

New Research in *Psychological Science*

March 03, 2022



[Incel Activity on Social Media Linked to Local Mating Ecology](#)

Robert C. Brooks, Daniel Russo-Batterham, and Khandis R. Blake



Brooks and colleagues investigated how local characteristics may shape the activity of young men who self-identify as incels (involuntary celibate) and tend to promote misogyny and gender-based violence in some societies. The researchers analyzed a database of 4 billion Twitter posts (2012–2018) to identify the U.S. location of tweets using words peculiar to incels or about incels. Incel tweets were disproportionately more common in areas with fewer women, higher male-to-women ratios, and small income gaps by gender but higher income inequality overall. These findings suggest that monitoring social media might indicate where to focus interventions to diminish gender-based violence.

[Queen's Gambit Declined: The Gender-Equality Paradox in Chess Participation Across 160 Countries](#)

Allon Vishkin



Paradoxically, societies with more political and economic gender equality appear to have more gender disparities in certain fields, including science. Vishkin found that this gender-equality paradox also extends to chess participation. Across 160 countries, women from countries with less gender equality, on average, participated more often in chess. This paradox appears to be driven by the greater participation of younger chess players in countries with less gender equality, possibly reflecting a generational shift. However, the paradox is not linear; gender differences in chess were the highest in countries with the most but also the least gender equality.

[The One That Got Away: Overestimation of Forgone Alternatives as a Hidden Source of Regret](#)

Daniel Feiler and Johannes Müller-Trede



Sometimes people experience more regret after making a decision when they do not see the outcome of the unchosen option than when they do see it, this investigation suggests. In four studies, participants made choices and then rated whether and how much they regretted their choice when the rejected alternative was later either revealed or kept a secret (e.g., seeing or not seeing the unchosen of two blurred faces in a dating app). When participants did not see the unchosen alternative, they tended to idealize it and overestimate its value, resulting in more regret than they experienced when they did see it.

[Niche Diversity Predicts Personality Structure Across 115 Nations](#)

Patrick K. Durkee et al.

According to the niche-diversity hypothesis, personality structure results from the affordances of different combinations of personality traits within a society—that is, individuals occupy different niches (e.g., workplaces, social groups) within a larger population, and each of those niches favors some traits to the detriment of others. Hence, the more niches a country has, the more diverse its personality structure should be. Durkee and colleagues found support for this hypothesis in a study involving 115 nations. Countries with greater niche diversity produced more dimensions of personality than countries with less niche diversity, indicating that socioecological factors might affect the structure of personality within the individuals who live in that place.

[The Impact of Feedback on Perceptual Decision-Making and Metacognition: Reduction in Bias but No Change in Sensitivity](#)

Nadia Haddara and Dobromir Rahnev



Feedback can help people improve performance, but how? Participants made perceptual judgments (whether a grid had more Xs or Os). Compared with participants who did not receive feedback after each judgment, those who received feedback changed their response strategies by reducing their response bias (i.e., the tendency to prefer one category of responses). However, feedback did not affect perceptual sensitivity (i.e., the ability to discriminate between types of stimuli). In another experiment, feedback improved calibration (i.e., participants became more confident about their responses that turned out to be correct, and less confident about their wrong responses). Thus, feedback appears to improve performance by allowing individuals to adjust their strategies and calibrate their confidence.

[Early-Life Socioeconomic Circumstances and Physical Activity in Older Age: Women Pay the Price](#)

Aïna Chalabaev et al.



Chalabaev and colleagues explored the associations among early-life economic and cultural circumstances, sex, and physical activity in older age. Using data from a large European survey, they found that early-life disadvantages that were cultural (based on number of books at home at age 10 years and parents' occupations) but not material (overcrowding at home and house quality) predicted less physical activity between the ages of 50 and 96. However, this relationship was more pronounced for women than for men: 30% of women who had been culturally advantaged and 38% of those who had

been culturally disadvantaged were physically inactive, versus 28% and 31% of men, respectively.

[The Role of Conjunctive Representations in Stopping Actions](#)

Atsushi Kikumoto, Tesufuaishin Sameshima, and Ulrich Mayr



Stopping ongoing actions is an important aspect of self-control. Kikumoto and colleagues tested which representations are targeted by the stopping process. Across two experiments, they measured participants' electroencephalographic activity during a combined rule-selection and stop-signal paradigm, in response to conjunctive representations (binding action-relevant features) and representations of constituent features (rules, stimulus, and responses). Results indicate that the stopping process appears to target conjunctive representations—the stronger the conjunctive representation, the harder participants found it to stop an intended action. When the stopping process was successful, the strength of conjunctive representations diminished. Thus, suppressing conjunctive representations might be key to stopping actions.

[Nurturing the Mathematical Brain: Home Numeracy Practices Are Associated With Children's Neural Responses to Arabic Numerals](#)

Cléa Girard et al.



Girard and colleagues asked the parents of 8-year-olds how frequently they engaged in formal and informal numeracy practices (e.g., adding numbers, singing songs with numbers) at home. Separately, the researchers used functional MRI to measure each child's neural response to the repetition of numbers and words. Results indicated that frequent challenging and formal numeracy practices at home (e.g., dividing double-digit numbers) were associated with increased arithmetic skills. This association was influenced by children's neural response to digits (but not words) in a region of the left intraparietal sulcus (IPS), suggesting that home numeracy practices might modulate neural response to symbolic numerical information.