

SHORT AND LONG TERM GROOMING RECIPROCITY IN CAPTIVE BONOBOS

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Previously we have studied long term grooming reciprocity in captive bonobos, showing that grooming is more likely to be reciprocated in groups with a relatively shallow dominance hierarchy. Furthermore, bonobos groom less reciprocally than chimpanzees, who have a more shallow hierarchy. No information on short term grooming reciprocity in bonobos has been published so far. Furthermore, the effect of egalitarianism has only been looked at on a group level, comparing reciprocity in despotic groups with groups that had a more egalitarian hierarchy. Here we 1) study reciprocity over different time periods and 2) look at despotism on a dyadic level, predicting that grooming will be less reciprocal in dyads that have asymmetric competitive abilities. We studied a captive group of bonobos at Planckendael Wild Animal Park, Belgium, monitoring all grooming bouts and agonistic encounters by all occurrence sampling. We calculated David's scores as measures for competitive abilities and to calculate a hierarchy steepness. Reciprocity in grooming was analysed on three levels (within bouts; on a daily basis; across periods). Overall grooming was reciprocated over long time frames, but less on shorter time frames. Moreover, preliminary analyses indicate that grooming is not reciprocated in a larger proportion of dyads than in chimpanzees. Mutual grooming is less common in the bonobos we studied than has been reported for chimpanzees. We discuss the differences in reciprocity in relation to age, sex, kinship and dominance relations of the different dyads.

Keywords: Pan paniscus, Reciprocity, Grooming, Dominance