Deconstructing the Glass Ceiling

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Aims: There is a large body of evidence-based research illustrating the challenges faced by women who strive in male-typed careers. The purpose of this paper is to outline and integrate a review of the relevant social psychology research into a model of women’s leadership. Proposed Conceptual Argument: As leadership is stereotypically a masculine dimension, women who emulate agentic characteristics will rise into leadership. However, empirical evidence overwhelmingly illustrates the consequences to agentic women whose competence is simultaneously expected and minimized. Findings/Conclusion: This model raises awareness of complex issues in research for women including: the “promotion of ‘male’ females”; “success does not equal competence”, “agentic women sustain reactive opposition”, “the process of self-selection”, “stereotypic threat”, and “equality equals greed”. Because of the ubiquity of these cognitive distortions, awareness may mitigate antagonism and conflict to propel women into leadership roles.

Keywords: Glass Ceiling; Leadership; Gender; Model; Women; Deconstruction

Introduction

Leadership is a performance of power that signifies male-type or agentic character traits such as “independence” and “action”. One identified contributor to women’s slower than expected ascent into leadership in academic Science, Technology, Engineering, Mathematics and Medicine (STEMM) is the persistence of assumptions and stereotypes that women are intrinsically “communal” or “dependent” and “passive”, and therefore, lack the capacity to succeed as leaders (National Academy of Sciences National Academy of Engineering Institute of Medicine of the National Academies, 2006). Stereotype-based cognitive biases about gender contribute to women’s underrepresentation in professions traditionally occupied by men, such as academic STEMM in multiple ways: they influence women’s self-beliefs, causing them to self-select out of highly agentic roles such as leadership; they also disadvantage women in review processes critical for advancement—women are underrated in evaluation processes for leadership roles even by individuals who consciously hold egalitarian beliefs (Hill, Corbett, & St. Rose, 2010; Valan, 1998). Despite policy changes such as Title IX of the Civil Rights Act (1972) in the US and internationally, the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW, 1979) and the Beijing Platform for Action (1995), women and men still do not enjoy equal opportunities for education, employment, success, advancement, and satisfaction.

Because most people are unaware of implicit biases and how they work to disadvantages women in leadership, their effect has been attributed to “a glass ceiling”, a metaphor describing invisible barriers to women’s career advancement (Loden, 1996). In this sense the reason why women do not advance beyond a certain level in organizations is not readily apparent; upon closer inspection a ceiling is revealed—made up of biased judgments women collectively experience as they work to advance. Significant empirical research has mapped the “glass ceiling” and its landscape of implicit socio-cultural and psycho-social barriers to women’s full participation in academic STEMM and other male-typed occupations; however, a feminist theoretical lens has not yet been applied to deconstruct this body of work. What remains unaddressed, in particular, is the extent to which the empirical research used to map causal reasons for women’s under-representation may function to inadvertently reinforce the very power structures that recreate belief in gender difference and the assumption that leadership is a male trait. This paper problematizes [applies a critical lens to] that body of literature and proposes a unique, feminist model of leadership.

Social Role Theory: A Framework for Empiricism about Gender Bias

Based upon empirical studies from the fields of social and cognitive psychology Figure 1 represents six major barriers women face (i.e., six panels of the glass ceiling) as they work to advance to leadership in male-typed jobs. Throughout this body of research social role theory is used to explain the contemporary causes of belief in gender difference. According to social role theory individuals learn to associate specific traits and characteristics with men and women based upon the types of work they have traditionally performed, differentiating these beliefs about gender roles into “communal” versus “agentic” attributes (Eagly, 1987; Eagly & Karau, 2002; Eagly, Mitchell, & Paludi, 2004).

