

EXTENDED GROWTH IN THE FEMALE ANTHROPOID SKULL: ARE LINKS BETWEEN MORPHOLOGY AND SOCIAL BEHAVIOUR UNIVERSAL AMONG TAXA?

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Extended cranial and mandibular growth in the great apes has been well documented by Balolia et al (in review), who suggested that female adulthood cranial growth occurs when females are gregarious, as a result of competition for resources. Similarly, Wang et al (2007; J Hum Evol 53, 350-361) interpreted prolonged cranial growth in female rhesus macaques as being related to intrasexual competition. The aim of the current research was to assess patterns of female extended growth in two further anthropoid taxa: *Papio*, who are gregarious and who live in matrilineal societies, and *Hylobates*, who are not gregarious, but whose females exhibit high frequencies of intrasexual aggression. Overall cranial size, cranial breadth and cranial height are quantified for ~20 adult female specimens (M3 in full occlusion) for each taxon. Relative age is determined through the assessment of taxon specific patterns of dental wear. Results show statistically significant increases in cranial height, with age in *Papio* females, while females of *Hylobates* show size increases in overall cranial size and breadth, but not height. Results are interpreted in light of previous results for *Pan*, *Gorilla* and *Pongo*, and related to differences in patterns of socioecological selective pressures in the females of different anthropoid taxa.

Keywords: adult growth, intrasexual competition, cranium, dental wear