

Compare the height and weight among All India inters university male handball players

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Abstract

Handball is fast body contact sports which require good physique. Hirata (1979) and Khosla (1983) demonstrated that the players in medal-winning teams were taller than the others, thus suggesting how important body height and mass are to play handball successfully. Despite the game's world-wide popularity, there have been few other investigations of anthropometric and physiological characteristics of elite male handball players: most notably, recent data are lacking. Previous reports have shown that body structure and morphological characteristics can determine the selection of participants in many sports. Results of cross-sectional anthropometric studies have tended to suggest that certain physical factors including body composition (body fat, body mass, muscle mass) and physique (somatotype) significantly influence athletic performance (Carter 1984). The purpose of the study was to compare the height and weight among all India inters University male handball players. A total of three hundred and twenty (320) male handball players were selected as subjects from All India Inter University Handball Tournament, organised by Periyar University, Salem, Tamilnadu. In which four university teams from five zones (East, South, West, North and Central) took part in competition. Each team constitutes of 16 players each. The mean age, height and weight of the selected subjects are 22.92 ± 2.04 years, 176.38 ± 4.70 cm and 71.40 ± 6.73 Kg respectively. The height and weight was selected as criterion variables. To measure height stadiometer was used and weight was measured through weighing machine. The equipments used in the present study were reliable and accurate.

Keywords: Height, weight, Anthropometric and Handball

Introduction

Handball is fast body contact sports which require good physique demonstrated that the players in medal-winning teams were taller than the others, thus suggesting how important body height and mass are to play handball successfully. Despite the game's world-wide popularity, there have been few other investigations of anthropometric and physiological characteristics of elite male handball players: most notably, recent data are lacking. Previous reports have shown that body structure and morphological characteristics can determine the selection of participants in many sports. Results of cross-sectional anthropometric studies have tended to suggest that certain physical factors including body composition (body fat, body mass, muscle mass) and physique (somatotype) significantly influence athletic performance Knowledge of the physical characteristics of handball players could provide insight into those individual factors which influence the players' performance in the game. It is concluded that height and weight differ among all India inter university male handball players.

Statement of the Problem

The purpose of the study was to compare the height and weight among all India inters University male handball players.

Methodology

Selection of Subjects

A total of three hundred and twenty (320) male handball players were selected as subjects from All India Inter University Handball Tournament, organised by Periyar University, Salem,

Tamilnadu. In which four university teams from five zones (East, South, West, North and Central) took part in competition. Each team constitutes of 16 players each. The mean age, height and weight of the selected subjects are 22.92 ± 2.04 years, 176.38 ± 4.70 cm and 71.40 ± 6.73 Kg respectively.

Variables and Test

The height and weight was selected as criterion variables. To measure height stadiometer was used and weight was measured through weighing machine. The equipments used in the present study were reliable and accurate.

Statistical technique

The collected data was analysed using one way Analysis of variance (ANOVA). When *F* ratio was found significant, Scheffe's post hoc test was applied to know the difference between the five groups. All the statistical tests were calculated using the statistical package for the social science (SPSS) for windows (Version 16).

Table 1 clearly shows that height ($F = 22.677, p = 0.000$) and weight ($F = 37.176, p = 0.000$) among handball players of different zone showed a significant difference. It denotes that height and weight found to be best in north zone players (Figure 1). Scheffe's post hoc test showed no significant difference between north vs. central, north vs. east, south vs. west, central vs. east ($p > 0.05$). However, remaining comparisons found significant ($p < 0.05$) on height. Similarly height showed no significant difference between south vs. west, west vs. Central, west vs. East and central vs. East ($p > 0.05$). Remaining comparisons showed a significant difference ($p < 0.05$).

Table 1: ANOVA for height and weight

Variable	Zone	N	Mean SD	SOV	SS	df	MS	F
Height (cm)	North	64	178.17±2.60375	B	1581.812	4	395.45	22.677 (p = 0.000)
	South	64	172.77±6.06772					
	West	64	174.77±6.06772					
	Central	64	178.17±2.60375	W	5493.187	315	17.43	
	East	64	178.00±1.10000					
Weight (kg)	North	64	78.17±2.60375	B	4639.419	4	1159.8	37.176 (p = 0.000)
	South	64	66.73±8.23126					
	West	64	69.73±8.23126					
	Central	64	72.18±2.61786	W	9827.578	315	31.199	
	East	64	70.18±2.61786					

Discussion

In the present study it is clear that north zone handball players had greater height and weight than other four zone players. The significant difference in height and weight may be due to geographical variations, environmental influences, genetic factor, dietary habit, social economic differences of handball players also gave similar variations for different anthropometric measures.

Conclusion

- It is concluded that height and weight differ among all India inter university male handball players.

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