# Comparison of Somatotype of Physically Active Punjabi Men of Different Age Group

## Nishibha Thapliyal and Ashok Kumar

# Abstract

Aim: The aim of the study was to observe and compare the somatotype of physically active Punjabi men according to different age group. **Method:** One hundred (N=100,) men with regular physical activity between the ages 20-40 years were randomly selected and divided into four group on the basis of their age. Each subject was measured for anthropometric parameters after taking valid consents. **Results**: The mean age, height weight and BMI of all subject (N=100) was  $34.1\pm5.0$  years,  $172.7\pm3.7$  cm,  $71.6\pm5.7$  kg and  $24\pm1.8$  kg/m<sup>2</sup> respectively. The mean somatotype of men belonging to Group-1( 20- 25 years), Group-2(26-30 years), Group-3(31-35 years) and Group-4 (36-40 years) was 2.08-4.14-3.05, 2.93-5.55-1.78, 3.79-6.55-1.83 and 3.91-5.74-0.84 respectively. **Conclusion**: The results indicate the dominance of mesomorphy in all age groups of physically active Punjabi men, which is an important component that characterizes muscularity due to regular physical activity. The age Group 30-35 yrs (6.55) showed the highest mesomorphy values. An increasing trend in endomorphy and mesomorphy was seen from age Group 1 (20-25yrs) to Group 3(31-35yrs). Endomorphy which is characterized by fat components was found to high in middle age groups of 30-40 years leading to the conclusion that a change in frequency, intensity or type of physical activity may be needed.

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# Introduction

Human body is the most complex area of research. It varies in size and composition from person to person. The quantification of human shape and composition was done by W. H Sheldon and he called it 'Somatotype'. Somatotype divided people into three major groups' endomorphs, mesomorphs and ectomorphs. Endomorphy is the relative fatness, mesomorphy is the relative musculo-skeletal robustness and ectomorphy is the relative linearity or slenderness (Heath & Carter, 2002). There are many factors like gender, genetics, feeding habits and environment that affect human shape and size (Saranga et al., 2008; Reis et al., 2007). Somatotype is also seen to vary with change in physical activity as well. There is ample evidence indicating athletes have distinctive somatotype in accordance to the demands of the sports they are involved in (Rahmawati, et al., 2007; Carter 1970). There have been many studies on athletes and their somatotype but information about the non-athletic population is very less. Due to global rise in obesity and other lifestyle disorders, awareness about physical fitness and health related physical fitness among

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