Multivariate Distance Analyses for Growth Characters During Adolescence Among Bhil Boys of Rajasthan

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ABSTRACT Results of growth data on number of body dimensions (23 measurements) among adolescent Bhil boys of Rajasthan (11+ years to 19+ years) have been subjected to multivariate distance analyses by applying four different formulations : (1) the mean percentage growth of all body dimensions in each yearly age as mean multivariate distance (MMD). (2) The average proportion increments of all body dimensions between ages, called the co-efficient of proportion growth (CPG). (3) Average ratio of mean differences of all body dimensions between ages, called the co-efficient of standardized growth (CSG). And (4) average value of the critical ratio or 'r' for all measurements be between all ages, called T-distance. The results of these multivariate distance analyses of all measurements among adolescent Bhil boys indicate an intermediate growth pattern between Linear (example, height) and transverse (bulk, example, weight and others) growth curves. Further, the combined effect of all the measurements exhibits a sharp adolescent spurt between 14+ and 15+ years followed by a sharp decline of growth rate and a final and slow increase indicating a continuous growth of some body dimensions characterize the overall adolescent growth of Bhil boys. The use and application of multivariate distance analyses for growth is discussed.