

New Research From Psychological Science

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Effects of Adult Attachment and Emotional Distractors on Brain Mechanisms of Cognitive Control

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Adults with insecure attachment styles may have difficulties regulating emotions and this may put them at an increased risk for mental health problems. Volunteers underwent fMRI scans while performing an emotion-word Stroop task. Participants with tendencies towards insecure attachment demonstrated more activity in the right orbitofrontal cortex and superior frontal gyrus for unpleasant words, suggesting that insecure attachment may involve intense reactions to negative words. In addition, insecure volunteers also demonstrated more activity in the left dorsolateral prefrontal cortex and dorsal anterior cingulate cortex for pleasant words, indicating that these individuals may require greater effort to overcome the tendency for pleasant words to capture their attention.

For Whom Is Parting With Possessions More Painful? Cultural Differences in the Endowment Effect

William W. Maddux, Haiyang Yang, Carl Falk, Hajo Adam, Wendi Adair, Yumi Endo, Ziv Carmon, and Steven J. Heine

It can be painful parting with a prized possession and new findings suggest that in certain cultures it may be even more difficult to give up objects. The endowment effect describes the tendency for owners (potential sellers) to value objects more than potential buyers. European and East Asian volunteers were assigned to the role of buyers or sellers of coffee mugs or chocolates. A significant endowment effect (i.e., owners' average selling price was higher than buyers' average purchase price) emerged in the overall sample, but the effect was significantly larger for Western volunteers than for East Asian volunteers. The findings suggest that the endowment effect may be influenced by the degree to which independence and self-enhancement (vs. interdependence and self-criticism) are culturally valued.

Task Usefulness Affects Perception of Rivalrous Images

Adrien Chopin and Pascal Mamassian

Binocular rivalry occurs when each eye is presented with a different image and conscious awareness

alternates between both images but does not combine them together. There is new evidence that the image that is more useful for an auxiliary task (e.g., a separate visual search task conducted almost at the same time as the binocular rivalry task) will be seen more than the other, suggesting that task usefulness may change the appearance of a stimulus.

A New Look at Sensory Attenuation: Action-Effect Anticipation Affects Sensitivity, Not Response Bias

Pedro Cardoso-Leite, Pascal Mamassian, Simone Schütz-Bosbach, and Florian Waszak

It is difficult to tickle oneself. Anticipating our own touch can result in sensory attenuation—filtering out unnecessary information from our environment—reducing our touch perception. Results of a new study demonstrate sensory attenuation based on learned arbitrary associations between movements and visual effects: Perception of visual effects is impaired when the effects are due to an action habitually producing those effects. During the first part of the experiment (acquisition phase), left-key presses and right-key presses produced tilted patches. In the subsequent test phase, volunteers' sensitivity to those patches was reduced when the patches were triggered by the key press previously associated with them.

Electrophysiological Evidence for Parallel Response Selection in Skilled Typists

Gordon D. Logan, A. Eve Miller, and David L. Strayer

Numerous behavioral and psychophysiological studies suggest that people are able to select only one response at a time. However, a new study suggests that parallel response selection may occur during skilled typing. Lateralized readiness potentials (LRP; recorded from electrode sites on the scalp over primary motor cortex and reflects the difference in activation of responses in two hands) were recorded as typists typed words with keystrokes distributed between both hands. Analysis of the LRP recordings showed that the LRP amplitude decreased for the first keystroke as progressively more keystrokes were activated in the opposite hand, supporting parallel response selection. This type of response selection may be the result of extensive practice—the volunteers in this study were extremely skilled typists while other studies of this nature typically involve participants with limited practice on a task.

Why Barack Obama Is Black: A Cognitive Account of Hypodescent

Jamin Halberstadt, Steven J. Sherman, and Jeffrey W. Sherman

Hypodescent is the association of individuals of mixed-race ancestry with the minority or socially subordinate group. This may be the result of an individual's learning history, and not necessarily the product of racist or political motivation. Volunteers (native Chinese and native Caucasian New Zealanders) had to quickly classify photos of racially ambiguous individuals (created by morphing a

Chinese face with a Caucasian face). Ambiguous faces were classified as Chinese more often by Caucasian than by Chinese participants. Findings suggest that hypodescent may be explained by attention theory, which assumes that minority groups are learned later than the majority group and that learning minority groups requires attention to their distinctive features.