

Locomotion and Motivation in *Pan paniscus*

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The factors that limit reproductive success are expected to be different for male and female primates. Males are typically limited by access to females, whereas in many primates female strategies often reflect access to food. This difference needs to be extended to evolutionary considerations of a species locomotor morphology as the sexes may be under selection pressure for different modes of locomotion. Locomotor data were collected during focal animal follows and opportunistically on records of mode of travel to mating, feeding, and other contexts for individuals in two communities of Lomako Forest bonobos or pygmy chimpanzees, *Pan paniscus*. Most mating happened in fruit trees, so that travel to mating data focused on both travel to and arrival in fruit trees. Frequencies of modes of locomotion were compared between contexts and age and sex categories using G tests of Independence and appropriate non-parametric statistics. Adult males often arrived first at mating situations at higher speeds and on the ground using quadrupedal knuckle walking. Adult females, in contrast, arrived using slower, arboreal travel including quadrupedal walking and quadrumanous scrambling. Males were significantly more likely to engage in "risky" locomotion, including long distance leaps, and significantly less likely to use slower, presumably more energetically efficient methods of traveling long distances. Adult male and female locomotion may reflect a sex difference in the motivation for travel that is important in considerations of the evolution of locomotor morphology in primates.