The vertical arrow in the model represents the hierarchical nature of power and characteristics defining leadership. The
Bem Sex Role Inventory, an instrument developed by both men and women participants and validated over several decades, characterizes “leadership abilities” as a masculine trait (Bem, 1974; Holt & Ellis, 1998). These studies identify the tenacious stereotypic merging of the male gender with leadership traits: confident, tough, dominant, assertive, instrumental, controlling, self-sufficient, ambitious, aggressive, forceful, independent, competitive and “prone to act like a leader”; while communal characteristics, ascribed primarily to women, describe concern for other’s welfare including being “affectionate, helpful, kind, sympathetic, interpersonally sensitive, nurturant, and gentle” (Bem, 1974; Eagly & Karau, 2002). These feminine traits have little overlap with those ascribed to the stereotypical leader. An early study by Broverman and colleagues found that male-gendered traits were highly valued and constituted a competency cluster which was assumed to be antithetical to and incompatible with femininity (Broverman, 1972).

Though it has been highly debated, there is no definitive scientific evidence that men and women differ in their ability to learn or perform agentic (e.g., logic, leadership) or communal (e.g., mentoring, caretaking) tasks (Hyde, 2005; Plant, Hyde, Keltner, & Devine, 2000). Despite this information, cultural attitudes, assumption and stereotypes about gender difference persist and operate to prescribe and instruct both individuals’ self-beliefs as well as social norms and ideas about the ‘natures’ of men and women and how they should behave. As women work toward leadership in agentic or male-typed jobs, in particular, social role theory predicts that they will face disadvantage due to a “lack of fit” between the communal traits they are both assumed and expected to have, and the agentic traits associated with success and competence in those jobs. This hypothesis has been tested repeatedly through empirical studies and Figure 1 provides an outline of constructs from research findings that illustrates the specific barriers— or glass ceiling— women encounter as they work toward leadership in male-type professions.

In much of the literature, the discrimination faced by women is not differentiated between explicit and implicit bias. In a systematic review of experimental evidence for interventions that affect implicit gender bias in employment, in 24 of 27 articles, male and female participants did not differ in their evaluations of women. The fact that empirical studies show that both genders propagate implicit bias circumvents the ”us” versus “them” polarities that permeate the literature. Placing the emphasis on “we” rather than “them”, mitigates the oppositional counterculture deconstructs the binary of gender (Kristeva, 1995; Snyder, 2008). Deconstruction “unmasks the supposed ‘truth’ or meaning of text by undoing, reversing, and displacing taken-for-granted binary oppositions that structure texts (e.g., right over wrong, subject over object, reason over nature, men over women, speech over writing, and reality over appearance)” (Schwandt, 2001). Feminism provides a “necessary moment of reversal”, to purge the system of its present masculinist hegemony, yet adding the perspective that both sexes are equally guilty of implicit bias helps deconstruct the “masculine/feminine schema” (Caputo, 1997). This paper seeks to uncover a “re-reversal” of women under the glass ceiling, looking at their own reflections.

**Piecing Together Empirical Research**

The center of the model (Figure 1) represents women’s identity with the intersection of the unconscious barriers of implicit gender bias. The barrier in frame 1 titled, Agentic Equals Success, represents the way that stereotypical male-gendered agentic traits are more highly valued in our society than stereotypical female-gendered communal traits (O’Heron & Orlofsky, 1990; Rudman & Glick, 1999). Though women are socialized and expected to behave in communal ways, both men and women who display agentic instead of communal behaviors are viewed as more competent in male sex-typed jobs (Carli, 2001; Cuddy, Fiske, & Glick, 2004; Heilman, Wallen, Fuchs, & Tamkins, 2004; Rudman & Glick, 1999). In addition, women who display more stereotypical male, or at least androgynous leadership characteristics, are more likely to gain access to leadership especially in male sex-typed positions (Francesco & Hakel, 1981; McConnell & Fazio, 1996; Rudman & Glick, 1999, 2001). An immediate issue women face as they embark upon male-typed jobs, therefore, is the need to be highly agentic; this may contradict with their own self-beliefs as well as the expectations of the cultures in which they live. As a result women may self-select out of these jobs, or feel less inclined to seek promotions, or high ranking and leadership positions.

