

## Relationship Between Anthropometric Measurement and Playing Ability Among Tamilnadu State Women Netball Players



### Physical Education

**KEYWORDS :** Women, Netball, Playing Ability, Anthropometric.

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### ABSTRACT

*The purpose of the present study was to find out the relationship between anthropometric measurement and playing ability among different positioned Tamilnadu state women netball players. To achieve this purpose of the study, seventy two women netball players from Ariyalur, Chennai, Cuddalore, Kanyakumari, Madurai, Nagapattinam, Ramanathapuram Thiruvannamalai, Tiruchirapalli and Tirunelveli districts in Tamilnadu were selected as subjects. The age of the subjects were ranged between 18 to 24 years. Ariyalur, Tiruchirapalli, Nagapattinam, Chennai, Madurai, Thiruvannamalai, Tirunelveli, Kanyakumari, Ramanathapuram and Cuddalore districts netball players in Tamilnadu were selected as independent variables. The playing ability (Subjective rating), arm length (Length of arm in centimetres) and leg length (Length of leg in centimetres) was selected as dependent variables and tested. The collected data on dependent variables was tested by using Pearson product movement correlation to find the relationship between playing ability and selected dependent variables. The level of conference was fixed at 0.05. The results of the study showed that there was no significant relationship between anthropometric measurement and playing ability among different playing positioned women netball players of various districts in Tamilnadu state.*

### INTRODUCTION

Sport is an institutionalized competitive activity that involves vigorous physical skills or use of relatively complex physical skills by individual's participation is motivated by a combination of intrinsic and extrinsic factors. Sports Psychology is defined as the scientific study of human behaviour in sport. Sports psychology can be applied to varied skilled movement physical activities and exercise programmes such as corporate fitness, exercise rehabilitation and health oriented exercise programmes as well as traditional physical education and competitive athletics.

Netball is a ball sport played by two teams of seven players. Its development, derived from early versions of basketball, began in England. Netball is most popular in Commonwealth nations, specifically in schools, and is predominantly played by women (Taylor, Tracy, 2001)). Netball became an International Olympic Committee recognized sport. Netball emerged from early versions of basketball and evolved into its own sport as the number of women participating in sports increased. From the start, netball was developed as a women's sport: existing outside the sphere of male-dominated sports, netball did not encounter the initial social opposition that faced women in other sports in the early 20th century (Borish, Linda J, 2000).

Physical education has been extremely fortunate to have excellent and inspiring leadership in the areas of research and tests and measurements. Body segments help the top sports persons perform in aid require for the particular performance. Accordingly the body segments have a significant place in the body field of sports activities and incorrect body proportion may lead to bad performance (Barry Johnson and K. Jack Nelson, 1988).

Human performance is a combination of many variables and one of them is the structure of body. All it can be said that in the light of the fast growing realization of the importance of the netball game and its contribution to the wellbeing and fitness of human in general performance in total sports and further development especially motor fitness and its components, anthropometric traits related to netball game. It is the right of the spirit to take up the study concerning relating with playing ability and anthropometric variables.

The purpose of the present study was to find out the relationship between anthropometric measurement and playing ability among Tamilnadu state women netball players.

### METHODOLOGY

To achieve this purpose of the study, seventy two women netball players from Ariyalur, Chennai, Cuddalore, Kanyakumari, Ma-

durai, Nagapattinam, Ramanathapuram Thiruvannamalai, Tiruchirapalli and Tirunelveli districts in Tamilnadu were selected as subjects. The age of the subjects were ranged between 18 to 24 years. Ariyalur, Tiruchirapalli, Nagapattinam, Chennai, Madurai, Thiruvannamalai, Tirunelveli, Kanyakumari, Ramanathapuram and Cuddalore districts netball players in Tamilnadu were selected as independent variables. The playing ability (Subjective rating), arm length (Length of arm in centimetres) and leg length (Length of leg in centimetres) was selected as dependent variables and tested. The collected data on dependent variables was tested by using Pearson product movement correlation to find the relationship between playing ability and selected dependent variables. The level of conference was fixed at 0.05.

### RESULTS

**TABLE**  
**MEAN, STANDARD DEVIATION AND 'r' VALUE BETWEEN ANTHROPOMETRIC MEASUREMENT AND PLAYING ABILITY AMONG DIFFERENT POSITIONS OF PLAY IN NETBALL**

Variable	Mean	SD	"r"
Arm length	73.91	3.99	0.08
Leg Length	85.26	3.74	0.16

The table value required for significance is 0.201 at .05 level of confidence

The above table shows that there was no significant relationship between anthropometric measurement and playing ability among

### DISCUSSION

These results were in line with anthropometric characteristics of netball players presented in some previous studies (Huang and Lu, 1991, Tian, 2006). Warren B. Young and Luke Pryor (2007) determined the relationships between selected anthropometric and fitness measures with indicators of performance in elite junior Australian football players. It was concluded that shorter and lighter players who possess high levels of speed and endurance are more likely to acquire possessions and be awarded votes, however these attributes do not guarantee team success. Further, It is established that body build plays an important role in achievements in many sport since it provides a basis for the formation and improvement of movement techniques, specific physical performance. The combination of somatometry and natural mechanical abilities of a volleyball player partly deter-

mines successful competition in volleyball (Papadopoulou et al., 2002). Hence, the above previous research supported the present result.

#### CONCLUSION

The present study concluded that there was no significant relationship between anthropometric variables (Arm Length and Leg Length) and netball playing ability of Tamilnadu state women's netball players.

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