

# New Research in *Psychological Science*

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## [Identifying Long- and Short-Term Processes in Perceptual Learning](#)

*Jia Yang et al.*



Yang and colleagues developed a multicomponent theoretical framework to model contributions of both long- and short-term processes to perceptual learning. They applied the framework to the learning curves of 49 participants in seven perceptual tasks. Results indicated long-term general learning and within-session relearning in most tasks. Researchers also found between-session forgetting in several of the tasks, including visual and auditory discrimination tasks; between-session gain in a visual shape search task; and within-session adaptation, between-session forgetting, and between-session gain in a contrast detection task. The multicomponent model may provide a potential tool to optimize learning in normal and clinical populations.

## [Detecting Prejudice From Egalitarianism: Why Black Americans Don't Trust White Egalitarians' Claims](#)

*Michael Rosenblum, Drew S. Jacoby-Senghor, and N. Derek Brown*



This research suggests that the way White Americans express egalitarian views may inadvertently reveal inegalitarian tendencies and sow mistrust with Black Americans. Asked to read White writers' declarations that they are nonprejudiced and egalitarian, Black perceivers inferred likability and trustworthiness and accurately inferred underlying racial attitudes and motivations. But White writers believed that their egalitarianism seemed more indicative of allyship than Black Americans perceived it to be. Linguistic analysis revealed that Black perceivers accurately attended to language emphasizing humanization, support for equal opportunity, personal responsibility, and the idea that equality already exists. Moreover, White egalitarians' underlying racial beliefs predicted Black participants' actual trust and cooperation.

### [Melting Ice With Your Mind: Representational Momentum for Physical States](#)

*Alon Hafri, Tal Boger, and Chaz Firestone*



How does the mind represent changes of state, such as the melting of ice? Hafri and colleagues explored *representational momentum*—how memory extrapolates the spatial positions of moving objects—to investigate mental representations of state. Participants who viewed objects undergoing state changes (e.g., ice melting, logs burning, grapes shriveling) remembered them as more melted, burned, or shriveled than they actually were. Thus, memory distorted these state changes forward in time, indicating that mental representations of objects actively incorporate how they change—not only in their relation to their environment but also in their essential qualities.

### [Material Benefits Crowd Out Moralistic Punishment](#)

*Tage S. Rai*

Rai found that paying people to engage in punishment might reduce their willingness to do so under certain circumstances. In an economic game, providing a monetary bonus for punishing unfair offers nearly cut participants' willingness to do so in half. Separately, in judgments of hypothetical transgressions, participants viewed punishers who accepted payment as having worse character and rated their punitive actions as less morally acceptable. However, large enough payments or reassurance that punishment accompanied by payment still signals moral virtue restored participants' willingness to punish. Data were consistent with a signal-corruption mechanism whereby payment interferes with the prosocial signal that moralistic punishment provides about a punisher's motives.

### [Can Feelings “Feel” Wrong? Similarities Between Counter-Normative Emotion Reports and Perceptual Errors](#)

*Ella Givon et al.*



This research suggests that experiencing emotions that deviate from social norms might feel as “wrong” as making perceptual errors. In four experiments, participants made perceptual decisions (reported the gender of faces) and, separately, provided emotion reports (reported their pleasant or unpleasant feelings in response to emotion-invoking pictures, such as an angry tiger or a puppy). Although electroencephalogram findings were inconclusive, counter-normative emotions and perceptual errors were marked by post-error slowing and speed/accuracy trade-offs and showed similar reaction-time distributions. Thus, the experience of reporting counter-normative emotions resembled that accompanying perceptual-decision errors, indicating similar cognitive processing of “wrong” emotions and perceptions.

### [Development of Visual Memory Capacity Following Early-Onset and Extended Blindness](#)

*Priti Gupta et al.*

Gupta and colleagues studied whether visual memory capacity can develop in congenitally blind individuals after sight surgery. The researchers used an image-memorization task to longitudinally evaluate the visual memory of 12 congenitally blind individuals ranging in age from 8 to 22 years. Results indicated poor visual memory capacity soon after surgery but significant improvement in

subsequent months, with performance 1 year after surgery comparable to that of control participants with matched visual acuity. These findings provide evidence for the plasticity of visual memory mechanisms into late childhood but do not rule out vulnerability to early deprivation of sight.

[“They’re Everywhere!”: Symbolically Threatening Groups Seem More Pervasive Than Nonthreatening Groups](#)

*Rebecca Ponce de Leon, Jacqueline R. Rifkin, and Richard P. Larrick*



The meaning of places is socially constructed, often informed by the groups that others perceive to be pervasive there. Across six studies using surveys, experiments, and archival data, Ponce de Leon and colleagues examined the factors that influence the formation of these perceptions of places and groups. Results indicated a role of symbolic threat (i.e., perceived differences in values and worldviews) in how groups may shape places. Specifically, they demonstrated that groups higher in symbolic threat appear to be perceived as more populous in a place and more associated with that place than groups lower in symbolic threat.

[Navigable Space and Traversable Edges Differentially Influence Reorientation in Sighted and Blind Mice](#)

*Marc E. Normandin et al.*

This research suggests that vision may not be necessary for the effective use of geometry during spatial reorientation (i.e., when navigators are lost, their internal sense of direction is unreliable, and they must reorient themselves), at least in mice. Normandin and colleagues manipulated the navigational affordances of a chamber (i.e., a traversable space), used 3D edges to increase the salience of its borders, and evaluated how these variables influenced the use of geometry during reorientation in sighted and congenitally blind mice. Restricting navigational affordances to the task-relevant area facilitated the use of geometric strategies, such as using geometrically correct axes to reorient themselves, in all mice. However, increasing the saliency of borders improved geometry-based reorientation only in blind mice, who extensively patrolled the borders.

*Feedback on this article? Email [apsobserver@psychologicalscience.org](mailto:apsobserver@psychologicalscience.org) or comment below.*