The second barrier, Success ≠ Competence, represents the way that when gender stereotyping is activated, raters are less likely to attribute a woman’s success to ability than a man’s success. This attributional rationalization results from the assumption that men are more competent than women (Deaux & Emswiller, 1974; Heilman & Haynes, 2001; Swim & Sanna, 1996). Stereotyping effects are usually contextually assimilative as a group member stereotyped as having some attribute (i.e. men have leadership skills) is judged to have more of that attribute than a member of some comparison group (Biernat, 2003). Biernat found that gender stereotypes regarding task competence led decision makers to set different standards for judging competence in women versus men. More specifically, stereotyping may create lower minimum standards for initial hiring screens for women but higher confirmatory standards for women than men, so women would be more likely to make a short list, but would be less likely to be hired (Biernat & Fuegen, 2001).

Because of the attributional rationalization related to gender and competence, when there is ambiguity in performance crite-
ria, evaluations of women’s competence in male sex-typed jobs may be negatively affected (and men’s positively affected). In summarizing a wide range of research on gender and career advancement, Valian (1998) notes that as a woman rises into the top tiers of leadership, the mere fact that she is successful leads people to see her as succeeding against expectations, attributing her success to luck, the task being easy, or working hard rather than competence. Women as managers gain status attribution which creates connotations of instrumental competence; however, a woman will still be seen as less competent than a male manager with similar characteristics (Ridgeway, 2001). Heilman & Haynes (2005) found that women working as part of a mixed-sex dyad received less credit than men even for identical work for stereotypically male tasks unless their contribution was made explicit to the raters.

Stereotype-based expectations are tenacious and are resistant to disconfirming information. Competent women may interpret receiving less credit on a task as failure or may get angry at feeling ignored. Brescoll and Uhlmann (2008) found that the expression of anger by an applicant improved men’s evaluations and lowered women’s, particularly in high status positions. Having a specific external cause (such as losing an account) for anger mitigated but did not eliminate the negative bias toward women (Brescoll & Uhlmann, 2008). Even though external attribution for anger improved status and salary ratings for women who expressed anger, it had no impact on their lower competence rating. Women who are competent in male sex-typed roles may produce negative reactions (Glick, Larsen, Johnson, & Branstetter, 2005) and lower ratings simply because their competence violates the prescriptive norms for female behavior (Heilman & Okimoto, 2007). This appears to be particularly true for women who exhibit anger, considered a male emotion (Plant et al., 2000). Unfortunately, anger compounds women’s problems if they react to the stereo-typical assumptions of men’s superior competence.

The third barrier, Agentic → Reactive Opposition, illustrates that women who display agentic traits (not including anger) and are clearly competent in masculine sex-typed positions will be deemed as competent as men, but are viewed as less likeable and hostile than successful men. Independent of competence, likeability predicts advantage in career-affecting outcomes in evaluation and reward allocation (Heilman et al., 2004). As highly agentic women assert authority outside of traditionally female sex-typed jobs, they are likely to encounter reactive opposition to their authority (Ridgeway, 2001). Women appear to be able to reduce this opposition by “softening” assertive, competent behaviors to increase their influence and negotiate behaviors not traditionally required of men.

Parenthood & Self-Selection, illustrates that the issues for women are not research or teaching, but parenting and mobility as a cause for self-selection away from academia (van Anders, 2004). A recent critical review of the literature representing women’s underrepresentation in mathematically intensive scientific fields concluded that the evidence supporting a biological difference in mathematical ability between men and women is contradictory (Ceci, Williams, & Barnett, 2009). The conclusion of this review is further supported by Mason and Goulden (2004) in a nationally representative sample of PhDs (Mason & Goulden, 2004). They found that women who successfully pursue academic careers are less likely to marry and have children and more likely to divorce, than men who succeed in academic careers or women who drop out of the pipeline to tenure. This study revealed that factors affecting women’s success “spill over into the family, or the reverse, the family spills over into the job” (Ceci, Williams, & Barnett, 2009).

As poignant and compelling as parenthood responsibilities are to women, there are other implicit sociocultural reasons why women do not advance or remain in leadership. When women deviate outside the cultural norm, they may self-select and avoid managerial positions that seem threatening to a sense of what a woman’s identity in society should be. For example, Brunner found that women superintendents were uncomfortable using power over other people (Collard & Reynolds, 2005), and so it may not be success per se that many women fear, but rather the behaviors that lead to success may not meet with the approval of others (Austin, 2000).

