

Online Supplement

All-age relationship between arm span and height in different ethnic groups

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Online supplement

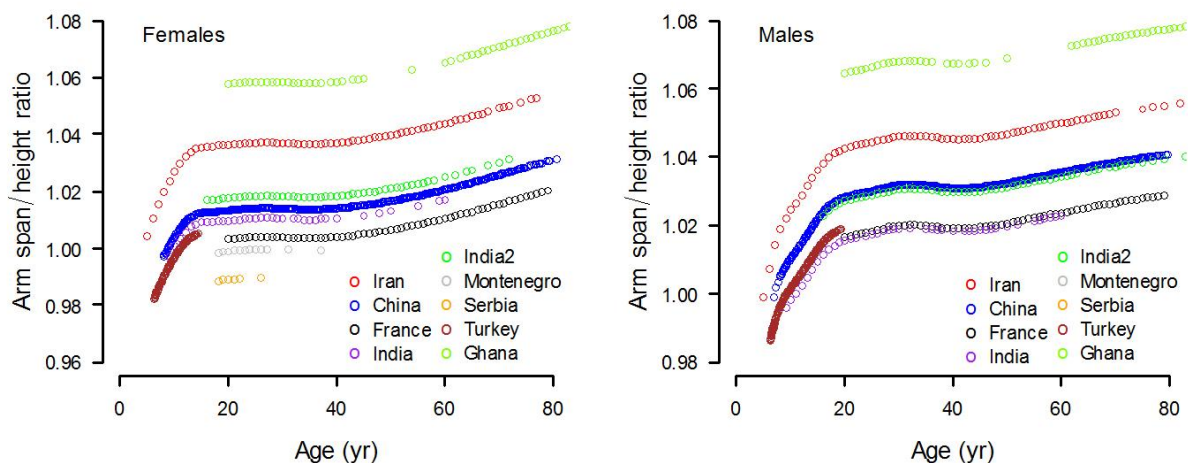


Figure E-1. Arm span/standing height ratio as a function of age in males and females, for each of the 9 sites contributing data.

Table E-1. Agreement between the number of French patients classified with a z-score below (low) or above (normal) -1.645 for FEV₁, FVC or FEV₁/FVC, or a restrictive pattern (FEV₁/FVC z-score > -1.645 FVC < -1.645). Calculations were performed using measured and predicted height.

		Using measured height		
		FEV ₁		
		low	normal	
Using height calculated from arm span and age	low	329	41	
	normal	22	1111	
			FVC	
			low	normal
	low	169	23	
	normal	25	1286	
			FEV ₁ /FVC	
			low	normal
	low	329	6	
	normal	0	1186	
			Restrictive pattern	
			low	normal
low	58	8		
normal	7	1430		

