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Changing Response Patterns: The cognitive Mechanisms behind Stereotype Threat Effects on Women

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Abstract

Stereotype Threat describes the negative impact on cognitive performance caused by the activation of negative social stereotypes. This study investigates the underlying cognitive mechanisms of gender-specific Stereotype Threat effects through a diffusion model analysis. An online experiment was conducted with 612 men and women, randomly assigned to either a Stereotype Threat or a control condition. Their performances in a mathematical task and an emotion recognition task were compared. To model the underlying cognitive processes, parameters of the drift diffusion model were estimated. Results showed no differences in accuracy as an effect of Stereotype Threat. However, women in the Stereotype Threat condition exhibited a higher threshold separation when performing the mathematical task, indicating more conservative response tendencies, compared to men and the control groups. The study addresses the need for potential interventions such as stereotype awareness to mitigate these effects and calls for further research into cultural and social influencing factors.