

# UC Berkeley

## Working Paper Series

### Title

Stereotype Threat in Organizations: An Examination of its Scope, Triggers, and Possible Interventions

### Permalink

<https://escholarship.org/uc/item/3wh9z792>

### Authors

Kray, Laura J.  
Shirako, Aiwa

### Publication Date

2009-10-05

Stereotype Threat in Organizations:  
An Examination of its Scope, Triggers, and Possible Interventions

Laura J. Kray & Aiwa Shirako

University of California, Berkeley

Working Paper: Please do not cite or quote without author permission

To appear in: In M. Inzlicht, & T. Schmader (Eds.), *Stereotype Threat: Theory, Process, and Application*. NY: Oxford University Press.

### Abstract

This chapter explores stereotype threat in organizational contexts. Building on the understanding that stereotype threat involves concerns about confirming a negative stereotype about one's group, we begin by elucidating the scope of potential stereotype threat effects in organizations. We first examine the ubiquity of evaluations in organizations, which are at the heart of stereotype threat. Next we specify the potential psychological consequences of stereotype threat on targeted individuals within organizations, including weakening domain identification and engagement, reducing aspirations, increasing self-handicapping, and reducing openness to feedback. In the next section we focus on specific performance consequences of stereotype threat in four domains: leadership, negotiations, entrepreneurship, and competitiveness. We follow by identifying the likely triggers of stereotype threat within organizations, including task difficulty, organizational structure, minority representation, and organizational culture. Finally, we identify three categories of strategies that organizations can implement to reduce stereotype threat: 1) stereotype management, which includes acknowledging stereotypes, emphasizing positive stereotypes, and deemphasizing negative stereotypes; 2) hiring and training, which includes increasing minority representation and job training; and 3) organizational culture, including both fostering identity safety and valuing effort.

## Stereotype Threat in Organizations:

### An Examination of its Scope, Triggers, and Possible Interventions

The workplace is a breeding ground for stereotype threat. Fundamentally, stereotype threat is a response to evaluations, an omnipresent facet of organizational life. Whether receiving an annual performance evaluation by a boss or periodic informal feedback from a mentor, organizations are evaluation-intensive environments. As such, individuals from negatively stereotyped groups are often exposed to situations in which negative expectations may undermine performance. Although the bulk of stereotype threat research over the past 15 years has centered on academic contexts, in this chapter we explore its implications in organizational settings.

Given that the workplace is inextricably linked with individuals' financial livelihood and achievement over the life course, understanding how stereotype threat affects work experiences is essential. Elucidating how stereotype threat is likely to creep into commonplace experiences on the job may provide organizations with fruitful direction for expanding diversity management training programs, which largely focus on bias from the perspective of the observer. Entire units of organizations are designed to monitor fairness of evaluation processes yet little systematic training is provided to employees to buffer them against the damaging effects of stereotype-based expectations. Because stereotype threat arises within the target of negatively stereotyped groups, understanding how the workplace is experienced by traditionally disadvantaged groups will enable organizations to manage diversity more completely, incorporating threats arising from multiple sources.

Another reason to closely examine stereotype threat in organizations is that huge racial and gender disparities in pay and advancement persist in virtually every industry in the US. The statistics are staggering. Although women make up 46% of the United States labor force, women comprise just 15% of Fortune 500 corporate board seats and just 3% of CEOs of these biggest revenue-generating corporations (“Quick stats,” 2009; “U.S. women in business,” 2009). Women and minorities are underrepresented in board positions as well as CEO positions. As of 2009, women comprise only 15.2% of *Fortune* 500 board seats, and fill only 15.7% of the corporate officer positions available (“U.S. women in business,” 2009). In total, African Americans, Asians and Latinos combined make up fewer than 3% of the *Fortune* 500 CEOs (Cole, 2008). Understanding how stereotype threat may contribute to these disparities is essential.

In reviewing the literature, we note that virtually all research on stereotype threat in organizations has focused on gender and race. Accordingly, we restrict our discussion to these two social categories. However, the broader stereotype threat literature has identified additional relevant social categories, including elderly people, sufferers of physical disabilities, sexual orientation minorities, and individuals of low socio-economic backgrounds, that should also be considered. In short, virtually any group categorization imaginable can result in stereotype threat as long as a negative component to the stereotype exists.

We organize this chapter into three sections. First, we define the potential scope of stereotype threat by: 1) identifying the ubiquity of evaluations throughout an individual’s tenure within an organization; 2) specifying the psychological hurdles imposed on targeted individuals; and 3) examining its downstream performance

consequences. Second, we identify the contextual triggers of stereotype threat within organizations. Third, we explore how stereotype threat might best be mitigated within organizational contexts.

