

Statistical notes on anthropometric subgroup constants for Bengal caste data.—By PRASANTA CHANDRA MAHALANOBIS.

Risley and others arranged their anthropometric data for each caste separately and considered the statistical constants for each caste as a complete group. In the present paper the Bengal data for certain castes were rearranged into subgroups consisting of (a) the different family names, e.g. Banerji, Sen, Ghose, etc., and also according to (b) the birth districts. The different statistical constants were then calculated for each subgroup separately.

Differentiation within the caste may be termed for convenience of reference, "INTRA-CASTE" differentiation, and must be clearly distinguished from inter-caste differentiation. In the present paper the significant or non-significant character of "INTRA-CASTE" differentiation is investigated with the help of the newly-calculated subgroup constants.

In addition, Pearson's "corrected" formula (as proposed in the *Biometrika*, vol. V), i.e. the relative magnitude<sup>1</sup> of  $m-M$  and

$$.67449 \sqrt{\frac{\sigma^2}{n} - \frac{2\sigma^2 - \epsilon^2}{N} - \frac{n(M-m)^2}{N(N-n)}}$$

was used and the results compared with those obtained by the more usual formula, i.e. the relative magnitude of  $(m-M)$  and

$$.67449 \sqrt{\frac{\sigma^2}{n} + \frac{\epsilon^2}{N}}$$

A new statistical "*coefficient of intra-caste differentiation*" is next constructed and this new coefficient is then used as a "standard difference" for testing the significant or non-significant character of inter-caste differentiation, i.e. for testing the variation from caste to caste.