

SOCIAL PLAY IN ACHIMPANZEE GROUP (*Pan troglodytes*)

S. Fontana, A. Lunardini

Dipartimento di Scienze del Comportamento Animale e dell'Uomo, Sezione di Antropologia, Università di Pisa, via S. Maria 55, 56126 Pisa

Chimpanzees are one of the few mammalian species which remain relatively playful throughout their entire lives. Chimpanzees of all age classes have been observed playing together, but play is more common among infants and juveniles. As a consequence there are many theories about the function of play in infants and juveniles. The most probable functions of play in young individuals are the following:

- 1) play offers an opportunity for physical stimulation that is necessary for the development of muscle tissue, skeleton and central nervous system;
- 2) play may be a method whereby animals maintain social familiarity with other individuals.

The function of play is not clear in adults, but some researchers suppose that play may be used as an affiliative behaviour.

This study analyzes the differences between social play in infant and adult chimpanzees of a group living in the Natura Viva zoological park, Bussolengo-Pastrengo (Verona). The chimpanzee colony was composed of nine animals: 5 adult females (18-20 years old), 1 adult male (about 20 years old), 1 adolescent female (9 years old), 1 infant male (4 years old) and 1 infant female (5 years old). The group has been observed for 266 hours using focal animal sampling observation and scan animal sampling observation methods.

The result indicated, as in the literature, that infants play more frequently than adults. The two infants used the same play patterns while every adult used significantly different patterns with respect to all the other adults. Moreover the frequency of play among adult individuals was not positively correlated with special affiliative relationships.