

New Research From Psychological Science

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

[Reconsidering Temporal Selection in the Attentional Blink](#)

Patrick T. Goodbourn, Paolo Martini, Michael Barnett-Cowan, Irina M. Harris, Evan J. Livesey, and Alex O. Holcombe

When two stimuli are presented in close succession, people often report the first but fail to report the second. In studies of this phenomenon, which is known as attentional blink, many items are presented in rapid succession and participants are asked to make judgments (presence or absence, report the identity) about two target stimuli (T1 and T2) appearing in the string of items. The time between the presentation of T1 and T2 is called a lag. Surprisingly, studies have shown that T2 items are identified at shorter lags but not at longer lags — something called lag-1 sparing. The authors used a mixture-model analysis method to examine data from six attentional blink experiments. This model showed that at shorter lags, T1 and T2 are captured in a single attentional episode. A second attentional episode occurs only when T2 follows T1 by more than 100 to 250 ms. These findings explain why T2 escapes attentional blink when it closely follows T1, a finding that helps inform future research and theories describing attentional blink.

[Cooperation, Fast and Slow: Meta-Analytic Evidence for a Theory of Social Heuristics and Self-Interested Deliberation](#)

David G. Rand

In this study, the researchers tested a new theory explaining the role of intuition and deliberation in cooperation. This theory — the social heuristics hypothesis — suggests that, because of its general advantageousness in daily life, intuition will favor cooperation. In contrast, deliberation is hypothesized to favor cooperation only to the extent that there are incentives to cooperate within the current situation. To test the predictions of this theory, the researchers conducted a meta-analysis of studies that examined cooperative behavior using incentivized economic games. Cooperation decisions in these games came in two forms, pure cooperation (i.e., cooperation was never in one's best interest) and strategic cooperation (i.e., the benefit or cost of cooperation depended upon the action of the other player). Encouraging intuition over deliberation was found to increase pure cooperation but had no influence on strategic cooperation, findings that support the social heuristics hypothesis.

[Visual Experience Shapes Orthographic Representations in the Visual Word Form Area](#)

Heinz Wimmer, Philipp Ludersdorfer, Fabio Richlan, and Martin Kronbichler

A popular account of word recognition suggests that a brain area located in the left ventral occipitotemporal cortex called the visual word form area (VWFA) stores abstract representations of words. The representations are thought to not include specific visual attributes of words; however, several studies suggest this may not be the case. To determine whether letters and words stored in the VWFA are fully abstract or contain information about the visual format in which they are most commonly perceived, the researchers collected fMRI data while German-speaking participants viewed nouns and nonnouns in capitalized and noncapitalized forms. German nouns are always seen capitalized, whereas nonnouns are most commonly seen in lowercase. Activation in the VWFA was greater in response to words presented in unfamiliar case formats, providing evidence that word representations in the VWFA are not fully abstract; rather, they contain information about the format in which they are most commonly perceived.

[Childhood Adversity, Self-Esteem, and Diurnal Cortisol Profiles Across the Life Span](#)

Samuele Zilioli, Richard B. Slatcher, Peilian Chi, Xiaoming Li, Junfeng Zhao, and Guoxiang Zhao

Research has shown an association between childhood adversity and dysregulation of the hypothalamic-pituitary-adrenal (HPA) axis, but the biological processes underlying this relationship are still not well understood. In two studies, the researchers examined self-esteem as a possible intermediary in this relationship. Specifically, they posited that childhood adversity influences self-esteem, and self-esteem in turn modulates functioning of the HPA axis. Adults from Wave 2 of the National Study of Daily Experiences (a U.S.-based sample) and rural Chinese children and adolescents were assessed for self-esteem, salivary cortisol, and childhood adversity. Across both studies, childhood adversity was found to be associated with lower self-esteem and, in turn, lower morning cortisol and a flatter cortisol slope — a nonnormative cortisol pattern associated with some forms of psychopathology.