

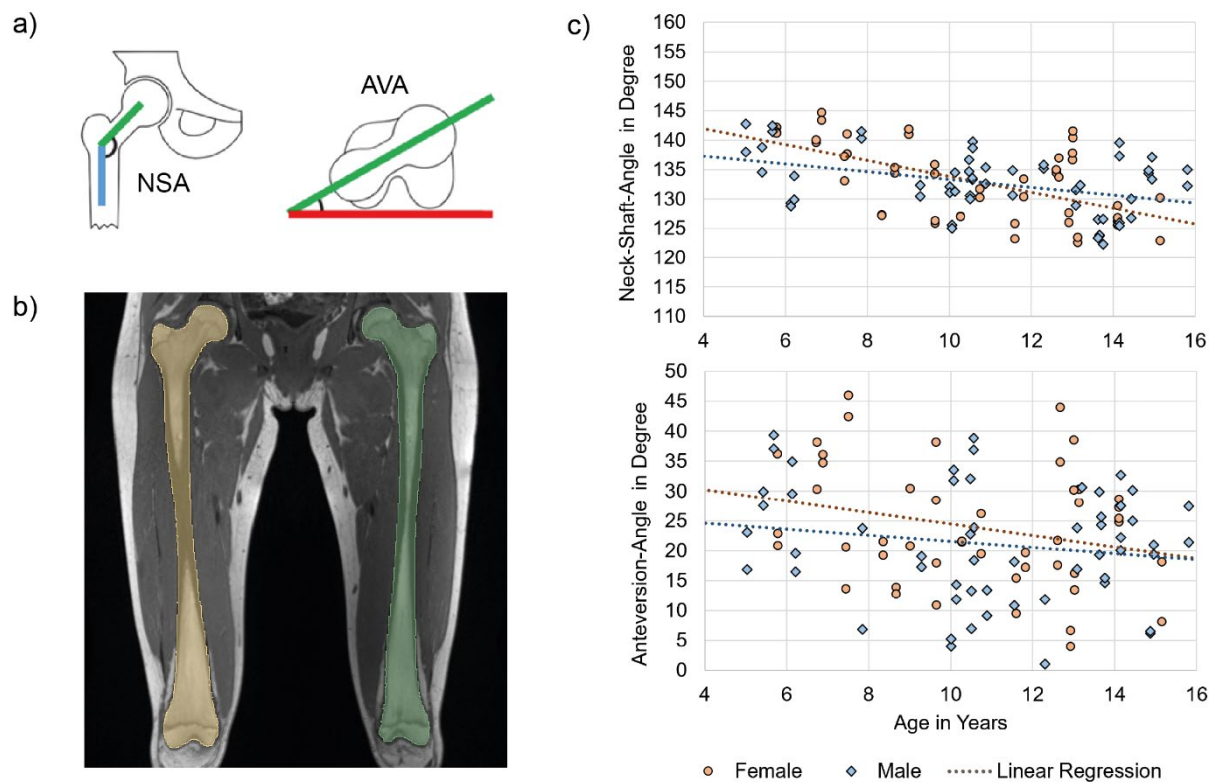


Figure 1. Automated MRI-based assessment of paediatric femoral geometry. (a) Visualisation of the femoral neck–shaft angle (NSA) and femoral anteversion angle (AVA). (b) T1-weighted Dixon MRI with an isotropic voxel size of 1 mm and corresponding 3D nnU-Net-based segmentation of the femora. (c) Age-related distributions of NSA and AVA in children aged 5–16 years, shown as sex-specific scatter plots with linear mixed-effects model predictions accounting for bilateral femoral measurements within participants. NSA demonstrated a significant negative association with age, whereas AVA showed no statistically significant age association.