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THE COMPARISON OF THE PHYSICAL CHARACTERISTICS AND PHYSICAL PERFORMANCE OF THE HIMACHAL PRADESH UNIVERSITY FOOTBALL PLAYERS IN RELATION TO THEIR PLAYING POSITIONS

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Abstract:- The purpose of the study was to find out the differences between the physical characteristics and physical performance of football players in relation to their playing positions. The study was confined to the 100 male football players who participated in inter college level tournament. The subjects has been taken from 25 teams ,who participated in Himachal Pradesh University inter college tournament. The subjects were selected randomly the four best players from the each participating team in respect to their playing positions. Comparison were made between and within the groups by using 'f' test and 't' test . The hypothesis for the present study is partially approved except to the strength component of physical performance in which only half line players have more strength than the players of other three groups i.e. goalkeepers, fullbacks and farwards. In the other variables there is no significance relationship between physical characteristics and physical performance of football players in relation to their playing positions.

Key Words: Football, Performance ,Body Composition, Physique, Anthropometeric Measurement ,Physical Characteristic, Morphology, Physical Ability, Age ,Height, Weight ,Skinfold, Skinfold Calliper, Circumference.

INTRODUCTION:

Games and sports are as old as human society and have achieved an universal following in the modern times. These have become integral part of educational process. Millions of people take part in sports activities for either recreational purposes or for health, strength and fitness and for displaying superiority over others in competition sports. Some competitive games and sports are taking shape of a profession with high skills, and with ample financial benefits linked with high degree of popularity.

The need for scientific approach to the problem of modern athletic training has been recognized for many years. It is imperative that a certain general body of knowledge is acquired before attempting to study the techniques and methods of improvement in training. It is essential, therefore, together date on the morphological and physiological responses of the participants to a general work task and during participation in different sports.

There is wealth of and empirical evidence to support the claim their body size differences among athletes in different sports and games, and among event within the same sport. The age, height, weight, and body size of national athletes are interest from several points of view. Chronological age of the top class athletes indicates the time at which peak performance might be expected. It is lower in case swimming and higher track and field and still higher in case of team games athletes. Peak performance age in a different sports disciplines is associated to the time to start sports training in a particular sport and time needed to develop the necessary physique and level of performance. With regards to weight, height and body size certain dimensions are necessary for success in selected events or sports. Heavier weight and huge body size are required to achieve optimum performance in some sports where as lighter and smaller physique is required to achieve optimum performance in some other sports.

The morphological characteristics of athletes are of interest to the sport scientists and coaches, as competitive sport demands the almost from the body. One method of describing human morphology is through somatotyping, which is a classification of total body form and shape expressed as a simple rating on continuous scales. In making evaluation of individual's physique the anthropometrists, measure height weight, length widths, circumferences of all body segments and

size of fat stores. These measure are reduce to an accurate index that conveys the athlete's potential of a given physique. The specific index comprising an individual's degree of fatness and muscularity is known as "somatotype".

The somatotype is a quantitative description of the present morphological conformation and composition of the body. It is expressed in three number rating that describes the body as a whole. The rating represents evaluation of the three components (endomorphy, Mesomorphy and ectomorphy) of the physique. Endomorphy refers to the relatively fatness of the physique.

The technique of somatotyping as a mean of assessing body shape and composition, independent of size, has been applied to the description of groups of outstanding international athletes. Somatotyping of the Olympic athletes began with Cureton (1951) who studied the swimmers and track and field athletes competing at the 1948, London Olympics. Subsequent somatotype were conducted on Olympic athletes by Tanner (1964) at the 1960. Rome Olympics deGray et. al. (1974) at the 1968 Mexico Olympic, Novak et al . (1974), at the Munich Olympics and Carter et. al. (1984 at 1976 Olympics games).

Physical fitness is state of body, which included the elements of Strength, Endurance, Speed, Flexibility and freedom from obesity. Physical fitness sometimes may be defined in term of capacity to do work. A player who possesses in games and sports. In other words a player who players and win the match without any fatigue is called physically fit. It varies from individual to individual. Recently more and more researchers are adding weight control or freedom from obesity as a component of physical fitness. Improvement of physical fitness status of player is prime objective of physical educator. Physical fitness is a unique responsibility of physical education shared by no other subject in curriculum.

