New Research From Psychological Science

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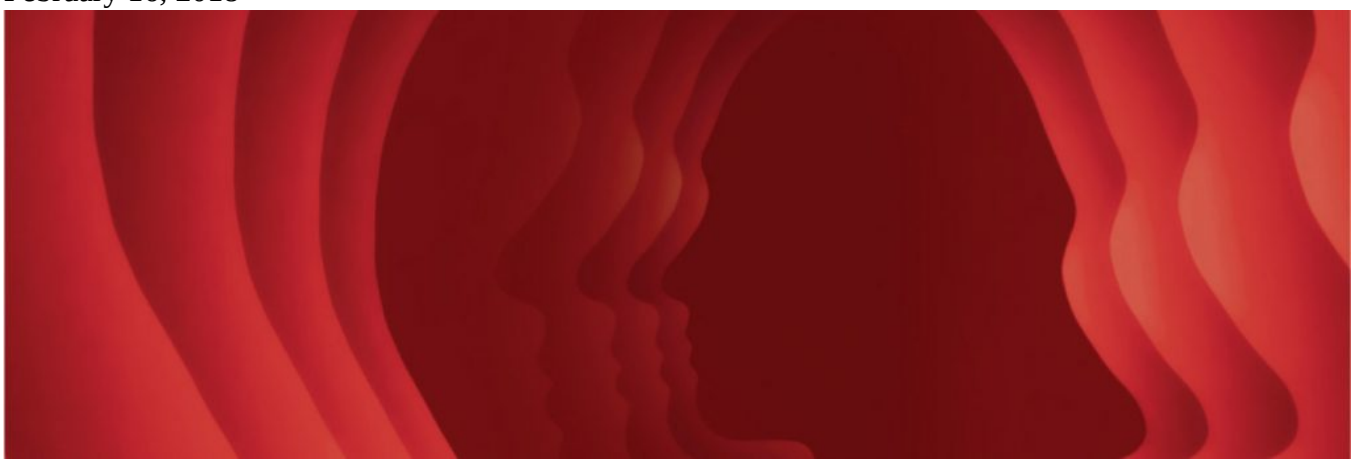

Read about the latest research published in *Psychological Science*:

[The Role of Experimenter Belief in Social Priming]

Thandiwe S. E. Gilder and Erin A. Heerey

In many social psychology priming studies, participants perform a task designed to activate or prime a particular concept. Priming is thought to influence participants' behavior outside of their awareness. Many articles reporting such studies do not mention a double-blind procedure, suggesting that the experimenters may have known the condition to which participants were assigned. To investigate the potential influence of experimenter knowledge, the authors conducted a series of experiments using tasks that primed the concept of social power. In a double-blind experiment, a computer program automatically assigned participants to conditions and delivered their task instructions; the results showed no evidence of priming effects on executive cognition. In four additional experiments, the authors manipulated participants' exposure to a prime and experimenters' belief about which prime participants received. Bayesian analyses of the data provided moderate support for the null model relative to a priming-effects model. Furthermore, analyses provided strong support for an experimenter-effects model relative to the null model. Additional data indicated that participants' perceptions of the experimenters varied according to the experimenters' beliefs, suggesting experimenter behavior as a possible mechanism of influence on priming study outcomes.

[Overstating the Effects of Loving-Kindness Meditation: Comment on Kok et al. (2013)]

Carol A. Nickerson

In a 2013 study, Kok and coauthors found that participants who were randomly assigned to practice loving-kindness meditation showed an increase in positive emotions over subsequent weeks relative to the control group, an increase that was greatest for those who began the study with high vagal tone.

They found that increased positive emotions correlated with increased perceived social connections over the same period, and increased social connections correlated with increased vagal tone. Kok and colleagues referred to this series of events as an “upward spiral” and suggested that loving-kindness meditation may offer a strategy for improving physical health. Nickerson concludes that further analyses of the data do not support the authors’ conclusions, noting that the conclusions depend on the inclusion of improbable vagal tone values from several participants. In addition, Nickerson argues that within-person analyses of the data do not provide conclusive evidence of an experimentally induced upward spiral, a pattern of change theorized to occur within individuals.

Evidence for the Upward Spiral Stands Steady: A Response to Nickerson (2018)

Barbara L. Fredrickson and Bethany E. Kok

Frederickson and Kok argue that Nickerson’s focus on final vagal tone values in identifying outliers is inappropriate given that the variable of interest in the original study was change in vagal tone over time. They state that removing participants with supposedly improbable values from analyses necessarily renders the results nonsignificant because it reduces statistical power. They note that adopting a statistical approach that replaces extreme values instead of removing them provides support for each of the three hypotheses in the original study. Frederickson and Kok agree that within-person patterns of change are of considerable interest but dispute the appropriateness of the specific analyses that Nickerson conducted. The authors argue that recoding continuous data into discrete groups produces data with considerably less informational value. They suggest that future research could take advantage of statistical tools that can simultaneously test between-person and within-person effects over time, noting that such tools will require larger samples and more frequent assessments.

Concern for Others Leads to Vicarious Optimism

Andreas Kappes, Nadira S. Faber, Guy Kahane, Julian Savulescu, and Molly J. Crockett

People tend to update their beliefs with new information when it is better than expected but not when it is worse than expected. The authors hypothesized that this learning bias, thought to arise from self-enhancing motivations, might extend to information that we learn about others, to the extent that we care about them. In several experiments, participants predicted the likelihood of unpleasant future events that could happen to themselves or to others. As expected, participants updated their self-related predictions more after receiving information indicating that the event was less likely than they anticipated. They also showed an optimistic learning bias for events affecting friends and strangers, a phenomenon the authors call *vicarious optimism*. Vicarious optimism was greater for identifiable than unidentifiable strangers. Participants showed greater vicarious optimism for a stranger they were induced to like compared with a stranger they were led to dislike. Additional results revealed that greater vicarious optimism for strangers correlated with greater generosity toward them.