

DEVELOPMENTAL CHANGE IN MOTHER-OFFSPRING DISTANCE IN FISSION-FUSION SOCIETY OF WILD CHIMPANZEES

T. Matsusaka^{1,2}, K.A. Katumba³

¹*Primate Research Institute, Kyoto University, Inuyama, Aichi, Japan.* ²*Faculty of Health and Well-being, Kansai University, Sakai, Osaka, Japan.* ³*Mahale Mountains Chimpanzee Research Project, Kigoma, Tanzania.*

Presenter's Email: matsusaka.t@gmail.com

Wild chimpanzees are known to live in a "fission-fusion" society. The members of the unit-group do not always travel together but often split into temporary parties of various size and composition. Infant and juvenile chimpanzees generally show strong association with their mothers, but sometimes travel apart from mothers. The purpose of this study is to clarify the developmental change in mother-offspring distance and to examine the factors affecting their spatial relationship. We conducted simultaneous focal observation of mother-offspring pairs: TM observed the offspring, while KAK observed the mother. The subjects were the 16 immature chimpanzees of the M group living in the Mahale Mountains National Park, Tanzania. During focal observations, we recorded mother-offspring distances every 10 minutes using the instantaneous sampling method. Results show that (1) the mother-offspring distance gradually increases up to 3 years old, but individual differences become conspicuous from around weaning age. (2) Offspring who have younger siblings tend to stay apart from their mothers (over 20m) more often than the same-aged chimpanzees who don't have younger siblings. However, distance changed gradually rather than suddenly upon the birth of a younger sibling. (3) Offspring tend to stay near their mothers when their mothers are in estrus. (4) Juvenile chimpanzees tend to stay apart from their mothers (over 20m) more often when large number of group members travel together within earshot. This study revealed the social factors affecting the development of mother-offspring spatial relationship. Keywords: Development. Mother-offspring relationship. Chimpanzees. Behaviour.

Keywords: Development, Mother-offspring relationship, Chimpanzees, Behaviour