

THE INFLUENCE OF SOCIAL COHESION ON THE DEVELOPMENT OF SEX-SPECIFIC ASSOCIATION PATTERNS IN JUVENILE ATELIN PRIMATES

C.A. Schmitt^{1,2,3}, A. Di Fiore^{1,2,3}

¹*Department of Anthropology, New York University, New York, NY, US*, ²*New York Consortium in Evolutionary Primatology, New York, NY, US*, ³*Center for the Study of Human Origins, New York University, New York, NY, US*.

Presenter's Email: cas486@nyu.edu

Juvenile primates must begin early to form the social bonds and behaviors that will help them survive as adults. In atelin primates, differences in social organization may complicate this process: access to social partners may be reduced by variable subgroup membership in a fission-fusion society compared to more cohesive groups. We explored how these differences influence access to social partners by investigating proximity patterns in two sympatric atelin taxa in Amazonian Ecuador: woolly monkeys (*Lagothrix poeppigii*), which live in large, socially-cohesive groups, and spider monkeys (*Ateles belzebuth*), which live in comparably-sized fission-fusion groups. Proximity data were recorded during 522 hours of focal animal observation in four social groups (three *Lagothrix*, one *Ateles*). For both taxa, juveniles consistently had a higher number of neighbors compared to non-juveniles, both overall (within 10 meters) and in close proximity (within 1 meter). *Lagothrix* females had significantly more neighbors overall than *Ateles* females, which is consistent with the higher incidence of subgrouping and small subgroup size in *Ateles*. For males, the number of neighbors overall did not differ between spider and woolly monkeys, and males had significantly fewer neighbors overall than females in both taxa. *Ateles* and *Lagothrix* males show a gradual, statistically significant decrease in the number of individuals in proximity with increasing age. These results suggest that despite differences in social structure, juvenile males of both taxa maintain similar association patterns throughout development. The differences seen in juvenile female patterns suggest that *Ateles* may require a longer period of adult investment than *Lagothrix*.

Keywords: Atelin, juvenile, behavior, ontogeny