Chusmir and Koberg (1991) examined the self-confidence and sex-role identities of male and female managers, and found that sex-role identity (but not gender) was a major factor in the level of self-confidence. Their results showed that women and men in jobs that produced cross-sex role identities had lower levels of self-confidence; gender was not a factor in level of self-confidence, but those with masculine or androgynous orientations had higher self-confidence (Chusmir & Koberg, 1991). Depending on the culture of the organization and the woman leader’s identity-orientation, there is evidence that women may experience discomfort when crossing into masculine sex-typed jobs.

Although Morley (2006) reported that attributing difficulties to women’s psychic narratives (such as lack of confidence) contributes to a theory of deficit rather than a theory of power, it is important to recognize that the implicit nature of bias strikes the internal mechanisms of women. This kind of awareness and consciousness-raising is the first stage in the application of behavioral change (Prochaska, Prochaska, & Levesque, 2001; Prochaska & Velicer, 1997).

The fifth barrier, Stereotyped Threat & Identity Safety, illustrate that stigmatized individuals are aware of accusations that devalue their group’s social identity as women are typically stereotyped as being emotional and lacking leadership aptitude
(Crocker et al., 1998). This leads to what Claude Steele’s group has termed “stereotyped threat”. The stereotype that women are not as good leaders as men can produce a threat that can potentially undermine performance and aspirations among women (Davies, Spencer, & Steele, 2005; Steele, 1997). Women are vulnerable to stereotypic threat in traditionally masculine domains that allege a sex-based inability (Crandall, Eshleman, & O’Brien, 2002; Davies, Spencer, Gallagher, & Kaufman, 2005; O’Brien & Crandall, 2003; Spencer, Steele, Quinn, Hunter, & Forden, 2002).

In a study specific to leadership, participants were exposed to gender-stereotypic TV commercials and then given a choice between being a leader or supporter. Women participants became vulnerable to stereotypic threat that led women to avoid leadership roles in favor of supportive roles (Davies, Spencer, & Steele, 2005). However, the researchers created “an identity-safe” environment as an intervention by including a sentence confirming that research indicates no gender difference in ability to perform as a leader or problem solver (the more subordinate role). The inclusion of such a statement eliminated the vulnerability to stereotypic threat despite exposure to threatening situational cues that primed stigmatized social identities.

Although there are many studies that document stereotypic threat, this study’s hallmark is that it provided an intervention that successfully restored women’s leadership aspirations. Stereotypes can be combated or changed by using the same tools that propagated these cognitive distortions of reality.

The sixth barrier, Equality Equals Greed, illustrates the power of social norms. There have been several studies conducted where results showed that men as compared to women: evaluate their performance more favorably, despite comparable scores; claim greater ability following performance on tasks; and are less prone to explain successful performance as due to luck although both sexes did not differ in attributions to luck, effort, or task (Cherry & Deaux, 1978; Correll, 2004; Deaux, 1979, 1995; Deaux & Emswiller, 1974; Deaux & Farris, 1977). These gender differences on performance evaluations are highest in response to failure on masculine tasks. Medical women students rated themselves lower than their male counterparts on all measures of academic ability as well as future performance as a physician; men were likely to persist until there was no possibility of success while women persisted only until there was some possibility of failure (Fiorentine, 1988). This research offers explanations that the transgression of gender norms provides women incentives to change or lower their high-status career goals when encountering hardship, self-doubt, and the possibility of failure (Fiorentine & Cole, 1992). In a more recent study, researchers found that female physicians’ self-efficacy for 34 out of 35 competencies required to succeed as an independent clinical investigator were lower than male physicians following a 3-day workshop on clinical research in which all the faculty presenters were men (Bakken, Sheridan, & Carnes, 2003). As there are gender-differentiated double standards how men and women attribute performance to ability, men and women will also form different aspirations for career paths because of their own competence beliefs (Correll, 2004).