Physical fitness is a measure of ability of one's body to function under the stress of physical and mental efforts. This ability reflect the condition of the body organs and system to work under the stress may run miles in less than four minutes. Some have so little that they take hours to do some. It became of variation of level of fitness.

Organic fitness is usually assessed through measurements of the cardio vascular system by means of blood pressure measurements , pulse rate and blood counts. There is an evaluation of response to physical stress. Respiratory efficiency has been evaluated in the part by measurement of expiratory force, breath holding and lung or vital capacity. These tests are now seldom used because functional respiratory efficiency can be measured more effectively through cardiovascular tests due to close relationship between cardiovascular and respiratory systems. Analysis of expired air is however, being made in physiology of exercise laboratories.

It is well known that a high percentage of fat in relation to the total body weight is detrimental and may lead to obesity. While the standards vary from one source to another, it generally believed that the normal per cent body fat for young men and women should not exceed 15 and 25 percent, respectively. Values over these are considered to the above normal and may lean towards obesity. Note that an individual may be overweight without necessarily being obese. It is well known that obesity is generally to note that research has shown that along with obesity comes an increase in the number of adipose cells appear to be more variable during the early years before reaching adulthood, whereas the size of the cells appear to be more variable during the adult stage.

Statement of the Problem

Objectives of the Study

The investigator has undertaken the following two-fold objectives for the present study:

1.To compare the relationship of Physical Characteristics of Football players in relation to their playing positions.
2.To compare the relationship of Physical Performance of Football players in relation to their playing positions.
3.The determine the differences in various physique, body composition and somatotype components between four positions in Football.
4.To investigate the differences in selected physical performance variables of football players in relation to their playing positions.

Delimitation of Problem

1.The study has been delimited to the Himachal Pradesh University Football Players, who participated in the Inter- College Level Competition organized by the Himachal Pradesh University, were taken as subjects.
2.The study was further delimited to the 100 football players only between the age group of 17 to 25 years.
3.The study was further delimited to the male football players of Himachal Pradesh University playing in different playing positions in the game of football.
4.The study was further delimited to the following variables of physical characteristics measurements:

i)Age
ii) Weight
iii) Height
iv) Thigh Circumference
v) Upper Arm Circumference
vi) Biceps Skinfold
vii) Triceps Skinfold
viii) Subscapula Skinfold

ix) Suprailiac Skinfold
x) Biceps Fat %age
xi) Triceps Fat %age
xii) Subscapula Fat %age
xiii) Suprailiac Fat %age

5.The study was also restricted to the following variables of physical performance measures:

i)30 mt. Sprint
ii) Chin-ups (H.B.)
iii) Bench Press
vi) Vertical Jump
v) Dips on Parallel Bar

Limitations of the Problem

1. Non-Availability of sophisticated instruments.
2. Nutrition and Socio-Economic Status of players might gave differed.
3. If there is any difference in performance due to different climatic conditions that will also considered as a limitation of study.
4. The participation of subject in other activities might have affected the performance of the study.

Hypothesis of the Problem

It is hypothesized that there is a non-significant relationship between physical characteristic and physical performance measures of the football players in relation to their positions.

Significance of the Study

The present study will be significant in the following manner :

1. The study will show the relationship of the physical characteristic and physical performance measures or physical ability of football players in relation to their playing positions which will help the Coaches and Physical Education Teachers.
2. Keeping in mind the morphological characteristic and physical abilities of the players the coach can improve the performance of the players.
3. The study might also help the football players to understanding their potentiality.
4. The study would be helpful to coach or the physical education teacher in the selection of the players.
5. The findings might act as guide in the physical education teacher or coach to select individual who are more suitable towards the particular position according to their physical characteristics.

SELECTION OF THE SUBJECTS

The study was confined to the 100 male football players who participated in inter-college level tournament. The investigator has taken 25 terms who participated in Himachal Pradesh University Inter-College Tournament being held at Mandi on 15th to 19th November, 2003, Only 25 teams were participated in the tournament. The investigator has selected randomly the four best players form the each participating team I n respect to their playing positions.

