

## Gender Identification Moderates Stereotype Threat Effects on Women's Math Performance

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This research applies a social identity perspective to situations of stereotype threat. It was hypothesized that individuals would be more susceptible to the performance-inhibiting effects of stereotype threat to the extent that they are highly identified with the group to which a negative stereotype applies. A quasi-experimental study with male and female college students revealed that individual differences in gender identification (i.e., importance placed on gender identity) moderated the effects of gender identity relevance on women's (but not men's) math performance. When their gender identity was linked to their performance on a math test, women with higher levels of gender identification performed worse than men, but women with lower levels of gender identification performed equally to men. When gender identity was not linked to test performance, women performed equally to men regardless of the importance they placed on gender identity. © 2001 Elsevier Science (USA)

A growing body of evidence suggests that racial and gender differences in testing situations might be created and maintained by stereotypes themselves. Steele and Aronson (1995) demonstrated, for example, that African American students perform more poorly than their White counterparts in testing situations where negative stereotypes about African Americans are relevant. These performance differences do not exist, however, when negative group stereotypes are not relevant to African American students' test performance. Thus, stereotype threat has been characterized as a psychological predicament in which individuals are inhibited from performing to their potential by the recognition that possible failure could confirm a negative stereotype that applies to their in-group and, by extension, to themselves. During the years since the publication of these results, evidence of stereotype threat effects has been found among other stigmatized groups and in other domains. Specifically, negative group stereotypes have been shown to decrease the performance of women on math tests (e.g., Schmader, Johns, Keiffer, Healy, & Fairchild-Ollivierre, 2001; Spen-

cer, Steele, & Quinn, 1999), Latinos on intelligence tests (Aronson & Salinas, 1997, as cited in Aronson, Quinn, & Spencer, 1998), white men whose math abilities are compared to those of Asian American men (Aronson et al., 1999), children from low socioeconomic backgrounds in academic testing situations (Croizet & Claire, 1998), the elderly on memory tasks (Levy, 1996), and whites with respect to natural athletic ability (Stone, Lynch, Sjomeling, & Darley, 1999).

Given this diversity of evidence from different research laboratories and with different target groups, there is now a good deal of confidence that stereotype threat has an influence on performance. As with any new area of research, however, many theoretical parameters of this effect have yet to be defined and tested. In particular, we do not have an extensive grasp on whether certain psychological variables make some individuals more or less susceptible to stereotype threat effects. One moderating variable that has been explored in past research is domain identification. Steele (1997; see also Steele & Aronson, 1995) originally theorized, and it was later demonstrated (e.g., Aronson et al., 1999; Stone et al., 1999), that individuals are more susceptible to the debilitating effects of stereotype threat to the extent that they are domain identified. They reasoned that only individuals who care a great deal about performing well in a given domain will feel threatened by the possibility that their poor performance could confirm a broader nega-

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