In a study of discrepancies in pay expectations of male and female management students, females had significantly lower career-entry and career peak pay expectations. Gender differences in career paths, comparison standards, and position importance were identified as potentially important explanations as women undervalue the financial worth of their work (Major & Konar, 1984). In studies of perceived pay entitlement, women allocate themselves less pay than do men especially when their experience is not made specifically relevant to the decision (Desmarais & Curtis, 1997; Major, Shaver, & Hendrick, 1987). There are strong social mores against self-promoting women as women suffer social reprisals for violating the gender prescription of modesty (Rudman, 1998). Although Blackmore (2007) found that self-promotion was central to the managerial performative culture, women in her study found it difficult to violate the social norm of modesty. Modesty may create self-sabotage at critical career junctures. Repeatedly, women demonstrate that their perception of entitlement interprets “equality as greed” as men take more for themselves that women do (Valian, 1998). An affirmative action study confirmed that while women believe men receive unfair benefit, men believe women are responsible for their own disadvantage (Boeckmann & Feather, 2007). While women may not be responsible for conscious and unconscious discriminatory practices, women are responsible for becoming aware of self-abnegating behavior and seeking constructive solutions.

Discussion: “It’s Not about You or Them”

This review illustrates the complexities that affect the identities of women leaders. Stereotypical male-gendered agentic traits are more highly valued in our society than stereotypical female-gendered communal traits (O’Heron & Orlofsky, 1990; Rudman & Glick, 1999), and women who display agentic vs communal behaviors are viewed as more competent in male sex-typed jobs (Carli, 2001; Cuddy et al., 2004; Heilman et al., 2004; Rudman & Glick, 1999). However, as highly agentic women assert authority outside of traditionally female sex-typed jobs, they are likely to encounter reactive opposition to their authority as they are less liked (Ridgeway, 2001). Providing clear evidence of communality in the workplace improved women’s ratings of likability (Heilman & Okimoto, 2007), but women applicants who are mothers were penalized on perceived competence and recommended starting salary. As women are perceived as competent, others will label their success as those who just do “easy tasks” or such hard workers that they are “over-achievers” (Swim & Sanna, 1996; Valian, 1998). Women and men in jobs that produced cross-sex role identities had lower levels of self-confidence. Stereotype threat may undermine performance and aspirations among women in the absence of identity-safety. There are strong social mores against self-promotion which is also evident for women at the highest leadership levels (Blihl & Kohles, 2008). This model represents the cognitive distortions illustrated from empirical evidence derived primarily from social psychology that influence women’s identities in leadership.

The proposed model for women’s leadership attempts to explain the interplay of tensions effecting women’s identities (although these constructs may also affect men whom implement non-linear leadership styles). Julia Kristeva, a French psychoanalyst with a focus on women’s identity, suggests that the danger of binary opposition is the creation of a counterculture, because “by fighting against evil, we reproduce it, this time at the core of the social bond—the bond between men and women” (Kristeva, 1995: p. 214). This sociopsychic splitting of identity must arise when women operate within this hierarchical, masculine model (Blackmore & Sachs, 2007). In addition,
leadership has been associated with an assumed capacity to change oneself into a leader (Blackmore & Sachs, 2007), while others have suggested that women are deficit and lacking leadership qualities (Morley, 2006). Both concepts may be a rendition of “fix the women” (Carnes, Morrissey, & Geller, 2008) as women “assimilate” into the male-dominated, hierarchical role of leadership (Isaac, 2007).

Women in leadership positions assimilate into a masculine world. If women self-select from leadership opportunities, the call for policies to address social concerns of women will diminish. “Family-friendly” workplace policies such as job sharing do exist, but pose long-term risk to careers and are considered dangerous as women who admit to care-giving responsibilities are penalized more than men (Drago et al., 2005; Jacobs & Gerson, 2004). The catch-22 is that leadership roles may require assimilation and yet, if women avoid leadership opportunities, the less likely that women will ascend into leadership and promote women’s accessibility (Bagilhole, 1993; Rudman & Glick, 2001).

