LETTER

Chimpanzees make mean-spirited, not prosocial, choices

Horner et al. (1) argued that chimpanzees "overwhelmingly" favor "prosocial choices" in preference to "selfish" ones. However, their findings are better interpreted as evidence that chimpanzees make "mean-spirited" decisions.

Consider a situation that transposes their experimental setup into a human context. A flight attendant of an airline provides refreshments for passengers in paired seats by giving one of them a bucket of colored tokens. This passenger then picks one of two colored token types to hand to the attendant. One color results in this passenger and the adjacent one both receiving a piece of banana wrapped in paper (self-and-other token), whereas choosing the other token results in only the selecting individual receiving fruit (self-only token). One of the pair makes all of the choices, and the other is free to communicate but cannot make any physical contact. The individual making the choices understands the nature of the choices available and gains no advantage (or disadvantage) whether the individual picks a self-only or a self-and-other token. The individual makes 30 token decisions.

The term to describe individuals in this setup who decide on a self-only token in preference to a self-and-other one is "mean spirited." This is preferable to calling these individuals self-centered or "selfish" because these terms imply that they made a choice that they might expect to benefit themselves in some manner at the expense of the other. Mean-spirited describes the fact that an individual selects a nonpositive outcome for another without any such self-gain. Even the single selection of a self-only in preference to a self-and-other token would be interpreted as evidence that a human was mean-spirited. This would be the case irrespective of how many self-and-other tokens were selected on other occasions because making even a single self-only choice marks an individual as unsocial. The only exception would be special circumstances, such as the other individual indicating he did not want any fruit.

Horner et al. (1) placed chimpanzees in a setup similar to the above, with the individuals separated in adjacent wire cages. The token-selecting chimpanzees chose self-only tokens in roughly one-third of 30 picks. They did this despite the non–token-selecting chimpanzee engaging in "poking paper (from the rewards) toward the actor, begging with an open hand, staring at the bucket with tokens, or aimed displaying with pilo-erection and hooting." Unlike the human example (which tacitly implies that the pair of individuals are strangers), the chimpanzees were paired from a "long established" group of 12 individuals, many of whom were kin and some of whom were in affiliative relationships—a factor that should have made self-only selection much less likely.

Horner et al. (1) interpreted chimpanzees as "overwhelmingly" favoring "prosocial choices" because the chimpanzees made a statistically significant greater number of self-and-other token choices compared with the control condition in which the adjacent cage was empty. Chimpanzees may yet provide evidence of prosociability, but this research does not, owing to the presence of mean spiritedness evidenced by the frequent selecting of self-only tokens.

John R. Skoyles[1]
Centre for Mathematics and Physics in the Life Sciences and Experimental Biology, University College London, London WC1E 6BT, United Kingdom

1. Horner V, Carter JD, Suchak M, de Waal FBM (2011) Spontaneous prosocial choice by chimpanzees. *Proc Natl Acad Sci USA* 108:13847–13851.

Author contributions: J.R.S. wrote the paper.

The author declares no conflict of interest.

[1]E-mail: j.skoyles@ucl.ac.uk.