SOCIO-BEHAVIORAL CONVERGENCE IN FEMALE AFFILIATIVE BEHAVIORS IN *PAN* AND *ATELES*

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Pan and *Ateles* converge in many aspects of their social organization. Both are characterized by a high degree of fission-fusion dynamics, in which species exhibit high variation in party size, composition, and spatial cohesion. Within this framework, chimpanzees (*Pan troglodytes*) and spider monkeys (*Ateles sp*.) exhibit the most similarity in subgrouping patterns and social relationships. Specifically, significant overlap is found in the context of female social relationships and patterns of male-female aggression. Here, we examine how affiliative behaviors mediate female social relationships in captive spider monkeys, chimpanzees, and bonobos. Focal data were collected from five female *Ateles geoffroyi* at Brookfield Zoo (mean age=13.2, range: 7-21), five female bonobos at Columbus Zoo (mean age=22.0, range: 7-31), and five chimpanzees at North Carolina Zoo (mean age=20.4, range: 15-43). Female dyads did not differ in their rates of total or directional grooming, but spider monkeys engaged in significantly less mutual grooming (Kruskal-Wallis H= 8.917, N=30, p=0.012). All three species exhibited grooming reciprocity. There were no significant differences in the overall use of tension-reduction behaviors. However, there were significant differences in the types of tension-reduction behaviors, with spider monkeys using embraces (H=14.306, p=0.001), bonobos using socio-sexual behaviors (H=14.269, p=0.001), and chimpanzees using kisses (H=11.50, p=0.003). Furthermore, bonobos used tension-reduction behaviors significantly more often in feeding contexts (ANOVA F=14.357, N=15, p=0.001). We suggest that each species use tension-reduction behaviors that are species-typical, but serve as functional equivalents. However, bonobos may experience increased tension in feeding contexts, which suggests differing social and ecological pressures may necessitate an increase in tension-reduction behaviors.