



A COMPARATIVE STUDY OF STRENGTH ENDURANCE AND AGILITY BETWEEN COLLEGE MEN HOCKEY AND FOOTBALL PLAYERS

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Abstract:

The purpose of the study was to compare the strength endurance and agility between college men hockey and football players. To achieve this purpose of the study, sixty men players studying in the AVVM Sri Pushpam College, Poondi, Thanjavur, Tamil Nadu, India were selected as subjects at random. Among them, thirty hockey players and thirty football players were selected. 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 bend knee sit ups and shuttle run. 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.

Key Words: Strength Endurance, Agility, College Men Hockey Players, Football Players

Introduction:

Strength endurance and agility are crucial physical attributes for both hockey and football players. These attributes not only enhance overall performance but also reduce the risk of injury. Both hockey and football require athletes to perform continuously for extended periods. Strength endurance ensures that players can maintain their physical abilities and strength throughout the entire duration of a match. In football, players often engage in physical battles, such as tackling and shielding the ball from opponents. In hockey, players need strength to maintain possession of the puck and to win physical battles along the boards. Strength endurance is vital for sustaining these efforts throughout the game.

In the closing stages of a match, fatigue sets in, and strength endurance becomes critical for maintaining speed, power, and accuracy in shooting, passing, and tackling. Fatigue can lead to poor form and increased risk of injury. Building strength endurance helps athletes maintain proper technique and reduce the likelihood of injuries caused by fatigue-related mistakes. Both hockey and football involve rapid changes in direction. Agility allows players to move quickly and efficiently, evade opponents, and change direction during plays. In football, defenders often need to react to the movements of attackers, while in hockey, defensemen must pivot and move swiftly to defend against offensive plays. Agility is crucial for effective defensive maneuvers.

Players in both sports need to handle the ball or puck with precision. Agility helps in dribbling, passing, and maintaining control while maneuvering through tight spaces. Agility allows players to react quickly to the ever-changing dynamics of the game, such as intercepting passes, making tackles, or positioning for shots on goal. Agile athletes are often better at avoiding collisions and injury by quickly adjusting their position or direction in response to potential threats on the field or ice. Agility training can also improve overall speed, as the ability to change direction rapidly is a key component of speed in both sports. Strength endurance and agility are fundamental attributes for hockey and football players. They not only improve athletic performance but also contribute to injury prevention. Training programs for these sports should incorporate exercises and drills that target these aspects of fitness to ensure that players are well-prepared for the physical demands of their respective games.

Methodology:

The purpose of the study was to compare the strength endurance and agility between college men hockey and football players. To achieve this purpose of the study, sixty men players studying in the AVVM Sri Pushpam College, Poondi, Thanjavur, Tamil Nadu, India were selected as subjects at random. Among them, thirty hockey players and thirty football players were selected. 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 bend knee sit ups and shuttle run. 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 1.

Table 1: 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	33.8	0.98	4.19*
Football Players	36.9	0.86	

* 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 1 shows that the mean values on strength endurance for hockey players and football players were 33.8 and 36.9 respectively. The obtained ‘t’ ratio value on strength endurance 4.19 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 college 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 2.

Table 2: The Mean, Standard Deviation and ‘t’ Ratio Values between Hockey and Football Players on Agility

Groups	Mean	Standard Deviation	‘t’ Ratio Value
Hockey Players	10.12	0.39	3.89*
Football Players	9.89	0.43	

* 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 2 shows that the mean values on agility for hockey players and football players were 10.12 and 9.89 respectively. The obtained ‘t’ ratio value on agility 3.89 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 college men hockey players and football players on agility.

Conclusion:

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

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