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# A study of relationship between selected anthropometric variables and shooting ability in handball

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## **■ABSTRACT**

The purpose of the study was to find out the relationship between selected anthropometric variable (standing height) and shooting ability in handball. To achieve these objective twenty male handball players of interuniversity level from Devi Ahilya University were randomly selected as subjects. It was hypothesized that there will be a significant relationship between standing height and shooting ability in handball. Scores obtained from Zinne's Team handball Test Battery were used as criterion measure. Analysis of the scores was done using Pearson's product moment correlation at 0.05 level of significance which showed that the obtained value of r was = -0.43521 while the required value of r at 0.05 level of confidence with 18 degree of freedom is = 0.444 which is not significant it clearly indicates a very low (-ve) relationship.

- KEY WORDS: Anthropometry, Zinne's team handball test battery
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nthropometric measurement has been a part of physical education since it's inception. Anthropometry means measurements of human body such as standing height, sitting height, leg length, arm length etc. in the game of handball the opponent tries to put the ball in the opponent's goal, in doing so each player must be able to catch, pass and dribble the ball and tackling the opponent (Al-Sendi *et al.*, 2003; Baynios *et al.*, 2006; Bourgios *et al.*, 2000 and Claessens *et al.*, 1991 and 1994).

Handball is an excellent sport for developing and maintaining physical fitness, it presents a real challenge to its participants. It is believed that anthropometric measure and physical variable play a very vital role in most of the games (Classens *et al.*, 1999; Gualdi and

Grazini, 1993 and Kansal *et al.*, 1980). Shooting ability may depend upon standing height of a player. In order to find out any sort of relationship between them present study was undertaken.

For the purpose of achieving this goal, twenty male handball of interuniversity level aged between (18-24) were selected as subjects. Measurement of standing height was taken in meters. Handball shooting ability was used as criterion measure which was obtained by using zinne's team handball test battery, composite scores thus obtained were converted into final standard scores.

The data obtained (measure of standing height) was correlated with the criterion variable *i:e.* handball shooting ability in order to find out the relationship between the dependent and independent variable.

| Table 1 : Measurement of standing height      |                             |
|---|-----------------------------|
| Variable                                      | Co-efficient of correlation |
| Standing height and handball shooting ability | - 0.43521                   |
| * indicate significance of value at P=0.05    | r 0.05 $(18) = 0.444$       |

indicate significance of value at P=0.05

The obtained value of r = -0.43521 clearly indicates a very low negative correlation between shooting ability and standing height which is not significant because the required value at 0.05 level of confidence is = 0.444.

# **Conclusion:**

The result of the present study clearly reveals that standing height do not have significant relationship with the handball shooting ability. Results contra indicate with the earlier researches, which have shown the significant relationship of these two variables.

The reason may be the fact that handball players at intervarsity level might not be possessing good level of skills which contributes towards encouraging connection.

The other factor may be the prerequisite of handball in terms of physical fitness, which these players may not be possessing such as good co-ordination ability, explosive strength, speed, endurance.

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