New Research From Psychological Science

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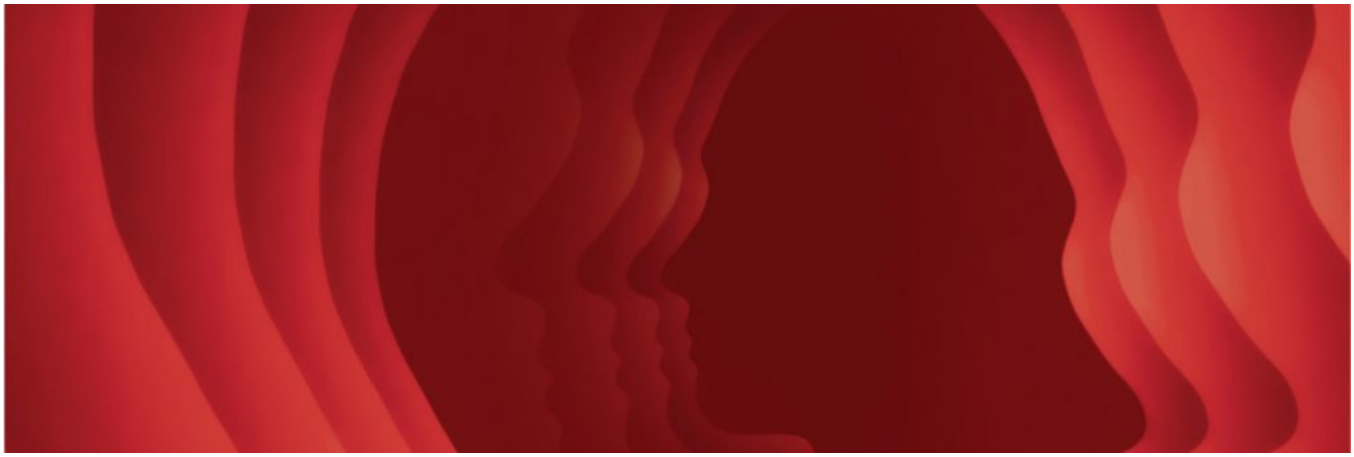

Read about the latest research published in *Psychological Science*:

Contingent Attentional Engagement: Stimulus- and Goal-Driven Capture Have Qualitatively Different Consequences
Alon Zivony and Dominique Lamy

Zivony and Lamy examined whether shifting attention to a location resulted in attentional engagement (i.e., extracting the features at that location). They presented a cue (four dots) that either shared the target color (e.g., the dots were red) or did not (e.g., the dots were white), and the cue appeared either where the target would appear or elsewhere. They then presented a target defined by its known color (e.g., a red letter) along with three distractors (three orange or pink letters). Participants were asked to identify the letter in the target color. Results indicated that the cue captured attention both when it shared the target's color and when it did not. However, when the cue signaled the location of a distractor that shared the features of the target (e.g., the target was a red "H" and the distractor in the cued location was an orange "H"), participants took longer to identify the target, and they were less accurate when the cue shared the target color than when it did not. This compatibility effect shows that attentional engagement might come at a cost, Zivony and Lamy argue, and supports the idea that attention can be shifted without being engaged.

Chimpanzee Cooperation Is Fast and Independent From Self-Control
Alexandra G. Rosati, Lauren M. DiNicola, and Joshua W. Buckholtz

Rosati and colleagues tested 40 chimpanzees in six tasks to examine the cognitive basis of cooperation. They analyzed chimpanzee's performance in three cooperative tasks: a resource-donation task in which they could choose to share food or not, an instrumental-helping task in which they could choose to hand an instrument to a human experimenter, and a punishment task in which they could punish a thief. In these tasks, the animals made prosocial choices faster than they made selfish

choices, and the most prosocial chimpanzees made the fastest prosocial responses.
However, performance in the three tasks did not depend on each other. Rosati et al. also measured chimpanzee's self-control in a go/no-go task and by having them decide between eating an immediate small portion of food or a delayed large portion, and found no link between self-control and prosocial choices. Finally, they measured social responsivity in a task in which chimpanzees could approach social or nonsocial stimuli (e.g., a person or photos of chimpanzees, and objects or food items, respectively), and they found that chimpanzees who approached social stimuli the fastest had shown more instrumental help but less food-sharing behavior in the cooperative tasks. Taken together, these results suggest that different cognitive processes are involved in cooperation and that cooperation does not depend on self-control. Moreover, chimpanzees and humans seem to share some key cognitive processes for cooperation.

The Power of Attention: Using Eye Gaze to Predict Other-Regarding and Moral Choices
Minou Ghaffari and Susann Fiedler

 Recent studies indicate that other-regarding choices (e.g., helping a stranger) and moral choices are affected by eye gaze. Thus, along with top-down processes (controlled processes in which one weighs information), bottom-up processes (in which one focuses on the characteristics of the choices' presentation) also seem to drive information search and, consequently, the decision. Ghaffari and Fiedler asked participants to make other-regarding choices (in which their interests conflicted with others' interests) and moral choices (in which any choice encompassed undesirable outcomes). They used an eye tracker to measure participants' eye fixations as an indicator of the choice process, and, in some cases, prompted participants to make a choice when their last fixation was directed at a randomly allocated target option. Participants were more likely to choose their last-fixated choice when their fixation was not interrupted and, to a lesser extent, when their last fixation was randomly allocated by the researchers. Also, experimentally manipulated final fixations predicted choices, revealing the influence of bottom-up processes. Thus, attention seems to be a product and a driver of decision making, and choices may be influenced by guiding attention.