

New Research From Psychological Science

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

[Temporary Deafness Can Impair Multisensory Integration: A Study of Cochlear-Implant Users](#)

Simon P. Landry, Jean-Paul Guillemot, and François Champoux

Does temporary deafness in adults disrupt other multisensory processes? Participants who had or had not experienced a period of deafness performed a nonspeech task meant to illicit an audiotactile illusion. Participants without a history of hearing loss experienced the audiotactile illusion, whereas those with restored hearing did not. This suggests that the maintenance of audiotactile processes might require an uninterrupted bond between the two modalities.

[General Cognitive Ability and the Psychological Refractory Period: Individual Differences in the Mind's Bottleneck](#)

James J. Lee and Christopher F. Chabris

Although research has shown that people with greater general cognitive ability have faster reaction times on speeded tasks, the mechanisms underlying this relationship are not well understood. Participants performed a speeded number-comparison task that consisted of two stimuli separated by 60 to 960 ms. The difference in reaction times between the high- and low-general-cognitive-ability groups increased as the time between the presentation of the first and second stimulus decreased, indicating an advantage in the central stage of serial processing for people with greater general cognitive ability.

[Individual Differences in Eye Movements During Face Identification Reflect Observer-Specific Optimal Points of Fixation](#)

Matthew F. Peterson and Miguel P. Eckstein

Studies of face identification have found that humans generally tend to look just below the eyes when trying to identify another person, but is there variation in this fixation behavior? In a series of trials, participants' eye movements were recorded as they observed and identified faces. On some trials, participants could look at any part of the face they wanted, but on other trials participants had to fixate on a certain point on the image. The researchers found differences in the optimal location of participants' eye fixations during the identification task. This suggests that each person's specific eye-movement strategy optimizes his or her ability to recognize others' faces.

[Extreme Rituals Promote Prosociality](#)

Dimitris Xygalatas, Panagiotis Mitkidis, Ronald Fischer, Paul Reddish, Joshua Skewes, Armin W. Geertz, Andreas Roepstorff, and Joseph Bulbulia

Extreme rituals often seem to incur great physical and mental costs with little obvious benefit, so why do people take part in them? Researchers examined people who had participated in or observed high- or low-ordeal religious rituals. Participants were assessed for their levels of religiosity, social identification, generosity, and perceived pain related to completing the ritual. Participants who had performed high-intensity rituals were more generous and had a more inclusive group identity, which suggests that intense rituals promote social cohesion and cooperative behavior.

[Transposed-Letter Effects Reveal Orthographic Processing in Baboons](#)

Johannes C. Ziegler, Thomas Hannagan, Stéphane Dufau, Marie Montant, Joël Fagot, and Jonathan Grainger

In a previous study, the authors trained baboons to discriminate a large number of English words from nonsense words and found that the animals performed above chance on words they had never seen. This led the authors to propose that the monkeys used an orthographic code to distinguish novel words from nonwords. The authors tested this hypothesis by examining whether the animals showed transposed-letter effects (a hallmark of orthographic processing) in a word/nonword discrimination task. The baboons' categorization of transposed-letter nonwords as "words" supports the authors' hypothesis and suggests that the neural mechanisms supporting reading are not linguistic in nature and are much older than the behavior itself.