The position-wise detail for data collection has been given in Table 3.1

Table 3.1 : Position –Wise Detail for Fata Collection

Sr.No.	Name of Position	Number of Teams Participated	Number of Players Selected form each team	Total Number of Players
1.	Goal Keeper	25	01	25
2.	Full-back	25	01	25
3.	Half	25	01	25
4.	Forward	25	01	25
	Total		04	100

Selection of Variables

The researcher thoroughly go to the available scientific literature related to the study through magazines, journals and physical education professionals Keeping in view the relevance of the variables for the present study (Feasibility Criteria), the following variables were selected for the present study.

Physical Characteristics Variables

i) Age
ii) Weight
iii) Height
iv) Thigh Circumference
v) Upper Arm Circumference
vi) Biceps Skinfold
vii) Triceps Skinfold
viii) Subscapula Skinfold
ix) Suprailiac Skinfold
x) Biceps Fat %age
xi) Triceps Fat %age
xii) Subscapula Fat %age
xiii) Suprailiac Fat %age

Physical Performance Variables

i) 30 mt. Sprint
ii) Chin-ups (H.B.)
iii) Bench Press
iv) Vertical Jump
v) Dips on Parallel Bar

Collection of Data

The investigator had taken the subjects group-wise for the administration of test items. Before going to the administration of test items the investigator explain and demonstrate each of the test items in front of the subjects. The investigator satisfied the quarries raised by the subjects in regard to the test items. The tests were conducted in the morning before the start of the tournament and in the evening after the tournament.
After administering the test items the investigator measured the physical characteristics of the subjects.

Statistical Methods

The following statistical methods and formula were used for the analysis of the raw data.

1. $F = \frac{MS^{bet}}{MS^{within}}$

$MSbet = \frac{SS^{bet}}{DF^{bet}}$

$MSwithin = \frac{SS^{within}}{DF^{within}}$

F = F ratio
MS bet = between group mean square
MSwithin = within group means square
SSbet = between sum of square
SSwithin = within group sum of square
SStotal = total sum of square
t = X
= t ratio
SD = Standard devision
SD = Standard error of one difference between means

3. $Fat\% = \frac{\text{Weight X Percentage Value of Fat}}{100}$

ANALYSIS AND INTERPRETATION OF DATA

Age in Relation to Playing Position of Football Players

Table 4.1 presents the results of analysis of variance for age in relation to playing position of players.

Source	df	Sum of Squares	Mean Sum of Squares	F-Value
Among the Groups	03	7.48	2.49	1.56
Within the Groups	96	153.28	1.59	
Total	99	160.76		

It is evident from Table 4.1 that F-value came out to be 1.56, which is not significant at 0.05 level of significance. This indicates that the four groups of football players playing in different positions i.e. Goalkeepers, Fullbacks, Halves and Forwards do not differ significantly with respect to their Age. From this it may be said that the football players playing in different positions are more or less of the same Age group.

Body Weight in Relation to Playing Position of Football Players

Table 4.2 presents the results of analysis of variance for body weight in relation to playing position of players.

Source	df	Sum of Squares	Mean Sum of Squares	F-Value
Among the Groups	03	86.83	28.94	0.67
Within the Groups	96	4136.08	43.08	
Total	99	4222.91		

It is evident from Table 4.2 that F-value came out to be 0.67, which is not significant at 0.05 level of significance. This indicates that the four groups of football players playing in different position i.e. Goalkeepers, Fullbaks, Halves and Forwards do not differ significantly with respect to their body Weight. From this it may be said that the football players playing in different positions possess more or less similar body Weight.

Height in Relation to Playing Position of Football

Table 4.3 presents the results of analysis of variance for height in relation to playing position of player.

Source	df	Sum of Squares	Mean Sum of Squares	F-Value
Among the Groups	03	1183082.19	394360.73	0.99
Within the Groups	96	3802052.56	396375.54	
Total	99	39235134.75		

It is evident from Table 4.3 that F-value came out to be 0.99, which is not significant at 0.05 level of significance. This indicates that the four groups of football players playing in different positions i.e. Goalkeepers, Fullbacks, Halves and Forwards do not differ significantly with respect to their Height. From this it may be said that the football players playing in different positions have more or less same Height.

Thigh Circumference in Relation to Playing Position of Football Players

Table 4.4 presents the results of analysis of variance for thigh circumference in relation to playing position of players.