It is important to raise awareness of the implicit nature of bias that strikes the internal mechanisms of women as these have become habitual in individuals’ responses directed toward women. In much of the literature, the focus is on the discrimination faced by women with little differentiation between explicit and implicit bias. Knowledge that both genders propagate discrimination circumvents the “us” versus “them” polarities. Placing the emphasis on “we” rather than “them”, mitigates the binary of opposition which collapses the category of “women”. Knowing also of the reaction against “angry women”, women who have awareness of the ubiquity of bias from both men and women (including themselves) may also be given the gift of perspective and empathy-deconstructing gendered polarities. Research has shown that perspective taking inspires empathy arousal and this leads to improved intergroup attitudes and that encouraging a perceiver to adopt a perspective of another eliminates perceived difference (Batson et al., 1997; Galinsky & Moskowitz, 2000; Vescio, Sechrist, & Paolucci, 2003).

While this research primarily focuses on “other’s” attitudes, another possibility derived from this research is that women’s experiences of discrimination becomes not all about “themselves” but also not all about the “other”. If “resilience has been defined as the capacity of dynamic systems to withstand significant disturbances” (Masten, 2007); then mitigating perceived opposition promotes positive outcomes for women in challenging circumstances.

**Conclusion**

The goal of this paper is to integrate the empirical evidence and bring into high relief the variety of challenges women face in seeking or taking on leadership roles in organizations. Baseline conclusions on evidence is highly relevant to women scientists. This model attempts to make this research readable to the STEM community, as feminist text too can exclude other meanings and stabilize “meaning within a system of power relations—a system of inclusion and exclusion” (Calas & Smirich, 1999: p. 654).

Limitations include the inability to take into account changes in historical, cultural, class, ethnic, contextual and political factors and creating a “homogeneous” essentialist view of women. Many of the experimental studies used did not differentiate between these other factors and so these were not included in the model. Also homogeneity is one of the characteristics of implicit bias which was the focus of this paper. And while some men may experience some of these constructs, these articles focus on women. There are inherent difficulties when blending the essentialism of experimental evidence with postmodern research, yet there are valuable perspectives gained in examining conflicting discourses and expanding the conversation (Martin, 1985).

Finally, this problem has remained persistent within higher education institutions that have long been credited with improving social and cultural problems. Clearly, policies and procedures attempt to address explicit forms of discrimination; however, there has been concern that policies to combat gender marginalization has been reduced to technology toolkits and “how-to” checklists (Morley, 2007). Moreover, equity policies can sometimes create reactive backlash (Isaac, Lee, & Carnes, 2009; Morley, 2006). There are change models from social psychology that help to illustrate the psychological and behavioral changes women experience as they enter leadership roles (Devine, 1989, 2001; Overton, McCalister, Kelly, & Mavickar, 2009; Plant & Devine, 2009; Prochaska et al., 2001; Prochaska & Velicer, 1997). Prochaska, in a study to advance women scientists, called for interventional strategies to increase women’s self-efficacy and self-confidence (Prochaska et al., 2006). Directions for future research may include interventional strategies at the organizational and individual levels to address these issues. Providing evidence of the ubiquity of implicit bias to women neutralizes polarities that stress the social bond between men and women. This review of the extant experimental research suggests that work needs to be done at the individual level.

As leadership is stereotypically a masculine dimension, women who emulate those characteristics of assertiveness will rise into leadership. As women leaders negotiate career demands, they also struggle with assimilating into a masculine context that is riddled with contradictions. Instead of reproducing a counter-culture, the authors hope to give the gift of perspective regarding the contradictions affecting women’s identities in leadership. The empirical evidence overwhelmingly illustrates the consequences to agentic women whose competence is simultaneously expected and minimized, actualizing a “failed assimilation” (Isaac, 2007). As leaders reach the pinnacle of their careers, there is need for reflection, and this is especially true for women negotiating the masculine discourse of leadership. While the research can be disillusioning, we believe that awareness may segue into resilience.

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**REFERENCES**


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