

DIFFERENCES OF BODY HEIGHT & BODY WEIGHT IN MALE HOCKEY PLAYERS IN RELATION TO FIELD HOCKEY PLAYING POSITION



Physical Education

KEYWORDS : Body height, Body weight, Playing Position, Field Hockey

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ABSTRACT

The purpose of this study was to find out differences of body height & body weight in male hockey players in relation to playing position. 50 male hockey players who participated in enter university from Allahabad University those age between 18 to 28 years were selected as subjects for this study. The players were grouped as Goalkeeper, Right Fullback, Left Fullback, Left Half, Right Half, Center Half, Inside Right, Inside Left, Outside Right, Outside Left, Center forward. To determine differences between groups, the analysis of variance (ANOVA) was used. The level of significance was set at .05. It has been observed from the analysis of given data and interpretation of findings that no significant differences of body height & weight in relation to playing position was found among different male hockey players.

Introduction:

Field Hockey is a popular recreational or competitive sport enjoyed by many people of all ages and skill levels. However, for the future growth and success of Field Hockey, it is of primary importance that a large number of young people are attracted to it. The interest in Field Hockey should be encouraged for several reasons. One of them is the nature of Field Hockey movements, which bring together a great number of children and young people and this sport can solve problems of physical development, of certain forms of behavior, and problems of spiritual and moral values. The next step is selection itself as optimal way of selecting health, constitutional and other characteristics of the young people adapted to the needs of Field Hockey. Formation of one Field Hockey player is a long and complex process that implies quantitative and qualitative learning. One of the processes of becoming a Field Hockey player involves Field Hockey camps, where a review and training are done of all that a player has learned and mastered by then. In the camp the young Field Hockey players about fitnesses of a sport they have up to that point practiced through individual work with coaches (Field Hockey specialization), they also practice specific Field Hockey skills and get directions to improve the performance of the general elements of Field Hockey. There are some differences in morphological characteristics and that effective realization of the elements of the game are directly and indirectly affected by many factors from the area of anthropological status of the Field Hockey players. The task of this study is to explore and determine how much are male Field Hockey players different in body height & weight, depending on their position in the team. Unfortunately, the body of research addressing issues of anthropological status of male and female Field Hockey players is not deep. Any scientific study always strives to every "why" getting its "because", and starting this study we are determined to find our "because".

Methodology:

Fifty male hockey players who participated in enter university from Allahabad University those age between 18 to 28 years, were selected as subject for this study. Players were grouped as Goalkeeper, Right Fullback, Left Fullback, Left Half, Right Half, Center Half, Inside Right, Inside Left, Outside Right, Outside Left, Center forward. The body weight taken with help of weighing machine in grams and the body height measured through the stadiometer in the gymnasium of department of physical education university of Allahabad. Each test was interpreted in detail, and the subjects were familiar with the method, technique and conditions under which each is performed. Method of demonstration was used to help participants gain a general, visual idea of the actions that they need to do. To determine the body weight & height difference between the groups analysis of variance (ANOVA) test was used to compare the means of different groups. The level of significance was set at .05.

Results and Discussion:

The results were obtained based on the value of degrees of freedom $df_1 = 10$ and $df_2 = 44$ and the limit value of F-test. Those where (limit) value of F-test is greater or equal to 2.05[10] at the significance level of $p = 0.05$ were confirmed as significant.

Table -1

Analysis of variance of differences of body height in male hockey players in relation to playing position

Source of variability	Df	SS	MS	F-Ratio
Between groups	10	413.78	41.37	1.469
Within the groups	44	1239.06	28.16	
Total	54	1652.84		

$df_1 = 10$; $df_2 = 44$; $f = 2.05$; $p = 0.05$

Legend: SS – Sum of Squares; MS – Means Squares; df – Degree of Freedom; F – F test;

P-value – the significance level;

Table 1, in which body height variable was analyzed shows that the value of F-test is **1.469**, which is lower than the calculated limit. On this basis, it can be concluded that the differences between the groups for body height variable do not exist that are not statistically significant at tabulated F value (2.05) at (10, 44) degree of freedom and .05 level of significance.

Table -2

Analysis of variance of differences of body weight in male hockey players in relation to playing position

Source variability	Df	SS	MS	F-Ratio
Between groups	10	64.61648	6.461	1.202
Within the groups	44	236.4879	5.374	
Total	54	301.1044		

Table 2, in which body weight was analyzed, shows that the value of F-test is **1.202** and that it is lower than the calculated limit. On this basis it can be concluded that the differences between the groups in terms of body weight do not exist and that are not statistically significant at tabulated F value (2.05) at (10, 44) degree of freedom and .05 level of significance.

Conclusion:

The analysis of the data revealed that body height difference does not exist between the groups it is necessary, first, to talk about specific positions on hockey field. It has already been mentioned that modern hockey requires extremely physically fit and technically sound in all positions. This is not particularly desirable in the game at the field, and differences not found in relation to body height of male hockey players. In addition to the longitudinal dimension of the skeleton and body height as its biggest representation in the anthropometric characteristics, it is important to also emphasize body weight, girth measurements and body fat and body weight. Differences between the groups in terms of body weight do not exist because hockey is considered as the speed endurance game which required fast movement of the body so that players control their body weight for performing sudden body movement. Hockey players is not a weight categories competition and overweight restrict players to perform free skills because of this hockey players control body weight in proportion to height so that no significance differences is found in body weight of hockey players in relation to playing position.

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