

## Comparison of anthropometric characteristics among All India Inter University sprinters

■ R. PRABU AND K. SEKARBABU

Received : 01.02.2012; Accepted : 08.03.2012

### ■ ABSTRACT

The purpose of the study was to determine the differences on the dependent variables such as standing height, sitting height, upper leg length, lower leg length among the categorical variables of 100m, 200m and 400m sprinters. For the purpose of this study, subjects were selected from the 72<sup>th</sup> All India Inter-University Athletic Championship held at the Rajiv Gandhi University of Health Sciences in Mangalore from 17<sup>th</sup> to 21<sup>st</sup> December, 2011. In this athletic championship, 1257 male athletes of 151 universities participated. Out of these athletes, all 47 male sprinters who have qualified for the semi-finals and finals of 100m, 200 m and 400 m were selected as subjects. Thus, the present study comprised of 16 sprinters from 100m, 13 sprinters from 200 m and 18 sprinters from 400 m. The sprinters who have participated more than one sprinting events were not included in this study. Further, one way ANOVA was applied followed by scheffe S' Post Hoc Test if necessary, to find out the differences between the dependent variables among the three groups of sprinters (independent variables). The results of the study revealed that 400 m sprinters were significantly taller than 100 m sprinters and ankle girth was significantly more for 200 m sprinters than 100 m sprinters. Besides, other dependent variables have taken for this study did not differ significantly among the three categories of sprinters.

■ **Key Words** : Anthropometric characteristics, Inter-university, Sprinters

■ **How to cite this paper** : Prabu, R. and Sekarbabu, K. (2012). Comparison of anthropometric characteristics among All India Inter University sprinters. *Internat. J. Phy. Edu.*, 5 (1) : 45-48.

See end of the article for authors' affiliations

Correspondence to :

**R. PRABU**

Research Scholar, Department of Physical Education and Sports Sciences, Annamalai University, Annamalai nagar, CHIDAMBARAM (T.N.) INDIA

**A**nthropometry is a technique to measure physical characteristics (body size, shape of specific body parts and proportion) of living beings, including men. Anthropometry has been widely applied in a broad range of disciplines, such as ergonomics and health sciences. Because of its convenience, anthropometry has also been applied to understand physical characteristics of athletes in the field of sports science which targets improvement of athletic performance. Since correct application of anthropometric techniques and interpretation of the information assist management of health status in athletes and also improves their performance, it is important that supporting staff in the athletic fields, including sports dieticians, share the knowledge associated with anthropometry. To date, the

measurement protocol proposed by the International Society for the Advancement of Kinanthropometry (ISAK) has been recognized as an international standard for anthropometric measurements in health and sports science and has been applied across many countries. It is hoped that the international measurement protocol such as that by ISAK to be recognized widely in the sports sciences also and will lead to development of human resources skilled in anthropometry (Masaharu and Kagawa, 2008).

Sprinting is the short distance race which remained important part of competitive play of world's important civilizations. Sprinting is considered to be the oldest form of athletic competition. In specific terms, it is not easy or even possible to give a list of qualities necessary for an athlete to