

# New Research From Psychological Science

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

## [Within-Cohort Age-Related Differences in Cognitive Functioning](#)

*Timothy A. Salthouse*

People born within the same range of birth years are often categorized as belonging to the same birth cohort. Age-related differences in cognitive functioning are assumed to be partly determined by generational influences associated with cohort membership. Individuals ranging in age from 18 to 97, born between 1907 and 1989 were assessed for five different cognitive abilities. Researchers looked at age-related differences in cognitive abilities as a function of participants' chronological age (within cohorts) and as a function of test year (between cohorts). The researchers found that age-related differences in cognitive abilities seen within cohorts were very similar to age-related differences between cohorts. This finding calls into question the practice of relying on birth cohort to explain influences on cognitive functioning.

## [The Neural Basis of Difficulties Disengaging From Negative Irrelevant Material in Major Depression](#)

*Lara C. Foland-Ross, J. Paul Hamilton, Jutta Joormann, Marc G. Berman, John Jonides, and Ian H. Gotlib*

Depressed individuals often have difficulty expelling negative material from working memory (WM); however, the neural mechanisms underlying this phenomenon are not well understood. fMRI data was collected while individuals with and without depression saw two lists of emotionally valenced words. Participants were instructed to keep one of the lists in WM and then had to indicate whether a target was or was not included in the specified list. Depressed participants had greater activation in the dorsal anterior cingulate and parietal and bilateral insular cortices (brain areas utilized in cognitive control) when negative words were removed from WM than when they were maintained in WM. These findings identify brain areas related to cognitive control as playing a role in depressed individuals' difficulty with negative material.

Come listen to Ian H. Gotlib give the [Society for a Science of Clinical Psychology Distinguished Scientist Award Address](#) at the 25th APS Annual Convention.

## [One Way and the Other: The Bidirectional Relationship Between Ambivalence and Body Movement](#)

*Iris K. Schneider, Anita Eerland, Frenk van Harreveld, Mark Rotteveel, Joop van der Pligt, Nathan Van der Stoep, and Rolf A. Zwaan*

Can a person's body movements reflect his or her evaluation of an object or idea? Participants stood on a Wii balance board while they read a newspaper article that presented only the positive, only the negative, or both positive and negative aspects of abolishing the minimum wage for young adults. Participants then rated the extent to which their thoughts and feelings on the issue were conflicted, indecisive, or mixed. Participants who read the balanced version of the article moved side to side more often than did those who had read the positive or negative version of the article. In addition, the level of ambivalence participants felt correlated with the amount of their side-to-side movement. These findings suggest that feelings of ambivalence may be accompanied by specific body movements.

### [Making Sense of Nonsense: The Visual Salience of Units Determines Sensitivity to Magnitude](#)

*Luxi Shen and Oleg Urminsky*

In this study, the authors examined whether making an unfamiliar unit of measurement more salient would reduce *deliberational blindness* — a failure to consider the meaning of even unfamiliar units. In the last of five experiments, researchers examined a unit of measurement that is not well understood — horsepower (hp). Participants were shown information about a car with a 150-hp or a 300-hp engine and were asked to rate the power of the car. In some cases, the unit of measurement (hp) was presented in a different color font to make it stand out, and in others it was not. Participants' ratings of the power of the car were less dependent on the number (150 or 300) when the unit of measurement was made to stand out. These findings provide insight into how presentation of numerical information affects decision making.