

Photogrammetric Frontal Facial Proportions of 12-year-Old Southern Chinese

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This study aimed to establish norm values for facial proportion indices of 12-year-old southern Chinese and to describe any gender differences.

Of the 258 individuals (140 females and 118 males) was obtained from a Hong Kong Chinese Birth Cohort Study. Facial landmarks were plotted with ImageJ 1.45 on the frontal photographs. Twenty-two facial proportion indices were obtained and analyzed with IBM SPSS 19.

Gender differences were evident. The Mandibulo-lower face height index (Sto-Gn/Sn-Gn) ($P < 0.05$), nose-face height index (N-Sn/NGn) ($P < 0.001$) and upper face height-binocular width index (NSto/Ex-Ex) ($P < 0.05$) were larger in female. The reverse was found for the lower face-face height index (Sn-Gn/N-Gn) ($P < 0.001$), Upper lip height-mouth width index (Sn-Sto/Ch-Ch) ($P < 0.01$), upper lip-nose height index (Sn-Sto/N-Sn) ($P < 0.001$), upper lip-mandible height index (Sn-Sto/Sto-Gn) ($P < 0.05$) and upper lip-upper face height index (Sn-Sto/N-Sto) ($P < 0.001$). Population norms of facial proportion indices were developed from the mean values of this study.