

Research Briefs

February 28, 2022



[Time to Pay Attention? Information Search Explains Amplified Framing Effects Under Time Pressure](#)

Ian D. Roberts, Yi Yang Teoh, and Cendri A. Hutcherson
Psychological Science

Different framing of the same choice problem can lead to different choices, an effect that time pressure can increase. Roberts and colleagues tracked participants' eye gaze and found that time pressure produced shifts in visual attention toward reward-predictive cues (e.g., in graphics, colors associated with higher gains) that increased framing effects. Their findings were contrary to an influential explanation for the amplification of framing effects in which time pressure leads individuals to rely on automatic emotional responses. Instead, they suggest, time pressure may lead individuals to strategically allocate their attention in an adaptive strategic behavior.

[Frequent Interpersonal Stress and Inflammatory Reactivity Predict Depressive-Symptom Increases: Two Tests of the Social-Signal-Transduction Theory of](#)

Depression

Annelise A. Madison et al.

Psychological Science

According to the social-signal-transduction theory of depression, people who experience ongoing social stress that triggers an elevated inflammatory response are at higher risk for depression. Madison and colleagues found support for this theory in two studies of healthy adults and breast cancer survivors. Participants who reported more frequent interpersonal tension, more loneliness, or less social support had higher depression symptoms one year later, especially when they also showed a higher inflammatory response (measured by blood inflammatory markers) to a laboratory social stressor the year before. These findings suggest the effectiveness of depression treatments that target social stress and inflammation.

Scene Context Impairs Perception of Semantically Congruent Objects

Eelke Spaak, Marius V. Peelen, and Floris P. de Lange

Psychological Science

A toilet-paper roll might be more easily processed when seen in the kitchen than in the bathroom—that is, a visual scene might minimize the processing of objects that are congruent with it, compared with incongruent objects. Spaak and colleagues found support for this counterintuitive result in change-detect on (i.e., the disappearance of an object in a scene) and object-discrimination tasks. When the object was congruent with a scene, participants' perception of the object was impaired (e.g., they took longer to notice that it was missing in a change-detection task). Stimulus confounds, response biases, and search strategy did not explain these “congruency costs.”

Teacher Mindsets Help Explain Where a Growth-Mindset Intervention Does and Doesn't Work

David S. Yeager et al.

Psychological Science

Growth-mindset interventions teach that intellectual abilities can grow. Yeager and colleagues examined how teachers' mindsets may shape the success of growth-mindset interventions. The study delivered short growth-mindset interventions to math students in their first year of high school. Results indicated that the interventions led to better math grades among students whose teachers themselves had growth mindsets. These findings support the mindset-plus-supportive-context hypothesis, which suggests students' growth mindsets must be supported by their teachers' own growth mindsets. Thus, contextual

support may be needed to foster growth-mindset effects.

[Where the Blame Lies: Unpacking Groups Into Their Constituent Subgroups Shifts Judgments of Blame in Intergroup Conflict](#)

Nir Halevy, Ifat Maoz, Preeti Vani, and Emily S. Reit
Psychological Science

This research suggests that people might assign more blame for intergroup conflict to groups that are presented as subgroups rather than as single, unified entities. In five experiments, Halevy and colleagues tested how different group presentations influenced the percentage of blame participants assigned to each group across three intergroup conflicts: the Israeli-Palestinian conflict, racial tensions between White people and Black people in the United States, and the gender gap in wages in the United States. Results indicated that how the groups are presented can shape moral judgments about intergroup conflict.

[Neural Representations of the Committed Romantic Partner in the Nucleus Accumbens](#)

Ryuhei Ueda and Nobuhito Abe
Psychological Science

This research suggests that neural activity patterns in the nucleus accumbens, a brain region involved in the processing of rewards, pleasure, and addiction, differently represent romantic partners and nonpartners. Forty-six men romantically involved with female partners performed a task in which a successful response triggered a photo in which their partner or unfamiliar women showed a happy expression and gesture. Using functional MRI to scan participants' brains during the task, Ueda and Abe found that the spatial patterns of activity in the nucleus accumbens discriminated between romantic

partners and unfamiliar women, regardless of their attractiveness.

