

New Research in *Psychological Science*

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[The Negative Effect of Smartphone Use on Academic Performance May Be Overestimated: Evidence From a 2-Year Panel Study](#)

Andreas Bjerre-Nielsen, Asger Andersen, Kelton Minor, and David Dreyer Lassen



Bjerre-Nielsen and colleagues monitored 470 students' smartphone usage over 2 years and assessed their academic performance across multiple courses. They found that students who used their smartphones in class more had lower grades than those who used their smartphones less. However, this negative effect was not as large when the researchers used a model to control for stable characteristics of students and courses (e.g., student self-control, teacher quality), including those not observed by researchers. These findings indicate that previous research that only controlled for observed student characteristics might have overestimated the negative effects of smartphone use on academic performance.

[Expectancy Violation Drives Memory Boost for Stressful Events](#)

Felix Kalbe, Stina Bange, Annika Lutz, and Lars Schwabe



Detailed information about an upcoming stressor might reduce a person's usually enhanced memory for stressful events by reducing their "expectancy violation." Participants who went through a stressful situation (mock job interview) and had previously received information about the stressor remembered the objects present during the event with the same level of detail as those who went through a control event (arithmetic tasks). However, participants who went through the stressful event without previous information—that is when the stressor violated their expectancy—had a more detailed memory than those who went through the control event. Using a neuroimaging technique, the researchers linked expectancy violation and memory formation under stress to the inferior temporal cortex.

[Does Posture Influence the Stroop Effect?](#)

Emilie E. Caron, Michael G. Reynolds, Brandon C. W. Ralph, Jonathan S. A. Carriere, Derek Besner, and Daniel Smilek



In a previous study, Rosenbaum and colleagues (2017) reported that participants showed a smaller Stroop effect (i.e., a smaller difference between the time they took to name the colors of letters used to write out color names when they matched versus when they did not match) when they performed the Stroop task while standing rather than when sitting. In five experiments, Caron and colleagues obtained a standard Stroop effect but did not find evidence that sitting significantly decreased the Stroop effect. Caron and colleagues' results suggest that posture does not appear to influence the magnitude of the Stroop effect.

[Preregistered Direct Replication of “Sick Body, Vigilant Mind: The Biological Immune System Activates the Behavioral Immune System”](#)

Joshua M. Tybur, Benedict C. Jones, Lisa M. DeBruine, Joshua M. Ackerman, and Vanessa Fasolt



In 2011, Miller and Maner showed that individuals who had recently been ill, and thus may have been more vulnerable to infection, were more likely to direct their attention to disfigured faces (i.e., those with infectious-disease cues, when compared with typical “healthy” faces) than individuals who had not recently been ill. However, Tybur and colleagues attempted to replicate this finding with a larger sample of participants and did not find a relationship between recent illness and biased attention to cues for infection.

[Number Adaptation Can Be Dissociated From Density Adaptation](#)

Kevin DeSimone, Minjung Kim, and Richard F. Murray

Which mechanisms underlie the ability to judge the number of objects in a scene even when there are too many to be counted? DeSimone and colleagues examined number adaptation—a phenomenon where, after viewing several objects, the number of objects in other images can appear to change substantially. They found that when an adaptation stimulus had more objects but lower density than a subsequent stimulus, adaptation reduced the number of perceived objects in the subsequent stimulus. This result indicates that number adaptation does not depend simply on mechanisms tuned to perceive density but requires number-specific mechanisms.

[The Reflection Effect in Memory-Based Decisions](#)

Regina A. Weilbacher, Peter M. Kraemer, and Sebastian Gluth



People may prefer options that they remember better in positive domains (e.g., appetitive images and financial yields), just as they avoid options with uncertain outcomes more often in gain domains than in loss domains. Participants were told to memorize the association between options and their locations on a screen. Afterward, they chose between two highlighted locations and attempted to match the locations to the options they had previously learned. When the options were positive (i.e., gain domain), participants were more likely to choose locations with options they remembered. The opposite occurred when the options were negative (i.e., loss domain; aversive images or financial loss).

[Positive Affect Is Associated With Less Memory Decline: Evidence From a 9-Year Longitudinal Study](#)
Emily F. Hittner, Jacquelyn E. Stephens, Nicholas A. Turiano, Denis Gerstorf, Margie E. Lachman, and Claudia M. Haase



Middle-age and older adults who experience positive affect—feeling enthusiastic, attentive, proud, active—appear to show less memory decline. Hittner and colleagues examined data from a longitudinal U.S. study that, among other measures, tracked middle-aged participants’ self-reported positive affect and measured their memory using free recall. The researchers observed that, across 9 years, participants with higher positive affect showed less memory decline than those with lower positive affect. This association appears to reflect the impact of positive affect on memory rather than the impact of memory on affect.