### *The Scope of Stereotype Threat in Organizations*

#### *The Ubiquity of Evaluations*

Given that stereotype threat arises from a concern that one will confirm a negative stereotype, it is potentially relevant in any context in which individuals expect to be evaluated. In contrast to academic settings that emphasize learning as a valued outcome, many profit-oriented organizations focus on bottom line performance as the sole metric of success. As such, organizations are particularly focused on evaluating employees. Whether an individual is submitting a job application or being considered for promotion, inferences and evaluations are made regarding this person's ability.

Stereotype threat can steer targeted individuals away from seeking jobs. By creating bogus company brochures for display at a job fair, Perdie-Vaughns, Steele, Davies, Ditlmann and Crosby (2008) observed that advocating a colorblind policy (as opposed to explicitly valuing diversity) in a context in which minority visibility was low led African-American managers to experience heightened distrust and discomfort with the organization. Thus, the message organizations send concerning their views on diversity, including both subtle and blatant messages contained in websites and recruitment materials, may activate stereotype threat and thereby reduce minority representation in the applicant pool.

Stereotype threat can also reduce aspirations toward jobs with greater risk and rewards, and towards leadership roles more generally (Davies, Spencer, & Steele, 2005;

Niederle & Yestrumskas, 2009; Perdie-Vaughns et al., 2008). Niederle and Yestrumskas (2009) found that women who were uncertain about their performance ability on a maze task were less likely than men to select difficult subsequent maze tasks with a greater payoff, despite a lack of actual differences in ability. In a study of college women, Davies and colleagues (2005) showed that women were less likely to take a leadership role when they expected to be evaluated and gendered leadership stereotypes were made salient. These effects of stereotype threat may make a potential employee less likely to apply for a job, and may discourage existing employees from fulfilling their potential.

Group contexts, such as team meetings or interviews, may also promote stereotype threat when an applicant is the sole member of a minority group (Roberson, Deitch, Brief & Block, 2003; Sekaquaptewa & Thompson, 2003), or simply when in-group members represent a small proportion of the members of a professional organization (e.g. Murphy, Steele & Gross, 2007). Even if targeted individuals apply for desirable jobs, solo or minority group representations may produce stereotype threat.

#### *Psychological Effects of Stereotype Threat in Organizations*

Stereotype threat may psychologically impact negatively stereotyped individuals by affecting domain identification and engagement, aspirations, propensity to self-handicap, and openness to feedback.

*Domain identification and engagement.* Whereas high identification with a stereotyped domain can trigger stereotype threat (Schmader, 2002; Steele, 1997; Steele, Spencer, & Aronson, 2002), stereotype threat can also lead to disengagement, a psychological defense designed to insulate the self from evaluations (Crocker, Major, & Steele, 1998; Major & Schmader, 1998). By chronically disengaging from a threatening

activity, negatively stereotyped group members avoid the possibility of confirming the negative stereotype (Steele et al., 2002). For example, women low in leadership efficacy who were told leaders require masculine traits to succeed disidentified with the leadership domain (Hoyt, 2005). Women's reluctance to initiate negotiations may also be a result of disidentification with the domain (Babcock, Gelfand, Small, & Stayn, 2006).

*Aspirations.* Stereotype threat can depress individuals' career and performance goals. In one study, women's exposure to television commercials depicting women in traditional roles led them to emphasize homemaking roles over achievement in describing their future lives (Geis, Brown, Jennings, & Porter, 1984). Similarly, Davies et al. (2005) showed that women who viewed gender stereotypic television commercials were less likely to choose a leadership role in a subsequent task. Finally, stereotype threat can also reduce financial aspirations in bargaining situations (Kray, Galinsky, & Thompson, 2002). Organizations frequently encourage their employees to strive for excellence, and yet stereotype threat may lead negatively stereotyped groups to set inappropriately low goals, ultimately producing suboptimal performance.

*Self-handicapping.* Another possible psychological consequence of stereotype threat is self-handicapping (Steele & Aronson, 1995). The activation of stereotypes in an environment in which critical evaluation is salient is a particularly pernicious combination. Rather than put forth effort and risk defeat, negatively stereotyped individuals may self-handicap as a defensive mechanism to provide an alternate explanation for poor performance (Keller, 2002). Although self-handicapping is typically thought to occur as a defensive reaction to negative stereotypes about one's group, it can



also can occur in the face of positive stereotypes, such as when men are expected to perform well in competitive tasks (Self, 1990).