Source	df	Sum of Squares	Mean Sum of Squares	F-Value
Among the Groups	03	2.47	0.82	0.62
Within the Groups	96	126.25	1.31	
Total	99	128.73		

It is evident from Table 4.4 that F-value came out to be 0.62, which is not significant at 0.05 level of significance. This indicates that the four groups of football players playing in different positions i.e. Goalkeepers, Fullbacks, Halves and Forwards do not differ significantly with respect to their Thigh Circumference. From this it may be said that the football players playing in different positions possess more or less same Thigh Circumference.

Upper Arm Circumference in Relation to Playing Position of Football Players

Table 4.5 presents the results of analysis of variance for Upper Arm circumference in relation to playing position of players.

Source	df	Sum of Squares	Mean Sum of Squares	F-Value
Among the Groups	03	0.88	0.29	0.48
Within the Groups	96	58.72	0.61	
Total	99	59.61		

It is evident from Table 4.5 that F-value came out to be 0.48, which is not significant at 0.05 level of significance. This indicates that the four groups of football players playing in different positions i.e. Goalkeepers, Fullbacks, Halves and Forwards do not differ significantly with respect to their Upper arm Circumference. From this it may be said that the football players playing in different positions possess more or less same Upper Arm Circumference.

1.2 Biceps Skinfold in Relation to Playing Position of Football Players

Table 4.6 presents the results of analysis of variance for Biceps Skinfold in relation to playing position of players.

Source	df	Sum of Squares	Mean Sum of Squares	F-Value
Among the Groups	03	11.07	3.69	0.81
Within the Groups	96	435.12	4.53	
Total	99	446.19		

It is evident from Table 4.6 that F-value came out to be 0.81, which is not significant at 0.05 level of significance. This indicates that the four groups of football players playing in different positions i.e. Goalkeepers, Fullbacks, Halves and Forwards do not differ significantly with respect to their Biceps Skinfold. From this it may be said that the football players playing in different positions possess more or less same Biceps Skinfold.

1.3 Triceps Skinfold in Relation to Playing Position of Football Players

Table 4.7 presents the results of analysis of variance for Triceps skinfold in relation to playing position of players.

Source	df	Sum of Squares	Mean Sum of Squares	F-Value
Among the Groups	03	10.59	3.53	0.94
Within the Groups	96	259.20	3.75	
Total	99	369.79		

It is evident from Table 4.7 that F-value came out to be 0.94, which is not significant at 0.05 level of significance. This indicates that the four groups of football players playing in different positions i.e. Goalkeepers, Fullbacks, Halves and Forwards do not differ significantly with respect to their Triceps Skinfold. From this it may be said that the football players playing in different positions possess more or less same Triceps Skinfold.

1.4 Suprailiac Skinfold in Relation to Playing Position of Football Players

Table 4.8 presents the results of analysis of variance for Suprailiac Skinfold in relation to playing position of players.

Source	df	Sum of Squares	Mean Sum of Squares	F-Value
Among the Groups	03	11.39	3.79	0.30
Within the Groups	96	1185.60	12.35	
Total	99	1196.99		

It is evident from Table 4.8 that F-value came out to be 0.30, which is not significant at 0.05 level of significance. This indicates that the four groups of football players playing in different positions i.e. Goalkeepers, Fullbacks, Halves and Forwards do not differ significantly with respect to their Suprailiac Skinfold. From this it may be said that the football players playing in different positions possess more or less same Suprailiac Skinfold.

1. 5 Subscapula Skinfold in Relation to Playing Position of Football Players

Table 4.9 presents the results of analysis of variance for Subscapula Skinfold in relation to playing position of players.

Source	df	Sum of Squares	Mean Sum of Squares	F-Value
Among the Groups	03	21.04	7.01	0.57
Within the Groups	96	1166.80	12.15	
Total	99	1187.84		

It is evident from Table 4.6 that F-value came out to be 0.57, which is not significant at 0.05 level of significance. This indicates that the four groups of football players playing in different positions i.e. Goalkeepers, Fullbacks, Halves and Forwards do not differ significantly with respect to their Subscapula Skinfold. From this it may be said that the football players playing in different positions possess more or less same Subscapula Skinfold.

