

MOTHERS MATTER! DOMINANCE STATUS, MATERNAL SUPPORT AND MATING SUCCESS IN MALE BONOBOS

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The Priority-of-access model relates variation in male mating success to differences in male dominance status and predicts that high dominance status increases the chance to monopolize access to females. Among primates, bonobos are exceptional in having a female-biased dispersal pattern and females occupying high social status. Under such conditions maternal support is not limited to immatures but can extend into adulthood. The persistence of close contacts between males and their mothers may lead to forms of nepotism that are rare or absent in other male-philopatric species and that may affect dominance status and reproductive success of males. We analyzed behavioral data including dominance status, party association, proximity, and mating success of nine mature male bonobos from a wild population at LuiKotale (DRC). Results revealed a linear dominance hierarchy among resident males and high association rates between mothers and sons. Overall, there was a positive correlation between dominance status and mating success. However, using a GLMM we found that a combination of rank AND presence of mother best explained variation of male mating success with oestrous females. Finally, we found that direct involvement of mothers in male mate competition had an immediate effect on male mating success. The study provides the first empirical evidence for maternal support in male bonobos. It offers novel information on how females engage in male mate competition and suggests that maternal support is an efficient mechanism to enhance male mating success.

Keywords: bonobo, maternal support, dominance, mating success