*Openness to feedback.* Stereotype threat can also influence employees' willingness to seek feedback from their supervisors and, when feedback is unavoidable, their openness to it (Roberson et al., 2003). In a sample of African-American managers, stereotype threat, triggered by low minority representation, was positively correlated with indirect feedback seeking, or a reliance on ambiguous cues to understand how one is being evaluated. Stereotype threat can also lead to feedback discounting, or the tendency to doubt the accuracy of feedback and the motives of the feedback-provider. Individuals veer towards indirect feedback strategies when they perceive that the costs of direct feedback are high (Ashford & Northcraft, 1992; Morrison & Bies, 1991). Because seeking and utilizing direct feedback is essential for improving work performance (Ashford & Tsui, 1991), avoiding this vulnerability-producing behavior may limit achievement over time.

#### *Performance Effects of Stereotype Threat in Organizations*

In the current section, we explore specific organizational performance domains influenced by the existence of a "threat in the air." In essence, stereotype threat is relevant for any task in which certain social groups are believed to be more naturally adept than others. Below we consider four performance domains: leadership, negotiation, entrepreneurship, and competitiveness.

*Leadership.* Stereotype threat researchers have primarily examined leadership efficacy and leadership intentions, which gauge individuals' willingness and desire to assume leadership roles, rather than objective measures of leadership effectiveness. In

addition, gender has been the sole social identity examined in the context of leadership and stereotype threat. Consistent with role congruity theory (Eagly & Karau, 2002), the communal aspect of the female stereotype is incompatible with the agentic behaviors associated with effective leadership, thus setting the stage for stereotype threat to emerge.

The primary finding to emerge from this research is the observation that leadership efficacy, or self-assessed ability to lead (Bandura, 1997; Murphy, 1992), buffers women against stereotype threat (Hoyt, 2005). After hearing that effective leaders are masculine, women who were initially high in leadership efficacy actually strengthened their identification with the leadership domain; in contrast, women who initially reported low leadership efficacy reduced their identification with the leadership domain. Subsequently, Hoyt and Blascovich (2007) showed that the increased domain identification for high self-efficacy women translated into better performance when tasked with advising and motivating employees on a hiring committee.

*Negotiation.* Like leadership, men are presumed to have an advantage over women in negotiations because stereotypically masculine traits, such as assertiveness and rationality, are commonly associated with negotiating effectiveness (Kray, Thompson, & Galinsky, 2001). To demonstrate that this association can produce stereotype threat, Kray and colleagues adapted Steele and Aronson's (1995) manipulation of task diagnosticity prior to having mixed-sex negotiating dyads complete a buyer-seller simulation. Consistent with stereotype threat, women in the diagnostic condition set lower aspirations for the sale price and, accordingly, achieved significantly worse outcomes than their male counterparts; in the non-diagnostic condition, men and women performed comparably.

*Entrepreneurship.* Entrepreneurship, or the creation of new businesses, requires ambition, risk-taking, and innovation. Like many admired activities in business, entrepreneurs are thought to possess stereotypically masculine traits (Baron, Markman, & Hirska, 2001). Gupta, Turban, and Bhawe (2008) examined entrepreneurial intentions among a sample of business students and found that women reported weaker desires to start up and run a business than did men, particularly when masculine traits were subtly associated with entrepreneurs. This study suggests that stereotype threat can impact women's desire to be involved in high risk/high reward business activities.

*Competitiveness.* Consistent with the notion that competition is unfeminine, women are particularly vulnerable to underperforming relative to men when a competitive payoff structure exists (Gneezy, Niederle, & Rustichini, 2003). Participants in this research were tasked with completing computerized mazes. In the control condition, participants were paid a fixed amount for each maze they completed within the allotted time. In the competitive condition, only the top performer was compensated. Whereas no gender differences in performance were observed with a non-competitive payment scheme, the introduction of a competitive payment structure led women's performance to drop significantly relative to men's performance, which remained constant regardless of the level of competitiveness. In subsequent research, participants were given a choice of which payment scheme to work under (Niederle & Vesterlund, 2007) or whether to complete difficult versus easy tasks (Niederle & Yestrumskas, 2009). Not surprisingly, men were significantly more likely to select competitive payments and difficult tasks than women, despite the lack of a priori performance differences.

*The Organizational Context: Situational Triggers of Stereotype Threat*

We now consider various contextual factors that may exacerbate the tendency for stereotype threat to manifest in organizations. Specifically, we consider: 1) task difficulty; 2) organizational structure; 3) minority representation; and 4) organizational culture.

### *Task Difficulty*

The degree to which employees are adequately trained and prepared for the challenges they confront should predict whether stereotype threat occurs. Difficult tasks are both more likely to lead to stereotype threat, and are more affected by stereotype threat (Roberson & Kulik, 2007; Steele et al., 2002). Employees are expected and encouraged to take on complex tasks especially as they climb the corporate ladder, and as such the connection between task difficulty and stereotype threat activation produces a challenge for organizations as negatively stereotyped group members assume greater responsibility.

