



## COMPARATIVE ANALYSIS OF STRENGTH ENDURANCE AND AGILITY BETWEEN UNIVERSITY HOCKEY AND FOOTBALL PLAYERS

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### Abstract

The purpose of the study was to compare the selected physical fitness variables namely strength endurance and agility between university men hockey and football players. To achieve this purpose of the study, sixty men students studying master degree in the Department of Physical Education and Sports Sciences, Annamalai University were selected as subjects at random. The selected subjects were divided into two equal groups of thirty hockey players and thirty football players. Among the physical fitness components, the following variables namely strength endurance and agility were selected as criterion variables. All the subjects of two groups were tested on selected dependent variables by using standard tests. The independent 't' ratio was used to analyze the significant difference, if any between groups. The .05 level of confidence was fixed as the level of significance to test the 't' ratio obtained, which was considered as an appropriate.

**Keywords:** Strength Endurance, Agility, Hockey, Football.

### INTRODUCTION

Physical activities and sports serving as vehicles to achieve and maintain social relationship with other people. Sports for all becomes a very popular slogan all over the world today. The modern world is a world of competition. In every phase of life people have to face one or other kind of competition. In this competitive world sports and games occupy. The main aim of modern sports competition is to detect and develop human ability at an early stage of life and channelize it in the right direction to realize the achievements aimed at in particular sports and games.

### METHODOLOGY

The purpose of the study was to compare the selected physical fitness variables namely strength endurance and agility between university men hockey and football players. To achieve this purpose of the study, sixty men students studying master degree in the Department of Physical Education and Sports Sciences,

Annamalai University were selected as subjects at random. The selected subjects were divided into two equal groups of thirty hockey players and thirty football players. Among the physical fitness components, the following variables namely strength endurance and agility were selected as criterion variables. All the subjects of two groups were tested on selected dependent variables by using standard tests. The independent 't' ratio was used to analyze the significant difference, if any between groups. The .05 level of confidence was fixed as the level of significance to test the 't' ratio obtained, which was considered as an appropriate.

### ANALYSIS OF THE DATA STRENGTH ENDURANCE

The mean, standard deviation and 't' ratio values on strength endurance of hockey players and football players have been analyzed and presented in Table I.

**TABLE I**  
**THE MEAN, STANDARD DEVIATION AND ‘t’ RATIO VALUES BETWEEN HOCKEY AND FOOTBALL PLAYERS ON STRENGTH ENDURANCE**

Groups	Mean	Standard Deviation	‘t’ ratio value
Hockey Players	32.34	0.98	3.11*
Football Players	36.01	0.89	

\* Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence with df 58 was 2.002).

The table I shows that the mean values on strength endurance for hockey players and football players were 32.34 and 36.01 respectively. The obtained ‘t’ ratio value on strength endurance 3.11 which was greater than the table value required for significance with df 58 was 2.002. The results of the study showed that there was a significant difference between university

men hockey players and football players on strength endurance.

#### AGILITY

The mean, standard deviation and ‘t’ ratio values on agility of hockey players and football players have been analyzed and presented in Table II.

**TABLE II**  
**THE MEAN, STANDARD DEVIATION AND ‘t’ RATIO VALUES BETWEEN HOCKEY AND FOOTBALL PLAYERS ON AGILITY**

Groups	Mean	Standard Deviation	‘t’ ratio value
Hockey Players	12.08	0.78	3.98*
Football Players	11.06	0.89	

\* Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence with df 58 was 2.002).

The table II shows that the mean values on agility for hockey players and football players were 12.08 and 11.06 respectively. The obtained ‘t’ ratio value on agility 3.98 which was greater than the table value required for significance with df 58 was 2.002. The results of the study showed that there was a significant difference between university men hockey players and football players on agility.

#### CONCLUSIONS

1. There was a significant difference between hockey players and football players on strength endurance.
2. There was a significant difference between hockey players and football players on agility.

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