

New Research From Psychological Science

March 02, 2018



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

[Attractive Serial Dependence in the Absence of an Explicit Task](#)

Michele Fornaciai and Joonkoo Park

When we look at a series of stimuli, the current stimulus appears to be similar to the previous stimulus, a bias called *attractive serial dependence*. The authors investigated whether serial dependence results from biased perceptual representations or bias resulting from decision processes. In a passive-viewing paradigm, participants saw arrays containing 100, 200, or 400 dots while their brain activity was measured via electroencephalography. Analyses showed that the trajectories of evoked potentials in response to 200 dots depended on the stimulus presented previously, suggesting a neural signature of serial dependence that emerged early in visual processing. In a behavioral task, participants' numerical estimates indicated an attractive bias. For example, when a 200-dot array was preceded by a 100-dot array, participants tended to underestimate the number; when it was preceded by a 400-dot array, they tended to overestimate it. These results suggest that serial dependence is evident in early visual processing and occurs independently from decision processes.

[When Action-Inaction Framing Leads to Higher Escalation of Commitment: A New Inaction-Effect Perspective on the Sunk-Cost Fallacy](#)

Gilad Feldman and Kin Fai Ellick Wong

Whether it's a bad movie or a failing project, people often choose to continue or escalate commitments despite the lack of positive returns. Researchers often explain this phenomenon in terms of sunk costs: We have difficulty ignoring investments we have already made, and this biases our decisions about how to proceed. The authors hypothesized that escalation of commitment could also be explained in terms of the inaction effect—that is, negative outcomes lead us to believe that further losses are likely unless we take action. To investigate this hypothesis, they tested whether action-inaction framing influences our decisions to commit. Four experiments showed that participants were more likely to continue investing in a hypothetical project when continuing was framed as the active choice than when halting further investment was framed as the active choice. Participants were action oriented, reporting that it was better

to take action than not. Thus, people tend to respond to negative results by taking whichever approach seems more active.

[Early Socioemotional Intervention Mediates Long-Term Effects of Atypical Rearing on Structural Covariation in Gray Matter in Adult Chimpanzees](#)

Kim A. Bard and William D. Hopkins

Chimpanzees that experience disrupted rearing often show negative behavioral consequences during development. Research suggests that a responsive care intervention (RCI) can ameliorate some of these effects. In this study, the authors analyzed structural images of the brains of 27 adult chimpanzees reared in an institution, some of whom received RCI, and 16 adult chimpanzees reared by their mothers. Institutionally reared adult chimpanzees who received RCI did not show the brain changes associated with atypical rearing; their brains did not differ from those of mother-reared chimpanzees. Compared with RCI and mother-reared chimpanzees, institutionalized chimpanzees who received standard treatment showed differences in structural covariation and gray matter volume in the basal forebrain (i.e., caudate, putamen, nucleus accumbens, rectus gyrus, and orbital prefrontal cortex). Covariation in these basal forebrain areas was correlated with caregiver nurturing in the first month of life, suggesting a possible mechanism underlying the effect of early experience on brain development.

[Prenatal Stress as a Risk—and an Opportunity—Factor](#)

Sarah Hartman, Sara M. Freeman, Karen L. Bales, and Jay Belsky

In this study, the authors used a cross-fostering paradigm in prairie voles to investigate whether prenatal stress increases sensitivity to both positive and negative experiences in the rearing environment. Pregnant prairie voles experienced either high or low levels of stress; their offspring were then assigned to be reared by voles known to provide either low-contact or high-contact care. The four groups showed no differences in distress vocalizations during social isolation. However, voles that experienced prenatal stress and were reared by low-contact parents showed the most struggling behaviors during a forced swim test and the greatest corticosterone reactivity following the swim test. Voles that experienced prenatal stress and were reared by high-contact parents, on the other hand, showed the least behavioral and physiological reactivity. Voles that had not experienced prenatal stress showed no rearing-related differences in reactivity. The authors conclude that prenatal stress fosters developmental plasticity, increasing sensitivity to both negative and positive environmental factors.