### *Organizational Structure*

Organizations vary in the degree to which clear status differences exist between individuals. We expect that rigid hierarchical structures may increase stereotype threat for individuals low on the “totem pole.” Just as low status primates experience heightened anxiety and stress (Barkow, 1975; Sapolsky, 2005), low status members of organizations may be in a perpetual state of negativity. Because anxiety has been linked to stereotype threat (Aronson, Quinn, & Spencer, 1998; Bosson, Haymovitz, & Pinel, 2004), hierarchies themselves may produce stereotype threat effects for low status members. Recently, Galinsky, Shirako, Kray, and Thompson (2009) observed that low status negotiators (i.e. a job candidate relative to a job recruiter) experienced a performance

drop in a negotiation framed as diagnostic of their abilities. Thus occupying a low status position may trigger stereotype-threat consistent effects.

### *Minority Representation*

Recently, Justice Ruth Bader Ginsberg commented on the lack of gender diversity on the Supreme Court: “It’s almost like being back in law school in 1956, when there were 9 of us in a class of over 500, so that meant most sections had just 2 women, and you felt that every eye was on you. Every time you went to answer a question, you were answering for your entire sex. It may not have been true, but certainly you felt that way. You were different and the object of curiosity” (Bazelon, 2009).

This quote captures many of the challenges inherent in being the sole minority member in a group context (Kanter, 1977). Low demographic diversity in organizations signals to negatively stereotyped individuals that the stereotype may be relevant and, in so doing, increases the perceived evaluation pressures on the individual. By heightening the salience of identity group membership, low demographic diversity can also trigger stereotype threat (Inzlicht & Ben-Zeev, 2000; Murphy et al., 2007; Perdie-Vaughns et al., 2008; Roberson, et al., 2003; Sekaquaptewa & Thompson, 2003).

We also consider a macro-level example of the impact of minority representation on stereotype threat. In a multi-national study, Guiso, Monte, Sapienza, and Zingales (2008) observed a negative correlation between the gender gap in math scores and women’s opportunities for advancement at the societal level. In other words, as women’s representation in political, educational, and economic activities of a given society increases, girls’ underperformance on standardized tests decreases. This finding strong

suggests that the degree to which minority groups are adequately represented in the power structure is a key driver of performance.

### *Organizational Culture*

Another contextual factor that may trigger stereotype threat is the organization's culture. Broadly speaking, organizational culture is defined as "a system of shared values (defining what is important) and norms (defining appropriate attitudes and behaviors)" (Chatman & Cha, 2003, p. 21). Below we consider two aspects of organizational culture that may be particularly relevant: the endorsement of entity mind-sets and sexist attitudes.

*Endorsement of fixed mind-sets.* Most research on stereotype threat in organizations has identified ways in which women experience its debilitating effects due to stereotypes suggesting women lack "the right stuff" to succeed in cutthroat industries. To this end, we would expect that organizations and industries that cultivate rigid beliefs about innate talent underlying success would exacerbate stereotype threat. As expectations and evaluations become increasingly entwined, members of negatively stereotyped groups become more vulnerable to unwittingly confirming negative expectations.

Along these lines, in a provocative *New Yorker* article, Gladwell (2002) argued that a pernicious "talent mind-set" permeates American management orthodoxy. This mind-set is characterized by a firmly held belief that putting the right people in place—defined by their impressive credentials and intellect—will guarantee an organization's effortless success. He argues that this mind-set leads managers to evaluate their employees' performance on expectations rather than actual performance. Just like implicit beliefs suggesting individuals are born with a fixed set of abilities (Dweck &

Leggett, 1988), organizations whose cultures are characterized by a fixed mind-set may be particularly prone to eliciting stereotype threat.

*Sexist attitudes.* The degree of sexism felt and expressed in organizations is another cultural characteristic that may promote stereotype threat. Dating at least as far back as the Anne Hopkins v. Price Waterhouse Coopers Supreme Court case, we have known that sexist attitudes can harm women's career advancement (Fiske, Bersoff, Borgida, Deaux, & Heilman, 1991). We now know that sexism can adversely affect women by lowering their objective performance. In an examination of women engineer's problem solving abilities, merely being in the presence of men who held sexist attitudes caused women's performance to suffer (Logel, Walton, Spencer, Iserman, von Hippel & Bell, 2009). Specifically, because sexist men tend to exhibit subtle cues (i.e. increased dominance, sexual interest) revealing negative attitudes towards women, women who interacted with sexist men performed worse on a standardized assessment of engineering ability. The sexism raised women's risk of being devalued and judged according to a negative stereotype. Attempting to suppress the negative stereotype taxed women's limited cognitive resources, thus producing stereotype threat. Alternatively, sexism can undermine women's performance by increasing the salience of other potentially threatening behavior (Kaiser, Vick, & Major, 2006).

