

New Research From Psychological Science

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

[Learning Efficiency: Identifying Individual Differences in Learning Rate and Retention in Healthy Adults](#)

Christopher L. Zerr, Jeffrey J. Berg, Steven M. Nelson, Andrew K. Fishell, Neil K. Savalia, and Kathleen B. McDermott



People differ in their ability to learn new information, not only in how much and for how long they retain it but also in how quickly they learn. Zerr and colleagues tested the relationship between quickness of initial learning and long-term retention. Participants studied pairs of English and Lithuanian words, took a test in which they were presented with the Lithuanian word and had to type in the English word, and received the correct answer as feedback. They were tested until they successfully recalled all of the studied pairs. The number of tests needed to recall all the pairs provided the initial learning rate. Participants restudied the pairs, did a distracter task for 5 min, and then performed a final test. To test the stability of individual differences, 2 days later, they did the same tasks with different word pairs. Participants who learned more quickly (fewer initial tests) performed better in the final test on both days. These effects also occurred when the second study-test episode occurred 3 years after the first. Thus, learning efficiency – the relation between learning rate and retention – seems to be stable across days and years.

[Culture-Independent Prerequisites for Early Arithmetic](#)

Robert A. Reeve, Fiona Reynolds, Jacob Paul, and Brian L. Butterworth

In societies that use counting words, arithmetic development is associated with visuospatial working memory (VSWM), executive functions, and nonverbal intelligence. To explore the relative role of cultural practices versus general cognitive prerequisites in these associations, Reeve and colleagues tested 5- to 6-year-olds from two different cultures: English-speaking children from urban Australia and indigenous Anindilyakwa-speaking children from an island in northern Australia. Anindilyakwa does not contain counting words, but children still exhibit calculation skills comparable to those of English-speaking children. Reeve and colleagues tested both groups of children on cognitive tasks that usually correlate with arithmetic abilities (VSWM tasks such as Corsi Blocks, nonverbal intelligence tasks such as Raven's Matrices, and spatial reasoning tasks such as the Porteus Maze) and on addition tasks (a nonverbal addition task for the Anindilyakwa-speaking children and a comparable single-digit addition task for the English-speaking children). Results showed the same pattern of correlations between cognitive tasks and addition tasks in both groups, and VSWM was the best predictor of arithmetic ability. These results indicate that VSWM might be a cognitive prerequisite for the development of arithmetic, independent of culture.

[A Meta-Analysis of Gender Differences in Subjective Well-Being: Estimating Effect Sizes and](#)

[Associations With Gender Inequality](#)

Cassandra Batz-Barbarich, Louis Tay, Lauren Kuykendall, and Ho Kwan Cheung

Despite known global gender inequalities, evidence for gender differences in subjective well-being have been mixed. To address this inconsistency, Batz-Barbarich and colleagues conducted a systematic review of the literature and a meta-analysis examining self-reported life and job satisfaction. The meta-analysis included 428 research articles and more than 1 million participants. In the first analysis, no significant gender differences were found for life or job satisfaction. However, supplemental analyses showed that men and women reported equivalent life satisfaction, but women reported lower job satisfaction than did men. Using a meta-analytic regression, the authors explored whether age, national gender inequality index, economic indicators, time period of data collection, and geographic region moderated gender differences in job or life satisfaction. They found that only greater national gender inequality predicted greater gender differences in job satisfaction, although it did not predict greater gender differences in life satisfaction. This finding indicates that a domain measure, such as job satisfaction, might be more sensitive to differences in how men and women experience inequality.