Primate feeding behavior and craniodental morphology has been associated with food geometric and material properties. However, the influence of food properties on positional behaviors during feeding is not well understood. Here, we examine differences in feeding postural behaviors in relation to the feeding event, substrate type and size, and food geometric and material properties in a population of wild bearded capuchins (*Sapajus libidinosus*) at Fazenda Boa Vista in Gilbués, Piauí, Brazil. We analyzed video data from over 1400 co-occurring postural and feeding behaviors and their durations. Food size, substrate type, and substrate size were coded from the videos, and food material properties were measured from foods collected at the time of the video recordings.

Our results suggest significant variation in feeding postures across the feeding sequence, with substrate size (x^2 = 419.57, p<0.01) and with food material properties (toughness, x^2 = 68.04, p<.01; Young's modulus, x^2 = 135.96, p < 0.01) in bearded capuchins. Large-sized and mechanically challenging foods were associated with reduced variation in feeding postures. Substrate had a significant effect on feeding postures. Large foods doubled as a substrate and were associated with suspended postures, whereas small foods were associated with sitting and squatting. We found that food geometric and material properties had a significant influence on feeding postural behaviors in bearded capuchins. We posit that reduced postural variation is associated with improving the animal's limb forces and body positioning during food processing and ingestion for large, mechanically challenging foods.

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Relative hindlimb length and hindlimb segmental proportions as indicators of locomotor category in primates, rodents, and tree shrews

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Leaping is an important locomotor behavior for arboreal taxa such as primates, providing means to cross discontinuous substrates, escape predation, and/or capture prey. Primates that leap frequently have relatively longer hindlimbs than those taxa that leap less often. However, it is unknown if this pattern holds across a broader phylogenetic sample that includes non-primate arboreal taxa and non-primate specialized leapers. Here, we examine if relative hindlimb length and segmental proportions correlate with locomotor category across a sample of small-bodied (<800g) mammals. Lengths of six hindlimb elements (summing to total hindlimb length) were measured on micro-computed tomography scans. Total hindlimb length was regressed against body mass to calculate relative hindlimb length. Segmental proportions were calculated as the ratio of femoral, tibial, and pedal (the sum of calcaneal, cuboidal, metatarsal, and phalangeal lengths) lengths to total hindlimb length. We found that while three arboreal/scansorial taxa (common marmosets, greater dwarf lemurs, and palm squirrels) exhibit short hindlimbs relative to their body mass, all other arboreal and scansorial taxa have relatively long hindlimbs. Most arboreal, scansorial, terrestrial, and fossorial taxa distribute length evenly across segments (femur, tibia, and pes each comprise ~33% of total hindlimb length). Saltatorialists (*e.g.,* jerboas and kangaroo rats) were the only locomotor group with exceptional proportions, with pedal segments contributing ~38% of total hindlimb length. These results suggest to us that segmental proportions may distinguish specialized ricochetal hoppers from taxa that leap sporadically, while relative hindlimb length may predict general leaping ability across mammals.

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Anatomical and Shape Variation of the Endocranial Cavity in 6.0–8.0 Year-Old Humans

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Assessing brain evolution in fossil/modern skeletal remains relies on reconstructions of the endocranium. Whereas adults are relatively well documented, sufficient material to delineate the range of anatomical and shape variation in subadults is less well documented. This is particularly the case for late-stage children/adolescents, who are less well represented in skeletal samples. To address this issue, we provide an overview of the major anatomical differences and shape variations in 6-8.0 year olds.

We CT-scanned 43 crania (5.8-7.9 years of age; helical mode, standard kernel, 0.3 mm isotropic voxels). The degree of crown/root calcification for each tooth was compared to Schour and Massler's standards to determine developmental age. Shape variation was assessed via Principal Components Analysis, on Procrustes-aligned shape variables, in Morphologika. We use 34 (of 43) endocranial landmarks in the geometric morphometric assessment. Observations of brain anatomy relied on size-matched (geometric mean) virtual reconstructions.

PC1 explains 14.8% of the variance, with positive values representing height increase in the parieto-occipital region and depression of Broca's region and the temporal lobes. PC2 (10.5%) reflects the amount of flattening of the frontal-parietal-occipital lobes, but little change in basal structures. Changes along PC3 (7.6%) result from occipital flattening, with a rise/widening at asterion that is accompanied by frontal lobe rotation and anterior base depression.

Documenting anatomical and shape variation in the endocranium of modern children/adolescents allows greater insights into the evolution of brain structures and allows insights into potential developmental rate differences underlying cranial shape divergence in paleodemes and closely related species.

The AABA Education Committee: Where it has been, where it is going, how we hope to get there

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The AABA Education Committee was established to "facilitate the engagement of K-12 students, teachers, and broader audiences with biological anthropology." Initially, the committee organized teacher workshops at AABA annual meetings and facilitated a program for hominin and other primate casts to remain in each meeting's host city for one year for use in local classrooms. Activities then expanded to creating lesson plans incorporating the casts (2016), visiting K-12 classrooms (2016), and conducting museum visitor outreach and educator training (2019). Committee activities have been well-received and impactful for audiences and committee volunteers; however, the shifting US sociopolitical climate, the challenges of the COVID-19 pandemic, and increasingly contentious public discourse on many science-and-society issues