#### *Organizational Interventions to Mitigate Stereotype Threat Effects*

In this final section, we consider the various steps that organizations can take to reduce stereotype threat, including: stereotype management, training and hiring, and organizational culture.

#### *Stereotype Management*

*Acknowledging stereotypes.* By teaching stereotype threat and specifying how it may become activated, organizations can work to reduce its harmful effects (Johns, Schmader, & Martens, 2005). When negative stereotypes about one's social group are confronted directly, one counterintuitive response is *stereotype reactance*, or a pattern of behavior inconsistent with a negative stereotype. This performance boosting response has been demonstrated both within the negotiations (Kray et al., 2001) and the entrepreneurship domains (Gupta et al., 2008) by women typically thought to be most vulnerable to stereotype threat. Presumably, directly acknowledging stereotypes helps individuals to question their validity and to increase their motivation to disprove them. Rather than demonstrating behavior assimilating the stereotype, explicitly activating the stereotype may produce contrast effects. Organizations may carefully consider ways of confronting stereotypes directly, setting the stage for stereotype reactance rather than stereotype threat.

*Emphasizing positive stereotypes.* One mechanism for reducing the potency of negative stereotypes is to raise awareness about positive stereotypes that may be relevant to a given task (Kray et al., 2002; Rydell, McConnell, & Beilock, 2009). For example, Kray and colleagues demonstrated that explicitly valuing stereotypically feminine traits, such as empathy and verbal communicativeness, in negotiations led female negotiators to claim more of the bargaining pie than their male counterparts. This reversal of the typical gender gap occurred under conditions typically designed to elicit stereotype threat—a negotiation framed as highly diagnostic of one's underlying abilities. This research suggests that organizational leaders may reduce stereotype threat by actively managing and shaping the message that employees hear about what personal characteristics



contribute to task success. Additionally, training in stereotype management may include teaching specific techniques proven to reduce stereotype threat's impact. By teaching negatively stereotyped employees how to engage in self-affirmation, in which valued attributes about the self are actively considered, stereotype threat may be avoided (Martens, Johns, Greenberg, & Schimel, 2005).

*Deemphasizing negative stereotypes.* Another tool for eliminating stereotype threat is to reduce the power of negative stereotypes by focusing on characteristics that transcend stereotype-relevant social identities. Just as cooperative behavior between groups is promoted via commonly shared identities or goals (Kramer & Brewer, 1984; Sherif, 1966), stereotypes lose their power to drive performance when shared identities are valued. Kray et al. (2001) completely eliminated gender differences in negotiation performance in a diagnostic negotiation after highlighting the power of career aspirations, education, and work experience in predicting negotiating success. Because these characteristics transcend gender, negotiators presumably entered the negotiation without gender being a salient factor. In addition to eliminating differences in how men and women divided the pie, this approach also helped negotiators to expand the pie to enjoy more joint resources. More recently, Rosenthal and Crisp (2006) demonstrated that, by emphasizing overlapping identities between the sexes, women's career preferences become less stereotypically feminine, suggesting this approach may offer a way for women to achieve greater presence in the top echelon of organizations. Finally, disavowing personal characteristics strongly associated with negative stereotypes can insulate against stereotype threat (Pronin, Steele & Ross, 2004).

*Hiring and Training*

*Increasing minority representation.* Organizations would also be wise to pay careful attention to the representation of minorities within the workplace. By explicitly stating that individuals from a diverse set of backgrounds are welcomed and valued, stereotype threat can be mitigated (Perdie-Vaughns et al., 2008). The availability of role models from underrepresented groups who provide examples of success can reduce stereotype threat (Marx & Roman, 2002; Marx, Stapel, & Muller, 2005; McIntyre et al., 2005). One way for organizations to simultaneously increase minority representation and reduce stereotype threat is to adopt policies advancing diversity, as opposed to simple colorblindness (Perdie-Vaughns et al., 2008). By prioritizing diversity, organizations are poised to increase minority representation and ensure that existing and potential minority group members are less vulnerable to stereotype threat.

*Job training.* Given that a key trigger of stereotype threat is task difficulty, it seems logical that one way to mitigate its harmful effects is to provide proper training to employees for the challenges they face. In so doing, heightened self-efficacy in the relevant domain may counteract the negative effects of stereotype threat (Hoyt, 2005). By investing in employees' skills via comprehensive training programs, negatively stereotyped group members may feel more capable of exploring alternative career paths within an organization. At least in the context of negotiations, the availability of alternatives inoculates women negotiators against stereotype threat (Kray, Reb, Galinsky, & Thompson, 2004).

