

Impact of Habitual Physical Activity on the Human Body Proportions: A Comparative Study of Some Traditional Occupational Groups

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KEYWORDS Body Proportions. Z-Values. Skinfolds. Body Breadths. Body Circumferences. Segmental Lengths. Traditional Occupations

ABSTRACT Physical efficiency, body movement and performance in many daily activities can be determined through the study of human body proportions. The purpose of the present study is to analyze the effect of habitual activities on the body proportions of the adult males involved in four different traditional occupational groups i.e. Tailors, Farmers, Carpenters and Blacksmiths. A total of 800 adult men (200 each group) ranging in age from 30 to 40 years were examined for 27 anthropometric parameters (height, weight, seven skinfolds, eight circumferences, three segmental lengths and seven body breadths) following the techniques given by Lohman et al. (1988). Cross-sectional data has been collected from the different areas of Punjab during April 2003 and January 2004. Proportionality assessment is done by adjusting anthropometric measurement to a standard height or size and comparing them with the specified values and standard deviation values. Gross phantom specifications are used as given by Ross and Ward (1982). Results indicate that proportionally Farmers have less and Tailors have more weight in relation to height. Out of all the skinfolds maximum proportional development has been observed for biceps, subscapular and calf skinfold in Farmers whereas in case of circumferences maximum proportional development has been observed for chest circumference in Tailors followed by waist circumference in Blacksmiths and hip circumference in Farmers. Proportional development of segmental lengths do not show any definite trend that can reflect inter group differences. Maximum proportional development out of all the body breadths has been observed in antero-posterior chest breadth in both Tailors and Blacksmiths.