1.6 Biceps Fat Percentage in Relation to Playing Position of Football Players

Table 4.10 presents the results of analysis of variance for Biceps Fat Percentage in relation to playing position of players.

Source	df	Sum of Squares	Mean Sum of Squares	F-Value
Among the Groups	03	5.82	1.94	0.78
Within the Groups	96	238.80	2.48	
Total	99	244.62		

It is evident from Table 4.10 that F-value came out to be 0.78, which is not significant at 0.05 level of significance. This indicates that the four groups of football players playing in different positions i.e. Goalkeepers, Fullbacks, Halves and Forwards do not differ significantly with respect to their Biceps Fat Percentage. From this it may be said that the football players playing in different positions possess more or less same Biceps Fat Percentage.

1.7 Triceps Fat Percentage in Relation to Playing Position of Football Players

Table 4.11 presents the results of analysis of variance for Triceps Fat Percentage in relation to playing position of players.

Source	df	Sum of Squares	Mean Sum of Squares	F-Value
Among the Groups	03	5.61	1.87	0.88
Within the Groups	96	202.72	2.11	
Total	99	208.33		

It is evident from Table 4.11 that F-value came out to be 0.88, which is not significant at 0.05 level of significance. This indicates that the four groups of football players playing in different positions i.e. Goalkeepers, Fullbacks, Halves and Forwards do not differ significantly with respect to their Triceps Fat Percentage. From this it may be said that the football players playing in different positions possess more or less same Triceps Fat Percentage.

1.8 Subscapula Fat Percentage in Relation to Playing Position of Football Players

Table 4.12 presents the results of analysis of variance for Subscapula Fat Percentage in relation to playing position of players.

Source	df	Sum of Squares	Mean Sum of Squares	F-Value
Among the Groups	03	8.83	2.94	0.38
Within the Groups	96	734.25	7.64	
Total	99	743.09		

It is evident from Table 4.12 that F-value came out to be 0.38, which is not significant at 0.05 level of significance. This indicates that the four groups of football players playing in different positions i.e. Goalkeepers, Fullbacks, Halves and Forwards do not differ significantly with respect to their Subscapula Fat Percentage. From this it may be said that the football players playing in different positions possess more or less same Subscapula Fat Percentage.

1.9 Suprailiac Fat Percentage in Relation to Playing Position of Football Players

Table 4.13 presents the results of analysis of variance for Suprailiac Fat Percentage in relation to playing position of players.

Source	df	Sum of Squares	Mean Sum of Squares	F-Value
Among the Groups	03	9.26	3.08	0.45
Within the Groups	96	649.49	6.76	
Total	99	658.75		

It is evident from Table 4.13 that F-value came out to be 0.45, which is not significant at 0.05 level of significance. This indicates that the four groups of football players playing in different positions i.e. Goalkeepers, Fullbacks, Halves and Forwards do not differ significantly with respect to their Suprailiac Fat Percentage. From this it may be said that the football players playing in different positions possess more or less same Suprailiac Fat Percentage.

1.10 30 Meter Sprint in Relation to Playing Position of Football Players

Table 4.14 presents the results of analysis of variance for 30 Meter Sprint in relation to playing position of players.

Source	df	Sum of Squares	Mean Sum of Squares	F-Value
Among the Groups	03	0.26	0.08	0.74
Within the Groups	96	11.10	0.11	
Total	99	11.36		

It is evident from Table 4.14 that F-value came out to be 0.74, which is not significant at 0.05 level of significance. This indicates that the four groups of football players playing in different positions i.e. Goalkeepers, Fullbacks, Halves and Forwards do not differ significantly with respect to their 30 Meter Sprint. From this it may be said that the football players playing in different positions possess more or less same 30 Meter Sprint.

1. 11 Dips on Parallel Bars in Relation to Playing Position of Football Players

Table 4.15 presents the results of analysis of variance for Dips on Parallel Bars in relation to playing position of players.

Source	df	Sum of Squares	Mean Sum of Squares	F-Value
Among the Groups	03	4.88	1.62	1.26
Within the Groups	96	123.12	1.28	
Total	99	128.00		

It is evident from Table 4.15 that F-value came out to be 1.26, which is not significant at 0.05 level of significance. This indicates that the four groups of football players playing in different positions i.e. Goalkeepers, Fullbacks, Halves and Forwards do not differ significantly with respect to their Dips on Parallel Bars. From this it may be said that the football players playing in different positions possess more or less same Dips on Parallel Bars.