#### *Organizational Culture*

*Fostering identity safety.* Simply providing assurances that one's social identity will not be a determining factor for success on a task typically deemed to be stereotype-

relevant may reduce stereotype threat. Davies and colleagues (2005) eradicated the notion that gender is relevant to leadership by explicitly assuring their participants that researchers have not observed gender differences in leadership ability. Even in the face of threatening images depicting women in traditional roles, women for whom identity safety existed were able to strongly identify with the leadership domain.

*Valuing effort.* An effective means of reducing stereotype threat may be to increase the emphasis placed on social identity-neutral traits such as hard work and perseverance. Aronson, Fried, and Good (2002) demonstrated that endorsing incremental mind-sets, which emphasize the connection between hard work and success, reduce stereotype threat relative to entity mind-sets, which emphasize innate characteristics (such as gender or race) as key predictors of success. Along similar lines, incremental mindsets improve negotiation performance relative to entity mindsets (Kray & Haselhuhn) and even provide a buffer against negative stereotypes about women's negotiating effectiveness (Kray, Locke, & Haselhuhn, 2009).

Within the organizational literature, *psychological safety* has been identified as a means of promoting effortful learning. Psychological safety, characterized by a shared belief that well-intentioned interpersonal risks will not be punished, encourages moderate risk taking and persistence in the face of obstacles (Edmondson, 1999). By creating nurturing environments in which individuals feel safe to risk failure, effort and persistence will be encouraged. By fostering psychological safety, negatively stereotyped group members may no longer fear that their worth in the eyes of the organization hinges on any one test, thereby promoting persistence (Nussbaum & Steele, 2007).

*Conclusion*

In this chapter, we have reviewed and organized the literature examining stereotype threat in organizations. Upon reflection, we conclude that myriad opportunities exist for stereotype threat to exert pernicious effects on targeted individuals within organizations. Given the sheer ubiquity of evaluations within organizations focused on bottom-line performance, efforts to reduce stereotype threat will hinge on active efforts to manage stereotypes, diversify workforces, provide proper training to employees, and to shape organization's cultures in ways that cultivate adaptive beliefs.

Author Note

This work was made possible by the generous support of the Institute for Research on Labor and Employment at the University of California at Berkeley.

## References

Aronson, J., Fried, C.B., & Good C. (2002). Reducing the effects of stereotype threat on African American college students by shaping theories of intelligence. *Journal of Experimental Social Psychology, 38*, 113-125.

Aronson, J., Quinn, D. M., & Spencer, S. J. (1998). Stereotype threat and the academic underperformance of minorities and women. In J. K. Swim & C. Stangor (Eds.), *Prejudice: The target's perspective* (pp. 83–103). San Diego, CA: Academic Press.

Ashford, S. J., & Northcraft, G. B. (1992). Conveying more (or less) than we realize: The role of impression-management in feedback-seeking. *Organizational Behavior and Human Decision Processes, 32*, 370-398.

Ashford, S. J., & Tsui, A. S. (1991). Self-regulation for managerial effectiveness: The role of active feedback seeking. *Academy of Management Journal, 34*, 251-280.

Babcock, L., Gelfand, M., Small, D., & Stayn, H. (2006). Gender differences in the propensity to initiate negotiations. In D. De Cremer, M. Zeelenberg, & K. Murnighan (Eds.), *Social psychology and economics* (pp. 239-259). Mahwah, NJ: Lawrence Erlbaum.

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.

Barkow, J. H. (1975). Prestige and culture - Biosocial interpretation. *Current Anthropology, 16*, 553-572.

Baron, R. A., Markman, G. D., & Hirska, A. (2001). Perceptions of women and men as entrepreneurship: Evidence for differential effects of attributional augmenting. *Journal of Applied Psychology, 86*, 923-929.

- Bazelon, E. (2009, July 7). The place of women on the court. *The New York Times*, p. MM22
- Bosson, J. K., Haymovitz, E. L., & Pinel, E. C. (2004). When saying and doing diverge: The effects of stereotype threat on self-reported versus nonverbal anxiety. *Journal of Experimental Social Psychology, 40*, 247-55.
- Chatman, J. A., & Cha, S. E. (2003). Leading by leveraging culture. *California Management Review, 45*, 20-34.
- Cole, Y. (2008). Why are so few CEOs people of color and women? Retrieved August 15<sup>th</sup>, 2009, from [www.diversityinc.com/public/2696print.cfm](http://www.diversityinc.com/public/2696print.cfm)
- Crocker, J., Major, B., & Steele, C. (1998). Social stigma. In D. T. Gilbert & S. T. Fiske (Eds.), *The handbook of social psychology* (Vol. 2, 4<sup>th</sup> ed., pp. 504-553). Boston: McGraw-Hill.
- Davies, P. G., Spencer, S. J., & Steele, C. M. (2005). Clearing the air: Identity safety moderates the effects of stereotype threat on women's leadership aspirations. *Journal of Personality and Social Psychology, 88*, 276-287.
- Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review, 95*, 256-273.
- Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review, 109*, 573-598.
- Edmondson, A. C. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly, 44*, 350-383.
- Fiske, S. T., Bersoff, D. N., Borgida, E., Deaux, K., & Heilman, M. E. (1991). Social science research on trial: The use of sex stereotyping research in *Price Waterhouse*

