

New Research From Psychological Science

April 19, 2019



[Racial Bias in Perceptions of Size and Strength: The Impact of Stereotypes and Group Differences](#)

David J. Johnson and John Paul Wilson



Race influences judgments of size and strength, but those judgments are primarily based on objective physical features (e.g., bicep circumference), this research suggests. College students estimated other college students' strength by looking at their full-body photos. Both groups included Asian, Black, and White students. Men with larger bicep circumference and more upper body strength were rated as stronger, but race also affected the ratings: Black men were perceived as stronger than White men, and Asian men were perceived as weaker than White men. The same pattern was obtained for women. Raters' race and gender did not affect their ratings. In a second experiment, in which participants also rated height, a similar pattern of effects was obtained, and Asian men and women were rated as shorter than Black and White men and women. These results indicate that race impacts judgments of strength, but it does not necessarily decrease accuracy, as some biases derive from physical differences between groups, such as height (e.g., Asian men are on average shorter than White and Black men, and therefore race may reflect an actual physical difference). However, in the absence of individuating information, race may bias decisions more. This research may inform how we think about social issues such as police use of force — officers can use lethal force only when a person is a threat, so misjudgments of strength and size based on race may lead to the wrongful use of lethal force.

[Using a Psychopharmacogenetic Approach To Identify the Pathways Through Which — and the People for Whom — Testosterone Promotes Aggression](#)

Shawn N. Geniole, Tanya L. Procyshyn, Nicole Marley, Triana L. Ortiz, Brian M. Bird, Ashley L. Marcellus, Keith M. Welker, Pierre L. Bonin, Bernard Goldfarb, Neil V. Watson, and Justin M. Carré



Testosterone seems to increase aggression in men with certain personality characteristics, such as high dominance and low self-control, and this effect may be enhanced when those men also have a specific characteristic in their androgen receptor (AR) gene, this research suggests. Participants were men between 18 and 40 years old who completed personality questionnaires and provided a mouthwash sample for DNA extraction. In a task to measure the effects of testosterone on aggression, they were given either testosterone or placebo and were told they would play a game against a player who was in another room (this player was fictitious). In the game, participants received points exchangeable for money by repeatedly pressing a key on the keyboard, but those points could be stolen by the other player; when points were stolen, participants could respond by stealing points from the other player, but the stolen points would not be exchangeable for money. Choosing to steal points caused harm to the other player without any benefit for the participant and was thus used as a measure of aggression. Testosterone promoted aggression during the game among participants with high-risk personality profiles for aggression (high dominance, low self-control, and independent self-construal). This effect was enhanced among men who had more efficient AR genes, related to fewer cytosine-adenine-guanine repeats in the AR gene. These men also reported experiencing more pleasure but not anger during the aggression, which can indicate involvement of reward-related neurotransmitters (i.e., dopamine) on the heterogeneous effects of testosterone on aggression.

[Reactivation of Previous Experiences in a Working Memory Task](#)

Gi-Yeul Bae and Steven J. Luck



Recent experiences can have a large and automatic impact on the way we perceive and act on current events, even when those previous experiences are irrelevant for the current ones. Bae and Luck investigated whether these influences occur (a) because the past experiences change the synaptic connections among neurons and indirectly influence the way the current information is processed or (b) because the current events trigger an active representation of the previous experience, which directly impacts current processing. The researchers recorded event-related potentials (ERPs) while participants estimated stimuli orientations. On each trial, participants saw a teardrop-shaped stimulus and, after it disappeared, adjusted the orientation of a similar stimulus to match the orientation of the preceding one. Because the ERP data provided temporal information as well as the scalp distribution of brain activation, they allowed the researchers to decode previous-trial activation (due to a given stimulus orientation) from current-trial activation (due to a new orientation). Decoding of previous-trial activation began shortly after the current-trial stimulus was shown, which indicated that the current stimulus reactivated a representation of the previous trial, even though it was now irrelevant. Participants also tended to report orientations biased away from the orientation on the previous trial. Current events may thus trigger an active representation of previous events, potentially explaining how recent past experiences influence current processing.