[Climate Change and Children's Mental Health: A Developmental Perspective](#)

Francis Vergunst and Helen L. Berry

Clinical Psychological Science

Vergunst and Berry review research indicating that threats associated with climate change might increase risk to healthy human development from the point of conception. They suggest that these nefarious effects on physical and mental health (e.g., famine, anxiety) are already occurring and that monitoring and mitigating them is a matter of social justice as well as crucial for developmental health. Highlighting the need for well-controlled studies, Vergunst and Berry discuss the conceptual and measurement challenges inherent in studies of climate-change-related exposures and children's mental-health outcomes. They also describe priority research areas that would clarify the mechanisms through which climate changes influence psychological health and well-being throughout development.

[A Person-Centered Analysis of Craving in Smoking-Cue-Exposure Research](#)

Michael A. Sayette, Madeline E. Goodwin, Kasey G. Creswell, Hannah J. Esmacher, and John D. Dimoff

Clinical Psychological Science

Sayette and colleagues analyzed data from 672 daily smokers who were deprived of nicotine for 5 to 12 hr before participating in one of seven studies in which they reported their urge to smoke before and during exposure to cues associated with cigarette use (e.g., lighting a cigarette). Sixty-nine percent of participants reported a greater urge during cue exposure. However, 31% of participants reported maximal urge before cue exposure, which would result in their classification as nonresponders in traditional cue-reactivity analyses. These results suggest that analyses centered on mean levels of cue reactivity may underestimate cue-reactivity effects.

[Education, Financial Stress, and Trajectory of Mental Health During the COVID-19 Pandemic](#)

Yanping Jiang, Samuele Zilioli, Rhonda N. Balzarini, Giulia Zoppolat, and Richard B. Slatcher

Clinical Psychological Science

Jiang and colleagues explore how financial stress and educational disparities affected mental health in the initial months of the COVID-19 pandemic. They analyzed data from 2,204 participants in spring 2020. At the beginning of the pandemic, they found a relationship between lower education and worse mental-health outcomes mediated by increased financial stress. However, these relationships did not change over time. These findings indicate that addressing financial stress associated with pandemics

might mitigate the relationship between educational disparities and mental-health outcomes.

[Evidence From the Trauma-Film Paradigm That Traumatic and Nontraumatic Memories Are Statistically Equivalent on Coherence](#)

Andrea Taylor, Rachel Zajac, Melanie K. T. Takarangi, and Maryanne Garry
Clinical Psychological Science

This research suggests that traumatic memories are coherent and equivalent to nontraumatic memories (i.e., not fragmented and jumbled). Taylor and colleagues used a trauma-film-paradigm, in which participants viewed films that they later recalled, evaluating their memory's coherence. To properly norm the films used, Taylor and colleagues created a new set of materials that included two films of each of the following: traumatic events, negative events, positive events, and neutral events. They found that this new set of materials produced the intended effects and intensities, and that memories were fairly coherent and equivalent, regardless of whether they were traumatic.

[Daylong Mobile Audio Recordings Reveal Multiscale Dynamics in Infants' Vocal Productions and Auditory Experiences](#)

Anne S. Warlaumont, Kunmi Sobowale, and Caitlin M. Fausey
Current Directions in Psychological Science

Warlaumont and colleagues review recent research about how infants' vocal productions and auditory experiences are organized over a day, with implications for development. Everyday vocalizations appear to be clustered hierarchically in time (e.g., there is more difference in vocalization quantity from one hour to the next hour than from one 5-min interval to the next). Vocalizations also appear to be a type of exploratory foraging for social responses, with patterns of vocal exploration changing as children develop. Regarding the sounds infants encounter, different musical frequencies may foster learning

about category generalization.

[Integrating Insights About Human Movement Patterns From Digital Data Into Psychological Science](#)

Joanne Hinds et al.

Current Directions in Psychological Science

Digital data generated via smartphones and social-media interactions can provide information about people's movements and locations. Although research has used these data to detect movement patterns, Hinds and colleagues suggest that it has not integrated these data with psychological science, which could allow for a better understanding of thoughts, feelings, behaviors, and attitudes associated with movement. Hinds and colleagues argue that combining approaches from psychological and data science can improve researchers' and policymakers' predictions about individuals' and groups' movement patterns, with several potential applications (e.g., predicting the spread of disease).

