

Voluntary food sharing in pinyon jays: the role of reciprocity and dominance

Juan F. Duque and Jeffrey R. Stevens

Department of Psychology

Center for Brain, Biology & Behavior

University of Nebraska-Lincoln

Published as:

Duque, J.F. and Stevens, J.R. (2016). Voluntary food sharing in pinyon jays: The role of reciprocity and dominance. *Animal Behaviour*, 122, 135–144.

SUPPLEMENTARY MATERIALS

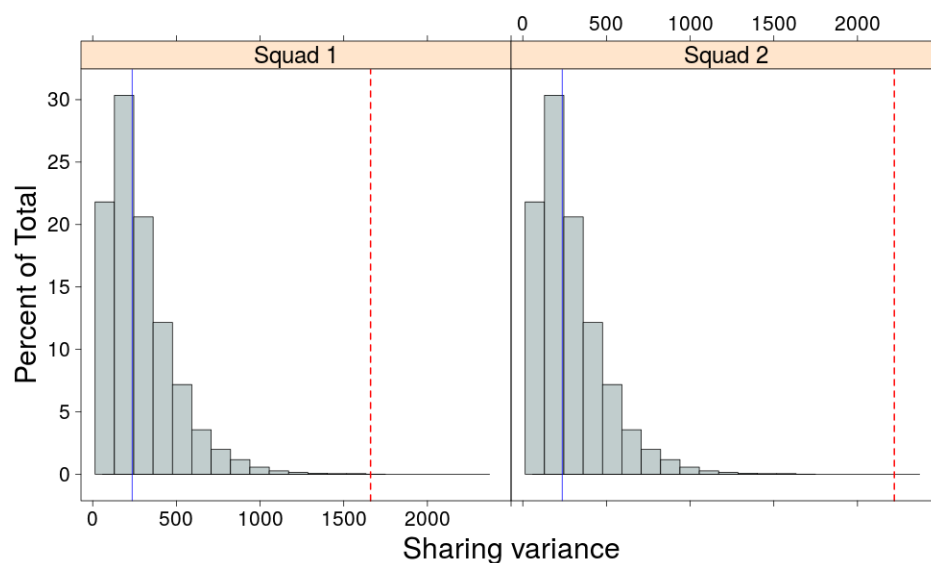


Figure S1: *Random distribution of variance in shares per partner.* These histograms represent the expected distribution of variances in number of shares if individuals shared randomly across partners. The blue solid lines show the median variances of the null random distribution. The dotted red lines show the observed variances. Both observed variances exceeded those expected due to chance, suggesting that donors did not share equally with all individuals.

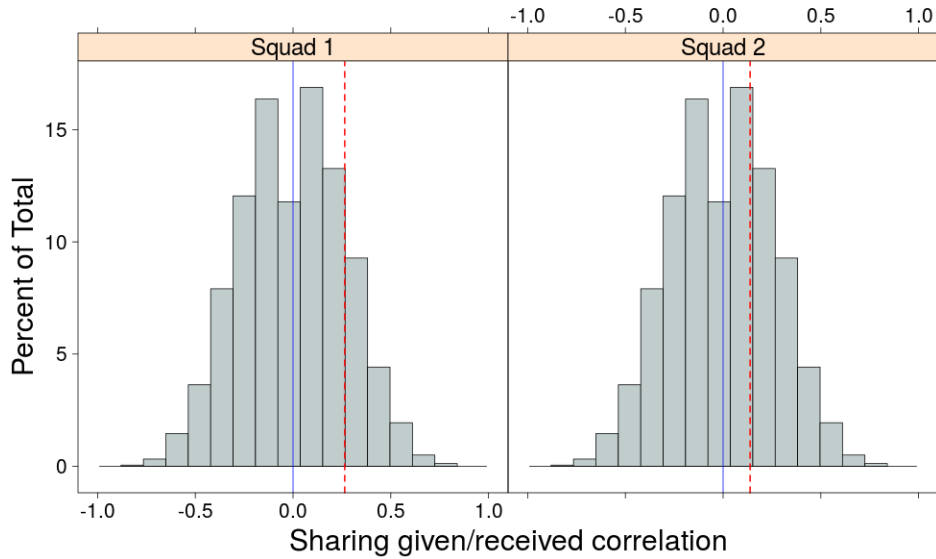


Figure S2: *Random distribution of long-term direct reciprocity correlation coefficients.* These histograms represent the expected distribution of long-term reciprocity correlation coefficients if individuals shared randomly across partners. The blue solid lines show the median correlation coefficients of the null random distribution. The dotted red lines show the observed correlation coefficients. Neither squad's observed correlation coefficient differed from chance expectations, suggesting that donors did not share more with those individuals who shared most with them.

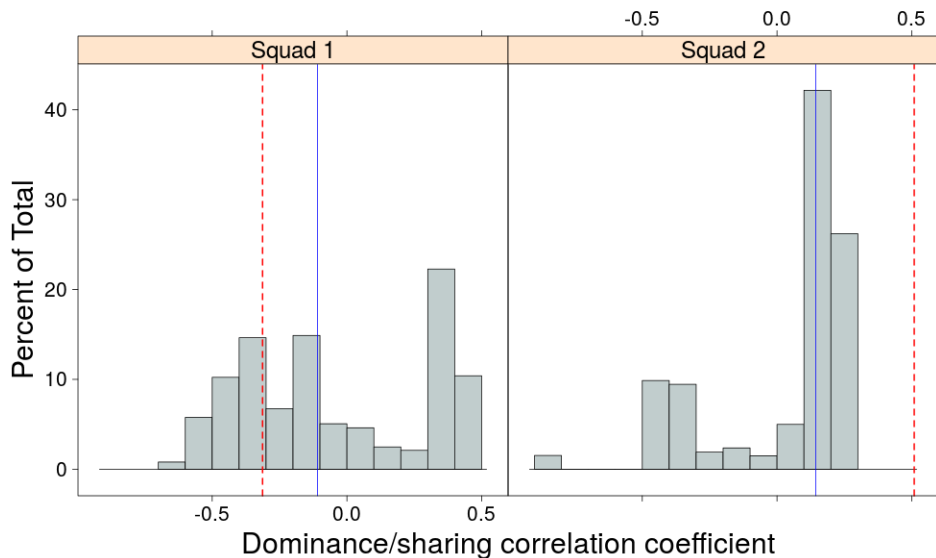


Figure S3: *Random distribution of correlation coefficients between dominance and sharing.* These values represent the expected distribution of correlation coefficients if individuals shared randomly across partners. The blue solid lines show the median correlation coefficients of the null random distribution. The dotted red lines show the observed correlation coefficients. Only Squad 2 showed a greater than expected (positive) value, suggesting that dominant individuals in Squad 2 shared more than subordinate ones.