

## Feelings of power can diffuse effects of negative stereotypes, study says

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(Medical Xpress)—New research from social psychologists at Indiana University Bloomington suggests that feeling powerful might protect against the debilitating effects of negative stereotypes.

"If you can make women feel powerful, then maybe you can protect them from the [consequences](#) of stereotype threat," IU social psychologist Katie Van Loo said.

In new work, Van Loo and Robert Rydell, [social psychologists](#) in the Department of Psychological and [Brain Sciences](#) in the IU College of Arts and Sciences, brought the study of these two social forces—power and stereotypes—together to determine whether one could circumvent the debilitating impact of the other.

[Negative stereotypes](#), according to an already large body of research, have insidious effects. The very fear of confirming a stereotype that reflects on one's identity—that "women can't do math," for example—is enough to undermine a woman's performance in the subject. Social psychologists have labeled this [phenomenon](#) "stereotype threat" and have documented its impact in such areas as test taking and athletics.

At the other end of the scale are the equal and opposite effects of power. Power, it has been shown, can have positive effects on individual agency, imparting a sense of freedom and control over one's cognitive, psychological and physical resources and, perhaps, paving the way for [optimal performance](#).

"This paper looks at whether making women feel powerful and reminding them of a time in which they had power can prevent stereotype threat," Van Loo said. "I wanted to look at how high power can protect women from decreases in cognitive resources as a result of stereotype threat."

In a series of three experiments, Van Loo and Rydell built a case for this process. In the first, using a technique called semantic priming, participants were given scrambled [sentences](#) of five words, each one containing a word related to either high or low power ("dominant" and "controlling" vs. "subordinate" and "dependent"), which they would form into a sentence. Each group was then given a math test in which the instructions either invoked the negative stereotype about women and math or were gender neutral.

A second experiment used an essay-writing task to make the participants feel either high or low in power, calling upon them to recall an incident in which they had control over another person or people or another had control over them. A control group, neutral in power, enabled the researchers to gauge whether the low power diminished performance or high power boosted performance in contrast to the neutral condition of power. Members of each group then took the math test with either threat or no-threat instructions.

The third experiment examined one possible mechanism involved in this cognitive process: working memory capacity, "that aspect of memory, critical to math, which allows you to hold information and manipulate it in your mind," Van Loo said. Again divided into high, low and neutral power through the use of the writing task, participants were given a memorization task asking them to recall the last three letters in a series of letters presented to them. They were then given the math test as in the previous experiments.

Each instance led to the same conclusions. Feeling powerful protected participants from the deficits in working memory capacity that those without power and under stereotype threat experience. Women who felt high in power performed better in math than those in both the low power and control group, despite the stereotype threat instructions.

"It's not that power made them better at math," Van Loo said, "but it buffered them from the effect of the negative stereotype. When women feel powerful, they can demonstrate their ability relatively unimpeded by stereotype threat."

As the researchers observe in the study, these results highlight the pitfalls of using performance to evaluate the abilities of those belonging to negatively stereotyped groups without taking into consideration other environmental factors that may influence performance, such as stereotype threat and power.

As for the practical lessons to be taken from this study, Van Loo said, "It's a little preliminary, but the reason we did this is to try to get to the point where we could make a recommendation and show something that can be helpful."

"Maybe if you're a student and you're about to take a [math test](#), try doing a thought exercise before you take a test," she said. "It might be helpful to think about a time when you had power. Maybe that would protect you."

The paper, "On the Experience of Feeling Powerful: Perceived Power Moderates the Effect of [Stereotype Threat](#) on Women's Math Performance," was published in the *Personality and Social Psychology Bulletin*.

Van Loo is a graduate student in the IU Department of Psychological

and Brain Sciences. Rydell is an assistant professor in the department and director of the Social Cognition Lab.

Provided by Indiana University

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