## New Research in Psychological Science

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Massive Effects of Saliency on Information Processing in Visual Working Memory

Martin Constant and Heinrich R. Liesefeld



Constant and Liesefeld developed a novel visual working memory (VWM) task to test whether VWM processing depends on an object's saliency (i.e., how much it stands out). This task disentangles an object's saliency from the discriminability of its to-be-remembered features (in this case, color), allowing for a direct manipulation of saliency. In three experiments, participants appeared to prefer processing the most salient objects within a scene. How well the objects were processed appeared to depend on both the objects' relative saliency (compared with objects presented at the same time) and absolute saliency (how much they stood out).

How Collective-Action Failure Shapes Group Heterogeneity and Engagement in Conventional and Radical Action Over Time

Morgana Lizzio-Wilson et al.



Collective-action successes appear to unify people who support the changes, and their failures seem to create subgroups among those who oppose the changes. Lizzio-Wilson and colleagues analyzed data collected before and after the 2017 marriage-equality debate in Australia. The failure of efforts against marriage equality led to the creation of four subgroups among opponents to the law: resigned acceptors, who were least inclined to act after failure; moderates, who showed moderate disengagement and continued investment; stay-the-course opponents, who maintained their commitment and course of action; and innovators, who maintained their commitment but used new tactics and were more inclined to justify the use of radical actions.

Convergent and Discriminant Validity of Retrospective Assessments of the Quality of Childhood Parenting: Prospective Evidence From Infancy to Age 26 Years

#### Marissa D. Nivison, Deborah Lowe Vandell, Cathryn Booth-LaForce, and Glenn I. Roisman

To evaluate the effects of early caregiving experiences on adults' mental and physical health, Nivison and colleagues assessed data from children's birth until they were 26 years old. When participants were young, researchers observed interactions between participants and their parents, and parents reported their caregiving behaviors; in adolescence, participants reported the caregiving they received; and at age 26, participants completed a retrospective self-report on the caregiving they had received while younger and on their parents' emotional availability. The researchers found that the retrospective reports were poorly matched with the actual measures of early caregiving and tended to be more influenced by the children's closeness to their parents in adulthood and by the participant's depressive symptoms in adulthood.

## <u>Using Body Ownership to Modulate the Motor System in Stroke Patients</u> *Riccardo Tambone et al.*

Illusory body ownership (e.g., of an avatar) might help to promote motor recovery in stroke patients. Patients with chronic motor deficits completed an immersive virtual reality training (three sessions each week for 11 weeks) in which they had either a first-person or a third-person perspective of an avatar that walked around the virtual environment. After the training, only the patients who had had a first-person perspective (i.e., experienced body ownership) improved gait and balance. Tambone and colleagues suggest that representing a virtual body as their own allowed patients to access motor functioning and promoted motor recovery.

# Age-Related Changes in Spatial Navigation Are Evident by Midlife and Differ by Sex Shuying Yu et al.

Before midlife, individuals begin to experience deficits in their spatial-knowledge acquisition and navigation strategies but preserve their path-integration ability (keeping track of relative position and orientation on the basis of integration of self-motion cues). Yu and colleagues tested young adults (ages 18–28) and midlife adults (ages 43–61) on essential aspects of navigation. They found that path-integration ability did not differ between age groups or sex. Regarding spatial-knowledge acquisition, men had a higher ability than women across age groups, and by midlife, both men and women showed a decreased ability to acquire spatial knowledge and an increased reliance on habitual paths.

### Dogs Mentally Represent Jealousy-Inducing Social Interactions

Amalia P. M. Bastos, Patrick D. Neilands, Rebecca S. Hassall, Byung C. Lim, and Alex H. Taylor



Dogs can experience and show jealousy, this research suggests. Dogs observed a realistic-looking fake dog positioned next to their owner, after which the researchers positioned a barrier to prevent each dog from seeing its owner and the fake dog. Although the barrier blocked their line of sight, the dogs forcefully attempted to reach their owners when they appeared to interact with the fake dogs. This reaction did not occur when the fake dog was replaced by a fleece cylinder. Thus, dogs showed human-like signatures of jealous behavior: Jealousy emerged only when their owner interacted with a social rival and as a consequence of that interaction, even when the interaction was out of sight.

## Effects of Trust and Threat Messaging on Academic Cheating: A Field Study

Li Zhao et al.



In a real classroom setting, telling students they were trusted to act with integrity did not prevent them from cheating in an unsupervised exam. Compared with students who took supervised exams, students who took unsupervised exams cheated more (as evidenced by correct responses to prohibitively difficult exam items that could have been answered only by cheating). A collective-punishment threat did somewhat reduce cheating, in comparison with an individual-punishment threat or no threat, under the same circumstances (unsupervised exams after an emphasis of trust in student integrity). However, none of these conditions reduced cheating to the level found for supervised exams.

#### Aging Increases Prosocial Motivation for Effort

Patricia L. Lockwood et al.



Older people appear to be more willing than younger people to put in effort to benefit others. Lockwood and colleagues used computational modeling to test the willingness of younger adults (18–36 years old) and older adults (55–84 years old) to put physical effort (i.e., exert gripping strength) into acts that would benefit themselves and/or others (i.e., monetary rewards). Younger participants put in more effort when they would earn the reward, but older people put in as much effort for themselves as for others. These findings indicate that prosociality might increase across the life span.