v. Hopkins. *American Psychologist*, 46, 1049-1060. Reprinted in E. Mertz, (2008). *The role of social science in law*. Hants, UK: Ashgate Publishing, International Library of Essays in Law and Society.

Galinsky, A. D., Thompson, L., Kray, L. J., & Shirako, A. (2009). *Taking stereotypes out of stereotype threat: The effect of role-based expectations*. Unpublished manuscript, Northwestern University.

Geis, F. L., Brown, V., Jennings (Walstedt), J., & Porter, N. (1984). TV commercials and achievement scripts for women. *Sex Roles*, 10, 513-525.

Gladwell, M. (2002). The talent myth: Are smart people overrated? *The New Yorker*, July 22, 2002.

Gneezy, U., Niederle, M., & Rustichini, A. (2003). Performance in competitive environments: Gender differences, *Quarterly Journal of Economics*, CXVIII, 1049 – 1074.

Guiso, L., Monte, F., Sapienza, P., & Zingales, L. (2008). Culture, gender, and math. *Science*, 320, 1164-1165.

Gupta, V. K., Turban, D. B., & Bhawe, N. M. (2008). The effect of gender stereotype activation on entrepreneurial intentions. *Journal of Applied Psychology*, 93, 1953-1061.

Hoyt, C. L. (2005). The role of leadership efficacy and stereotype activation in women's identification with leadership. *Journal of Leadership and Organizational Studies*, 11, 2-14.



Hoyt, C. L., & Blascovich, J. (2007). Leadership efficacy and women leaders' responses to stereotype activation. *Group Processes and Intergroup Relations*, *10*, 595-616.

Inzlicht, M., & Ben-Zeev, T. (2000). A threatening intellectual environment: Why females are susceptible to experiencing problem-solving deficits in the presence of males. *Psychological Science*, *11*, 365-371.

Johns, M., Schmader, T., & Martens, A. (2005). Knowing is half the battle: Teaching stereotype threat as a means of improving women's math performance. *Psychological Science*, *16*, 175-179.

Kaiser, C. B., Vick, S. B., & Major, B. (2006). Prejudice expectations moderate preconscious attention to cues that are threatening to social identity. *Psychological Science*, *17*, 332-338.

Kanter, R. M. (1977). *Men and women of the organization*. New York: Basic Books.

Keller, J. (2002). Blatant stereotype threat and women's math performance: Self-handicapping as a strategic means to cope with obtrusive negative performance expectations. *Sex Roles*, *47*, 193-198.

Kramer, R. M., & Brewer, M. D. (1984). Effects of group identity on resource use in a simulated commons dilemma. *Journal of Personality and Social Psychology*, *46*, 1044-1057.

Kray, L. J., Galinsky, A. D., & Thompson, L. (2002). Reversing the gender gap in negotiations: An exploration of stereotype regeneration. *Organizational Behavior and Human Decision Processes*, *87*, 386-410.

Kray, L. J., & Haselhuhn, M. (2007). Implicit negotiation beliefs and performance: Longitudinal and experimental evidence. *Journal of Personality and Social Psychology, 93*, 49-64.

Kray, L. J., Locke, C., & Haselhuhn, M. (2009). In the words of Larry Summers: Gender stereotypes and implicit beliefs in negotiations. In A. A. Stanton, M. Day, & I. Welppe (Eds.), *Neuroeconomics and the Firm*.

Kray, L. J., Reb, J., Galinsky, A., & Thompson, L. (2004). Stereotype reactance at the bargaining table: The effect of stereotype activation and power on claiming and creating value. *Personality and Social Psychology Bulletin, 30*, 399-411.

Kray, L. J., Thompson, L., & Galinsky, A. (2001). Battle of the sexes: Gender stereotype confirmation and reactance in negotiations. *Journal of Personality and Social Psychology, 80*, 942-958.

Logel, C., Walton, G. M., Spencer, S. J., Iserman, E. C., von Hippel, W., & Bell, A. E. (2009). Interacting with sexist men triggers social identity threat among female engineers. *Journal of Personality and Social Psychology, 96*, 1089-1103.