1.12 Chin-ups in Relation to Playing Position of Football Players

Table 4.16 presents the results of analysis of variance for Chin-ups in relation to playing position of players.

Source	df	Sum of Squares	Mean Sum of Squares	F-Value
Among the Groups	03	8.44	2.81	1.15
Within the Groups	96	234.72	2.44	
Total	99	243.16		

It is evident from Table 4.16 that F-value came out to be 1.15, which is not significant at 0.05 level of significance. This indicates that the four groups of football players playing in different positions i.e. Goalkeepers, Fullbacks, Halves and Forwards do not differ significantly with respect to their Chin-ups. From this it may be said that the football players playing in different positions possess more or less same Chin-ups.

1.13 Vertical Jump in Relation to Playing Position of Football Players

Table 4.17 presents the results of analysis of variance for Vertical Jump in relation to playing position of players.

Source	df	Sum of Squares	Mean Sum of Squares	F-Value
Among the Groups	03	26640.08	8880.02	0.88
Within the Groups	96	966409.92	10066.77	
Total	99	993050.00		

It is evident from Table 4.17 that F-value came out to be 0.88, which is not significant at 0.05 level of significance. This indicates that the four groups of football players playing in different positions i.e. Goalkeepers, Fullbacks, Halves and Forwards do not differ significantly with respect to their Vertical Jump. From this it may be said that the football players playing in different positions possess more or less same Vertical Jump.

1.14 Bench Press in Relation to Playing Position of Football Players

Table 4.18 presents the results of analysis of variance for Bench Press in relation to playing position of players.

Source	df	Sum of Squares	Mean Sum of Squares	F-Value
Among the Groups	03	27.32	9.10	5.51
Within the Groups	96	158.64	1.65	
Total	99	185.96		

0.01 Level of Significance. F> 4.00

It is evident from Table 4.18. that F-value came out to be 5.51, which is not significant at 0.01 level of significance. This indicates that the four groups of football players playing in different positions i.e. Goalkeepers, Fullbacks, Halves and Forwards do not differ significantly with respect to their Bench press.

1.15 t-Test to Study the Mean Differences on the Variable of Bench Press for Four of Players

The results of t-test to study the mean differences on the variable of bench press for four groups of players are given below.

A.Goalkeepers Vs Fullbacks

Table 4.19 presents the number of subjects, means, standard deviations, standard error of means and t-value for two groups of players on the variable of Bench Press.

Table 4.19: The Number of Subjects, Means, Standard Deviations, Standard Error of Means and t-Value for Two Groups of Players on the Variable of Bench Press.

Group	N	M	SD	SE_M	t-Value
Goalkeepers	25	5.72	1.10	0.22	0.24
Fullbacks	25	5.64	1.25	0.25	

It is revealed from Table 4.19 that t-value came out to be 0.24, which is not significant at 0.05 level of confidence. This indicates that the two groups of players do not differ significantly on the variable of Bench Press. From this it may be said that Goalkeepers and Fullbacks exhibit more or less same level of proficiency with respect to Bench Press.

B.Goalkeepers Vs Halves

Table 4.20 presents the number of subjects, means, standard deviations, standard error of means and t-value for two groups of players on the variable of Bench Press.

Table 4.20: The Number of Subjects, Means, Standard Deviations, Standard Error of Means and t-Value for Two Groups of Players on the Variable of Bench Press.

Group	N	M	SD	SE_M	t-Value
Goalkeepers	25	5.72	1.10	0.22	3.12*
Halves	25	6.92	1.58	0.32	

* Significant at 0.01 level of confidence. T > 2.66

It is revealed from Table 4.20 that t-value came out to be 3.12, which is significant at 0.01 level of confidence. This indicates that the two groups of players differ significantly on the variable of Bench Press. Further, since the mean score for Halves (6.92) is higher in comparison to Goalkeeper (5.72), it may be interpreted that Halves exhibit higher proficiency in Bench Press in comparison to their Goalkeeper counterparts.

