy (Repetition)  
   G. Interest in what followers have to say  
   H. How much weight they give to followers’ opinions  
   I. How well they deal with conflict  
   J. How well they defend their beliefs  
   K. Overall leadership skills/ability  

III. Nonverbals: (1=first word, 9=second word)
   1. Eye contact:
      a. No eye contact or eye contact  
      b. glancing or looking steady  
   2. Smile:
      a. no smile or smile  
      b. untimely or timely  
   3. head nod:
      a. no head nod or head no  
      b. stereotyped or spontaneous  
   4. facial expression:
      a. cold or warm  
      b. unconcerned or concerned  
   5. voice:
      a. harsh or soft  
      b. unpleasing or pleasing  
   6. speech:
      a. fast or slow  
      b. hesitant or fluent  
   7. gesture:
      a. no gesture or gesture  
      b. unexpressive or expressive  
   8. posture:
      a. rigid or relaxed  
      b. withdrawing or approachable
The University of Richmond was founded in 1830 by a group of Virginia Baptists as a seminary for men. The seminary was soon incorporated as Richmond College in 1840 when it added a program for literary studies. It wasn't until 1914, the same year that Richmond's campus moved from downtown to its current location, that Westhampton College for women opened.

Today, the University of Richmond's history of two separate colleges lives on through the coordinate college system. The coordinate system consists of the Richmond College for men and the Westhampton College for women. The Colleges are not completely separate as male and female students attend class together, eat meals together, and live on both sides of campus together.

Each College has its own governance system, which includes the Senate, the Honor Council, and the Judicial Council. Each Senate is responsible for representing student opinions, addressing campus needs, and providing various opportunities for students. The Richmond and Westhampton Honor Councils meet together and hear Honor Cases of students from both coordinate colleges. The Richmond College and Westhampton College Judicial Councils function as an appeal board for any Dean's Office sanctions concerning the violation of University Policy.

Each College administers its own residence life system. Most undergraduate students live on campus in single-sex residence halls. In addition, Richmond College and Westhampton College staff are trained to respond to crises in students' lives, which consume a great deal of staff time on this primarily live-on campus.

Each college also has its own Dean's Office. The Deans of Richmond College and Westhampton College function actively as part of the University's academic program in their roles as Associate Deans of the School of Arts & Sciences. The Deans also advise the student-run Honor Councils, which work to promote campus-wide academic and personal integrity.
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