Major, B., & Schmader, T. (1998). Coping with stigma through psychological disengagement. In J. K. Swim & C. Stangor (Eds.), *Prejudice: The target's perspective* (pp. 219-241). San Diego, CA: Academic Press.

Marx, D. M., & Roman, J. S. (2002). Female role models: Protecting women's math test performance. *Personality and Social Psychology Bulletin, 28*, 1183-1193.

Marx, D. M., Stapel, D. A., & Muller, D. (2005). We can do it: The interplay of construal orientation and social comparisons under threat. *Journal of Personality and Social Psychology, 88*, 432-446.

McFarland, L. A., Lev-Arey, D. M. & Ziegert, J. C. (2003). An examination of stereotype threat in a motivational context. *Human Performance, 16*, 181 – 205.

McIntyre, R.B., Lord, C.G., Gresky, D.M., Ten Eyck L.L., Frye, G. D. J., & Bond Jr. C. F. (2005). A social impact trend in the effects of role models on alleviating women's mathematics stereotype threat. *Current Research in Social Psychology, 10*, 116-136.

Morrison, E. W., & Bies, R. J. (1991). Impression management in the feedback seeking process: A literature review and research agenda. *Academy of Management Review, 16*, 522-541.

Murphy, S. E. (1992). *The contribution of leadership experience and self-efficacy to group performance under evaluation apprehension*. Unpublished doctoral dissertation, University of Washington.

Murphy, M. C., Steele, C. M., & Gross, J. J. (2007). Signaling threat: How situational cues affect women in math, science, and engineering settings. *Psychological Science, 8*, 879-885.

Niederle, M., & Vesterlund, L. (2007). Do women shy away from competition? Do men compete too much? *Quarterly Journal of Economics, 122*, 1067-1101.

Niederle, M., & Yestrumskas, A. H. (2009). *Gender differences in seeking challenges: The role of institutions*. Unpublished manuscript, Stanford University.

Nussbaum, A. D., & Steele, C. M. (2007). Situational disengagement and persistence in the face of adversity. *Journal of Experimental Social Psychology, 43*, 127-134.

Perdie-Vaughns, V., Steele, C. M., Davies, P. G., Ditlmann, R., & Crosby, J. R. (2008). Social identity contingencies: How diversity cues signal threat or safety for African Americans in mainstream institutions. *Journal of Personality and Social Psychology, 94*, 615-630.

Pronin, E., Steele, C. M., & Ross, L. (2004). Identity bifurcation in response to stereotype threat: Women and mathematics. *Journal of Experimental Social Psychology, 40*, 152-168.

Quick stats on women workers, 2008 (2008). Retrieved August 15<sup>th</sup>, 2009, from <http://www.dol.gov/wb/stats/main.htm>

Roberson, L., Deitch, E. A., Brief, A. P., & Block, C. J. (2003). Stereotype threat and feedback seeking in the workplace. *Journal of Vocational Behavior, 62*, 176-188.

Roberson, L., & Kulik, C. (2007). Stereotype threat at work. *Academy of Management Perspectives, 21*, 24-40.

Rosenthal, H. E. S., & Crisp, R. J. (2006). Reducing stereotype threat by blurring intergroup boundaries. *Personality and Social Psychology Bulletin, 32*, 501-511.

Rydell, R. J., McConnell, A. R., & Beilock, S. L. (2009). Multiple social identities and stereotype threat: Imbalance, accessibility, and working memory. *Journal of Personality and Social Psychology, 96*, 949-966.

Sapolsky, R. M. (2005). The influence of social hierarchy on primate health. *Science, 29*, 648-652.

Schmader, T. (2002). Gender identification moderates stereotype threat effects on women's math performance. *Journal of Experimental Social Psychology, 38*, 194-201.

Sekaquaptewqa, D., & Thompson, M. (2003). Solo status, stereotype threat, and performance expectancies: Their effects on women's performance. *Journal of Experimental Social Psychology, 39*, 68-74.

Self, E. A. (1990). Situational influences on self-handicapping. In R. L. Higgins (Ed.), *Self-handicapping: The paradox that isn't. The Plenum series in social/clinical psychology* (pp. 37-68). New York: Plenum Press.

Sherif, M. (1966). *In common predicament: Social psychology of intergroup conflict and cooperation*. Boston: Houghton Mifflin.

Steele, C. M. (1997). A threat in the air: How stereotypes shape intellectual identity and performance. *American Psychologist, 52*, 613-629.

Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology, 85*, 440-452.

Steele, C. M., Spencer, S. J., & Aronson, J. (2002). Contending with group image: The psychology of stereotype and social identity threat. *Advances in Experimental Social Psychology, 34*, 379-440.

U.S. women in business. (2009). Retrieved August 15<sup>th</sup>, 2009, from <http://www.catalyst.org/publication/132/us-women-in-business>