

**PROSOCIAL BEHAVIOR EMERGES INDEPENDENT OF RECIPROCITY IN COTTONTOP TAMARINS
(*SAGUINUS OEDIPUS*)**

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The cooperative breeding hypothesis posits that cooperatively breeding species are motivated to act prosocially, that is, to behave in ways that provide benefits to others, and that cooperative breeding has played a central role in the evolution of human prosociality. However, investigations of prosocial behavior in cooperative breeders have produced conflicting results and the mechanisms contributing to this variation are unknown. We investigated whether reciprocity would facilitate prosocial behavior among pairbonded cottontop tamarins (*Saguinus oedipus*), a cooperatively breeding primate species likely to engage in reciprocal altruism, by comparing the number of food rewards transferred to partners who had either immediately previously provided or denied them rewards. Subjects were also tested in a nonsocial control condition. Testing took place in captivity and subjects ($n = 13$) were tested with their long-term mates. Overall, results indicated that reciprocity increased food transfers. However, time-sensitive analyses revealed that results were best explained by (1) an initial depression in reward transfers to partners who recently denied rewards and (2) a prosocial effect that emerged late in test sessions. These results support the cooperative breeding hypothesis, suggest a minimal role for positive reciprocity, and emphasize the importance of investigating proximate mechanisms underlying prosocial behavior. Support for this research was provided by the University of Wisconsin Graduate Research Committee, Hilldale Professorship to CTS, and an NSF Graduate Research Fellowship to KAC.

Keywords: reciprocal altruism, negative reciprocity, punishment, cooperative breeding