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Gastro-intestinal parasite prevalence and social network position in Barbary macaques at Affenberg Salem

Living in large social groups brings some advantages (e.g. reduced predation risk), but also comes with costs. The enhanced risk of contracting infectious diseases is believed to be one of the major disadvantages. Individual infection risk may vary as a result of the non-random interaction patterns that characterize primate groups and lead to differences in exposure and susceptibility to parasite infection. This study aims at identifying the relationship between affiliative behavioural parameters and individual gastro-intestinal parasite load in a group of semi-free ranging Barbary macaques at Affenberg Salem. We collected over 700 h of focal animal data on affiliation, association, and agonism of all 38 adult males and females as well as faecal samples from all individuals. Using sedimentation procedures and light microscopy, we counted nematode eggs in 6 faecal samples per individual collected over an eight week period. We will report how individual prevalence and a categorical measure of infection intensity relate to an individual's strength and degree in a grooming network. These analyses will provide correlational evidence for the relationship between individual sociality and health in a gregarious primate that forms the baseline for further functional analyses.