## **New Research From Psychological Science**

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Read about the latest research published in *Psychological Science*:

Serotonin and Social Norms: Tryptophan Depletion Impairs Social Comparison and Leads to Resource Depletion in a Multiplayer Harvesting Game

Amy C. Bilderbeck, Gordon D. A. Brown, Judi Read, Mark Woolrich, Phillip J. Cowen, Tim E. J. Behrens, and Robert D. Rogers

What factors influence the conservation of shared resources? The authors manipulated participants' levels of serotonin activity by having them consume a drink containing tryptophan or a placebo (tryptophan depletion reduces serotonin activity). The participants then played a group game with three research confederates in which they harvested money from a partially replenished source. Participants could see how much the confederates were harvesting in each round, and confederates' harvesting behavior was manipulated by the researcher to be more or less aggressive. Tryptophan depletion was associated with more aggressive harvesting strategies and reduced sensitivity to social norms created by the confederates' harvesting behaviors, indicating that serotonin may play a role in resource management.

Individual Differences in Infant Fixation Duration Relate to Attention and Behavioral Control in Childhood

Kostas A. Papageorgiou, Tim J. Smith, Rachel Wu, Mark H. Johnson, Natasha Z. Kirkham, and Angelica Ronald

In this study, the authors examined the relationship between infant attention and childhood temperament and behavior. The parents of infants who had participated in an eye-tracking study at age 7 months filled out several questionnaires about their children's behavior and temperament at age 3.5 years. Longer fixation times in infancy were found to be associated in childhood with higher levels of effortful control and lower levels of surgency (which is characterized by high levels of activity, positive emotion, impulsivity, and engagement) and hyperactivity-inattention, demonstrating that fixation time in infancy is related to attentional and behavioral control in childhood.

We Take Care of Our Own: Caregiving Salience Increases Out-Group Bias in Response to Out-Group Threat

Michael Gilead and Nira Liberman

Does activation of the caregiving emotional system influence out-group bias? Researchers increased the salience of Israeli Jewish mothers' caregiver roles by having them think about a happy memory from

their childhood or about the first few weeks of their child's life. The researchers then manipulated the mothers' levels of out-group-threat by having them rate the probability that a natural or an out-group threat would occur. Mothers in the out-group-threat condition — but not those in the natural-threat condition — whose caregiver roles had been made salient displayed higher levels of out-group bias than did those whose caregiver roles had not been made salient. These findings extend our knowledge of the influence of caregiving on group bias and suggest a need for additional research.

## We See More Than We Can Report: 'Cost Free' Color Phenomenality Outside Focal Attention

Zohar Z. Bronfman, Noam Brezis, Hilla Jacobson, and Marius Usher

Although people often indicate that they can perceive rich details of a scene, they are usually able to remember only a few specific details of a perceived scene. Can we see more than we can report, or is the perception of scene richness an illusion? Participants were shown several rows of colored letters and were asked to report a specific letter from a precued row. In some instances, participants also had to report the color diversity of the row with the cued letter or that of a noncued row. Participants were able to report the color diversity of the cued and noncued rows without any cost to their letter-report performance, suggesting that people can register aspects of a scene outside of focal attention without any cost to working memory resources.