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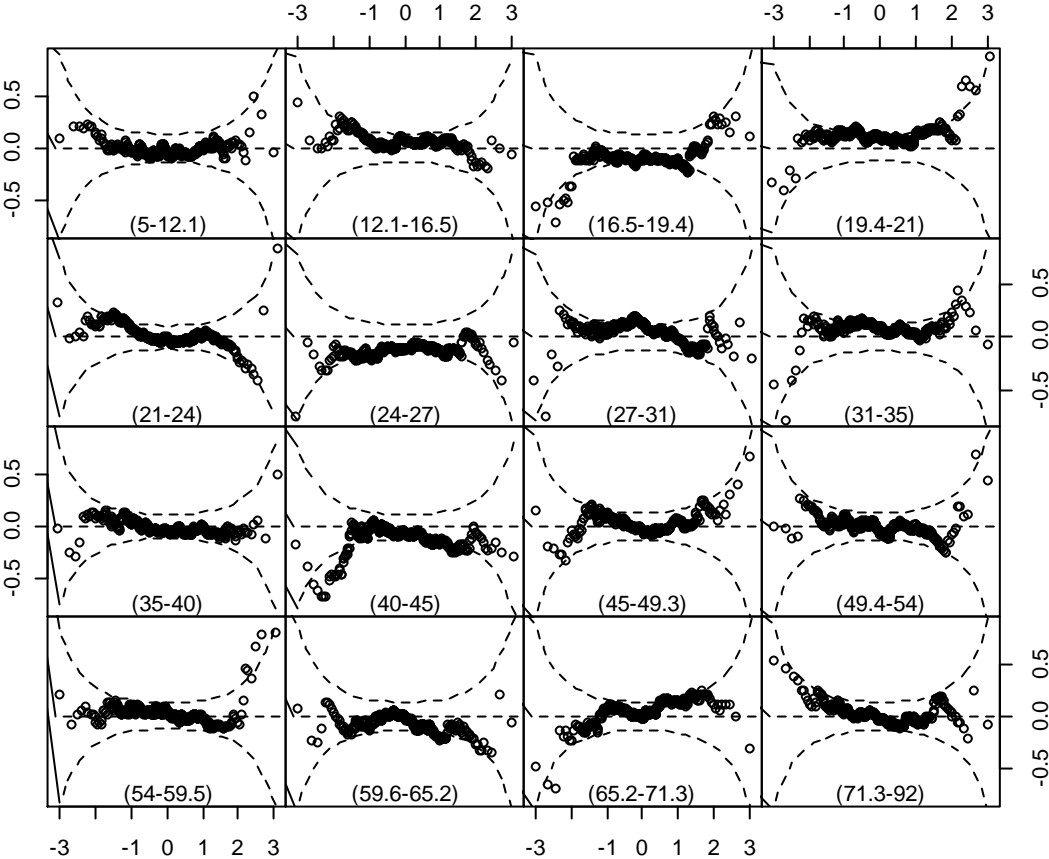


Fig E-2. Worm plot displaying the residuals within different age ranges. The residuals relate to the model of sitting height/standing height as a function of age and ethnic group in males.

