A vast literature exists on the possible benefits of social status in primates in terms of, e.g., feeding success or mating opportunities. Very few attempts, however, have been made to integrate and analyse these benefits together across primate species. Here, we use standard and phylogenetic meta-analysis on 20 species (1 lemur species, 6 New World monkeys, 10 Old World monkeys and 3 apes) and 118 published studies on primates to assess how rank affects various aspects of primate life-history. Male reproductive and mating success were higher for dominant individuals than for subordinates. Moreover, infant survival was higher for dominant females while we obtained a non-significant result for female birth rate. Analyses on feeding success and body condition only gave partial support for a significant advantage for dominant individuals. Moreover, results obtained from standard and phylogenetic meta-analyses were not always in agreement, suggesting that phylogenetic signal affects the benefits of social status. Finally, none of the modulator variables such as habitat, diet, social system, or life history variables included into our analysis had a clear significant effect on the benefits of social status of the species considered. This suggests that the benefits of social status may be independent from the effect of ecological, social or life history variables.

Keywords: meta-analysis, phylogeny, rank, socio-ecology