

New Research From Psychological Science

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

[Chimpanzees \(*Pan troglodytes*\) Are More Averse to Social Than Nonsocial Risk](#)

Sarah E. Calcutt, Darby Proctor, Sarah M. Berman, and Frans B. M. de Waal

Studies have shown that people take social risks on the basis of their judgments about whether a particular action in a social exchange will result in a cost or a benefit. Humans are more sensitive to social than nonsocial risk and overvalue its costs (e.g., humans would rather lose money by chance than because of another person's actions). Calcutt et al. tested whether female chimpanzees also overvalue the costs of socially risky decisions. In a trust game, chimpanzees could ensure one slice of banana for themselves by placing a token in a box that would reward them with the banana, or they could give this token to a partner and rely on the partner's decision. If they gave the token to the partner, the partner could either (a) take two slices for herself or (b) get two slices for herself and give two slices to the chimpanzee who gave her the token. In a nonsocial scenario, the chimpanzees faced the same decision, but the partner was replaced by a mechanical apparatus. Chimpanzees chose to take the risky decision more often in the nonsocial scenario than in the social one. The chimpanzees' decision to take a social risk and rely on a partner was not influenced by their friendship with the partner but rather by the partners' choices during the experiments. Like humans, chimpanzees avoid social losses more than nonsocial losses and seem to rely on emotional information to evaluate social risk.

[Volume Estimation Through Mental Simulation](#)

Hannah Perfecto, Kristin Donnelly, and Clayton R. Critcher



People might estimate the volume of containers by imagining filling them up. In several experiments, participants saw images of containers and were asked to estimate their volume, using a fictional volume measure they had learned earlier. Participants judged similar containers as larger when (a) they were

presented upright rather than upside down—an orientation effect—and (b) they had a narrower top—a cavern effect (i.e., a narrow top coupled with a wide base, which produces the illusion that the container is large and cavernous). These effects occurred both when participants were explicitly instructed to imagine filling the container and when they were just asked to estimate the container's volume. However, the effects disappeared when the containers were shown full and participants were asked to estimate their volume by imagining emptying them. This indicates the importance of the mental simulation (i.e., imagining doing something) for the biases in estimating volume. According to participants' ratings, filling the upright containers would be easier than filling the upside-down containers, but filling containers with narrow tops or wide tops would be equally easy, which indicates that the orientation effect occurs because of differences in the ease with which filling the containers can be simulated. This shows how basic characteristics of the target, such as position, can influence cognitive processes (e.g., mentally simulating filling a container) that then influence more complex perceptions, such as perceptions of volume.

[Gaze Amplifies Value in Decision Making](#)

Stephanie M. Smith and Ian Krajbich

When making decisions, people tend to choose the option they have looked at the most. Does this happen because looking more at one option gives it a value boost, or because it amplifies the original value of that option? Smith and Krajbich analyzed data from six studies that used eye tracking to measure participants' gaze while choosing between food items (e.g., chips vs. candy) or between learned symbols associated with different probabilities of reward (e.g., two Tibetan symbols, one with 30% probability of reward and the other with 70% probability of reward). Participants made their choices more quickly when the combined value (as previously defined by the participants or indicated by the experimenters) of the options was higher. The time spent looking at an option was more likely to affect the choice when the option had a higher value than when it had a lower value. Thus, gazing did not simply add a value boost to an option but instead amplified its value (by multiplying it by a constant). This amplifying effect was more pronounced in studies about choices of familiar objects, such as food items. These findings indicate that the effects of looking more at one option on people's choices depend on the original value of the option and contribute to the understanding of the relationship between visual attention (measured by gaze) and choice.