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Comparative study of strength between defenders and attackers of hockey players

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Abstract

The strength of the nation rests upon the health of its people to a large extent, on what is done to promote, improve and preserve the health, to be good man is the first requisite to success in life and to be a nation of healthy citizens is the first condition to national prosperity. Our educational process is useless without strong physique and good health. Long hours of work and sharpness of brain also depend of physical agility. The main purpose of the study is to find out the comparison of strength between defenders and attackers of hockey players. For this purpose 40 subjects were randomly selected 20 Attackers 20 Defenders. The administration of the tests will be done on each subject with a scientific manner for better results. Analysis of the data is done by the special statistical techniques viz. mean, standard deviation and 't' test. As per statistical analysis the level of significance is 0.05.

Keywords: Defenders, attackers, strength and hockey

Introduction

1. Attacker: A player whose job is to play the ball forward towards the opponent's goal area to create scoring opportunity.
2. Defenders: A defender is an outfield player whose primary role is to prevent the opposition from attacking.
3. Strength: The capacity to exert force against resistance".
4. Hockey: It is a sport in which two teams play against each other by trying to maneuver a ball or a puck into the opponent's goal using a hockey stick.

Methodology

Subjects For the present study 40 players from sports background especially hockey defenders and attackers of sports authority of India (Lucknow) were randomly selected to serve as subject. Data has been collected by different scientific equipments

S. No	Variables	Test
01	Grip Strength	Grip Dynamometer
02	Arm Strength	Pull-Ups
03	Leg Strength	Standing Broad Jump

Statistical Analysis

The data obtained from the responses given by the subjects by using standard equipments has been put in Microsoft Excel to develop Master Chart and then 't' test will be used for this statistical treatment. Further the level of significance was set at .05 levels.

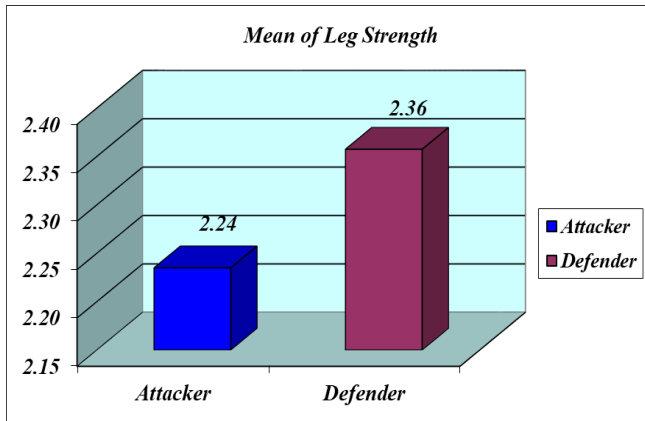
Findings

The findings of statistical treatment have been shown in the following tables.

Table 1: Comparison in leg strength between Attackers and defenders of hockey players

Game	Mean	S.D.	M.D.	S.E.	D.F.	O.T.	T.T.
Attackers	2.24	0.07	0.12	0.03	38	4.18	2.02
Defenders	2.36	0.11					

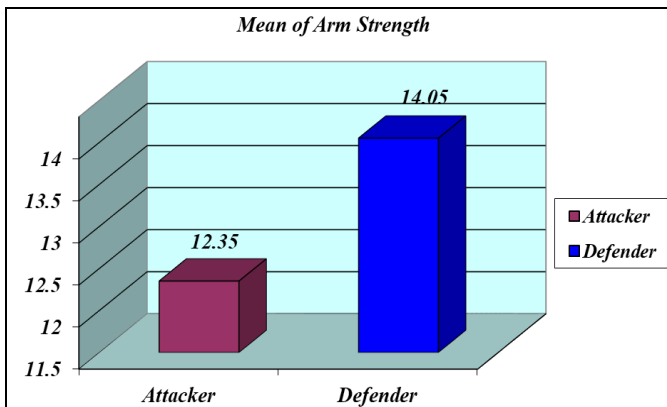
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Graph 1

Table 2: Comparison in Arm strength between Attackers and defenders of hockey players

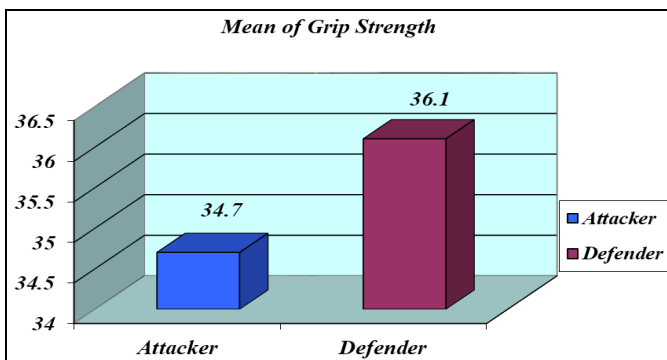
Game	Mean	S.D.	M.D.	S.E.	D.F.	O.T.	T.T.
Attackers	12.35	2.56	1.7	0.72	38	2.36	2.02
Defenders	14.05	1.96					



Graph 2

Table 3: Comparison in Grip strength between Attackers and defenders of hockey players

Game	Mean	S.D.	M.D.	S.E.	D.F.	O.T.	T.T.
Attackers	34.7	3.23	1.40	1.22	38	1.15	2.02
Defenders	36.1	4.40					



Graph 3

significant difference in selected strength components among attackers and defenders of hockey players. Therefore the hypothesis which the researcher has given is accepted.

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Discussion of Hypothesis

In the beginning of this study it was hypothesized that there might be significant difference in selected strength components among attackers and defenders of hockey players. In overall numerical and statistical analysis the comparison of selected strength components among attackers and defenders of hockey players, it is found that there is