

# New Research From Psychological Science

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

## [\*\*Paying Back People Who Harmed Us but Not People Who Helped Us: Direct Negative Reciprocity Precedes Direct Positive Reciprocity in Early Development\*\*](#)

*Nadia Chernyak, Kristin L. Leimgruber, Yarrow C. Dunham, Jingshi Hu, and Peter R. Blake*



To investigate how children reward and punish people who benefit or harm them, Chernyak and colleagues asked children between 4 and 8 years of age to play a computer game. In the game, children interacted with four animal avatars that could be either (a) benefactors who would give the child a gift (a virtual sticker) while incurring a personal cost or (b) malefactors who would take away virtual stickers from the child. Afterward, the children had the opportunity to give stickers to and take stickers away from the avatars. Children were more likely to show reciprocity toward the malefactors by taking stickers away from them than to show reciprocity toward the benefactors by giving them stickers. Thus, children tended to show more direct negative reciprocity than direct positive reciprocity. With age, children were increasingly more willing to engage in positive reciprocity but in a generalized manner rather than in a direct way, by giving stickers to avatars that had not been their benefactor. Only older children, around the age of 7, were likely to say that a benefactor should receive a sticker, showing understanding of a reciprocity norm. However, a short social-norm training, in which children heard a story about someone giving a benefit to a benefactor, increased children's subsequent direct positive reciprocity. In sum, although children are capable of engaging in direct reciprocity, they seem more likely to repay negative actions in kind than to repay positive actions. Yet it is possible for positive direct reciprocity to be learned by exposure to stories about reciprocation.

## [\*\*Forgetting Is a Feature, Not a Bug: Intentionally Forgetting Some Things Helps Us Remember Others by Freeing Up Working Memory Resources\*\*](#)

*Vencislav Popov, Ivan Marevic, Jan Rummel, and Lynne M. Reder*



Intentionally forgetting some information may free up memory resources to help us better remember subsequent information, this research suggests. Popov and colleagues reanalyzed data from a study by Marevic, Arnold, and Rummel (2018) in which participants studied pairs of words and, after the presentation of each pair, were instructed to forget or to remember the pair (i.e., to-be-forgotten and to-be-remembered words, respectively). In memory tests, participants recalled more words that had been preceded by to-be-forgotten words than by to-be-remembered words. Moreover, participants were more likely to remember words preceded by a greater number of consecutive to-be-forgotten words. The memory advantage given by to-be-forgotten words decreased if the to-be-forgotten words appeared earlier on the list. The authors showed that the benefit of to-be-forgotten words remained both when participants could not use working memory to verbally rehearse the words and when they had to memorize them while their attention was divided, indicating that the memory advantage given by previous to-be-forgotten items cannot be attributed to more rehearsal or attentional borrowing. Instead, the researchers suggest that to-be-forgotten items consume fewer memory resources than to-be-remembered items, leaving more resources available for the memorization of subsequent items. A computational model implementing the proposed theory provided a good fit to the data, supporting this idea.