[What's to Come of All This Tracking "Who We Are"? The Intelligence Example](#)

Wendy Johnson

Current Directions in Psychological Science

Despite increased requirements and encouragements to track what we do and how we do it in different areas of our lives, from job performance to sleep and diet, evidence suggests that constant tracking might not help that much with health and well-being and instead might have dire social consequences. Johnson uses human intelligence, which has been the object of efforts to track for more than 100 years, as an example of tracking's social consequences. For instance, intelligence tracking exacerbated social differences between those tracked and those untracked. The author suggests the potential for tracking activities to lead society into a dystopian future, much like the one portrayed in Aldous Huxley's *Brave New World*.

[Field Experiments on Social Media](#)

Mohsen Mosleh, Gordon Pennycook, and David G. Rand

Current Directions in Psychological Science

Studying online behavior can further understanding of misinformation and political psychology. Mosleh and colleagues discuss the strengths, weaknesses, and ethical constraints of two approaches to studying online behavior: hybrid lab-field experiments and field experiments. In hybrid lab-field studies, researchers can control and randomize participants' exposure to social media content in the lab and then, in the field, survey participants' attitudes and beliefs as well as observe their online behavior. In field

experiments, researchers can use the online environment to manipulate social media exposure (e.g., via private messages or public posts) without disclosing their research and then observe the effects of the manipulation on participants' online behavior.

[A Description–Experience Framework of the Psychology of Risk](#)

Ralph Hertwig and Dirk U. Wulff

Perspectives on Psychological Science

How individuals learn about risks—from climate change to cyberwarfare—shapes the success of risk countermeasures. Hertwig and Wulff distinguish between two teachers of risk: descriptions (e.g., warnings and statistics) and personal experience. They argue that one reason why responses to risk depend on learning mode is the discrepant cognitive impact that rare events (risk events) and common events (nonoccurrence of risk events) have on decision-makers. Thus, they propose a description–experience framework that emphasizes the impact of each mode of learning and its interplay on individuals' and collectives' responses to risk.

[Good Theories in Need of Better Data: Combining Clinical and Social Psychological Approaches to Study the Mechanisms Linking Relationships and Health](#)

Allison K. Farrell, Sarah C. E. Stanton, and David A. Sbarra

Perspectives on Psychological Science

Farrell and colleagues draw on the science of behavior change and discuss methodologies across psychological science fields that may stimulate the study of the mechanisms linking relationships and health. These methodologies should provide researchers with a better causal understanding of the mechanisms underlying the connection between relationships and health. The authors warn that these methods are most effective when used together and within a program of research or teams of collaborators. To foster collaborations across research groups, they recommend that researchers who have data on this area submit them to the Love Consortium data-science initiative (<https://www.theloveconsortium.org>).

[Unstandard Deviation: The Untapped Value of Positive Deviance for Reducing Inequalities](#)

Kai Ruggeri and Tomas Folke

Perspectives on Psychological Science

Studying individuals who emerge from disadvantaged circumstances to experience better outcomes than the average outcomes of their group (i.e., show positive deviance) may help to inform public policies

aimed at reducing inequalities. Ruggeri and Folke use examples from the real world and experiments to illustrate how studying the behaviors and outcomes of positive deviants can reveal how they depart from their groups and overcome inequalities. The authors propose that understanding these individuals' trajectories can help to inform interventions that are population-relevant and have a higher likelihood of benefiting individuals in adverse circumstances.

[The Failings of Conventional Mediation Analysis and a Design-Based Alternative](#)

John G. Bullock and Donald P. Green

Advances in Methods and Practices on Psychological Science

Mediation analysis quantifies the extent to which a variable participates in the outcomes of a treatment. Bullock and Green explain how the common way of measuring mediation, in which outcomes are regressed on treatments and mediators to assess direct and indirect effects—measurement-of-mediation analysis—is flawed. The researchers propose that scholars instead use an approach rooted in experimental design. In implicit-mediation analysis, features of the treatment are added and subtracted in ways that implicate certain mediators and not others. The researchers describe this approach and the statistical procedures implied, and they illustrate it with examples from recent literature.

Feedback on this article? Email apsobserver@psychologicalscience.org or scroll down to comment.