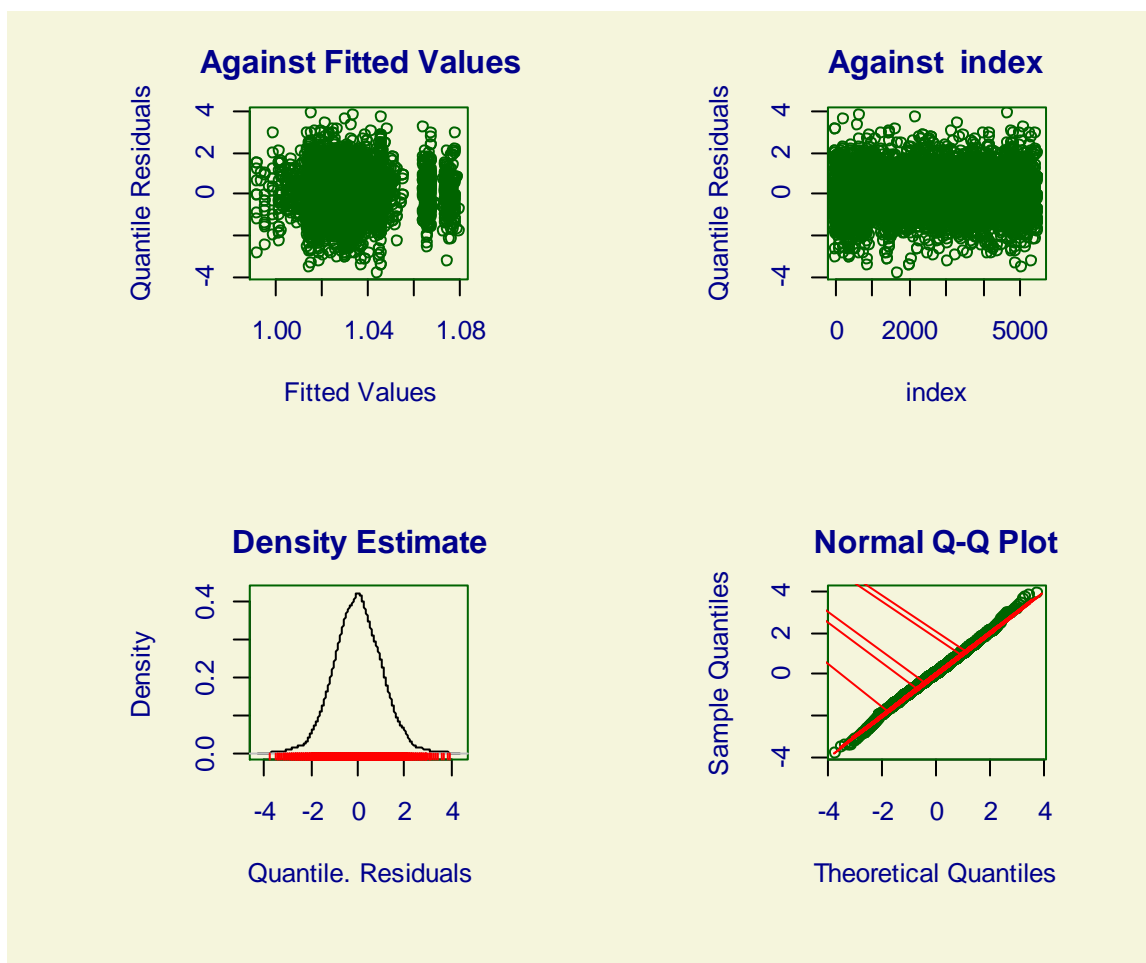


Fig. E-3. Normal probability (Q-Q) plot and other quantile distributions which allow to judge the goodness of fit to the data of the model for the standing height/height ratio in males as a function of age and ethnic group. In case of a good fit the quantile residuals should be symmetrically distributed (*i.e.* equal variance) around an average = 0, the density plot should suggest a Gaussian distribution, and the plot of theoretical quantiles and quantiles from the fitted sample should lie on a line $y=x$.

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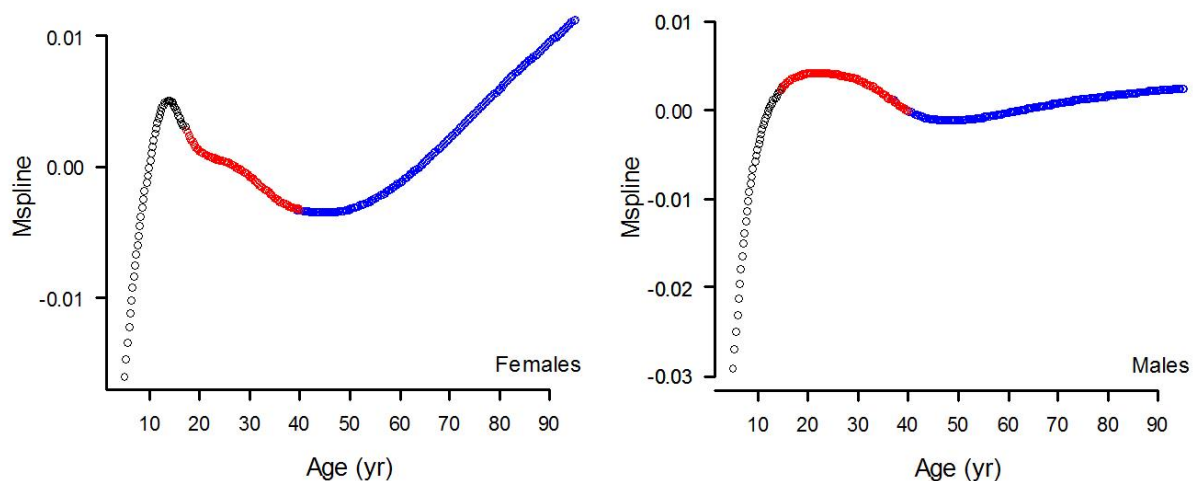


Figure E-4. Mspline represented by three polynomials for the 5-95 year age range. The explained variance (r^2) between measured and derived Mspline varied between 0.9997 and 1 in females, and between 0.9995 and 1 in males.