C.Goalkeepers Vs Forwards

Table 4.21 presents the number of subjects, means, standard deviations, standard error of means and t-value for two groups of players on the variable of Bench Press.

Group	N	M	SD	SE_M	t-Value
Goalkeepers	25	5.72	1.10	0.22	0.25
Forwards	25	5.80	1.15	0.23	

It is revealed from Table 4.21 that t-value came out to be 0.25, which is not significant at 0.05 level of confidence. This indicates that the two groups of players do not differ significantly on the variable of Bench Press. From this it may be said that Goalkeepers and Forwards exhibit more or less same level of proficiency with respect to Bench Press.

D.Fullbacks Vs Halves

Table 4.22 presents the number of subjects, means, standard deviations, standard error of means and t-value for two groups of players on the variable of Bench Press.

Group	N	M	SD	SE_M	t-Value
Fullbacks	25	5.64	1.25	0.25	3.17*
Halves	25	6.92	1.58	0.32	

* Significant at 0.01 level of confidence. T > 2.66

It is revealed from Table 4.22 that t-value came out to be 3.17, which is significant at 0.01 level of confidence. This indicates that the two groups of players differ significantly on the variable of Bench Press. Further, since the mean score for Halves (6.92) is higher in comparison to fullbacks (5.64), it may be interpreted that Halves exhibit higher proficiency in Bench

Press in comparison to their Fullbacks counterparts.

E.Fullbacks Vs Forwards

Table 4.23 presents the number of subjects, means, standard deviations, standard error of means and t-value for two groups of players on the variable of Bench Press.

Group	N	M	SD	SE_M	t-Value
Fullbacks	25	5.64	1.25	0.25	0.47
Forwards	25	5.80	1.15	0.23	

It is revealed from Table 4.23 that t-value came out to be 0.47, which is not significant at 0.05 level of confidence. This indicates that the two groups of players do not differ significantly on the variable of Bench Press. From this it may be said that Fullbacks and Forwards exhibit more or less same level of proficiency with respect to Bench Press.

F.Halves Vs Forwards

Table 4.24 presents the number of subjects, means, standard deviations, standard error of means and t-value for two groups of players on the variable of Bench Press.

Group	N	M	SD	SE_M	t-Value
Halves	25	6.92	1.58	0.32	2.86*
Forwards	25	5.80	1.15	0.23	

* Significant at 0.01 level of confidence. T > 2.66

It is revealed from Table 4.24 that t-value came out to be 2.86, which is significant at 0.01 level of confidence. This indicates that the two groups of players differ significantly on the variable of Bench Press. Further, since the mean score for Halves (6.92) is higher in comparison to Forwards (5.80), it may be interpreted that Halves exhibit higher proficiency in Bench Press in comparison to their Forwards counterparts.

DISCUSSION OF FINDINGS

The results obtained within one limitation of the study as for the finding one way ANOVA has show non-significant difference in age, height, weight, thigh circumference, upper arm circumference, biceps skinfold, triceps skinfold, supscapula skinfold, suprailiac skinfold, biceps fat percentages, triceps, fat percentage, subscapula fat percentage, suprailic fat percentage, 30 meter sprint, chin ups, dips on parallel bar, and vertical jump tests among one forward line player, one half line player, one back line player and one goal-keeper, from each team. Whereas significant difference is observed in bench press variable among these four groups.

The results of the present investigator clearly indicates that the sample teams have under gone the same type of conditioning programme and the same type of criteria has been adopted by the team coaches or lectures of physical education for the selection of the college teams. This may be possible that they have taken into consideration height, weight criteria for the selection of the teams which is prevalent in the game of football.

The difference in the strength aspect of the physical performance is observed which that half line players have more strength than the goalkeepers again the half line players have more strength than the fullbacks again when half line players are compared with forward line players. The half line players have better strength than forward line players. It clearly indicates that the half line players have more strength than the other groups of players i.e. goalkeepers, fullbacks, and forwards.

DISCUSSION OF HYPOTHESIS

The hypothesis for the present study is partially approved except to the strength component of physical performance in which only half line players have more strength than the players of other three groups i.e. goalkeepers, fullbacks and forwards. In the other variables no-significant relationship between physical characteristics and physicals performance of

football players in relation to their playing positions.

CONCLUSIONS

On the basis of findings and within the limitations of the following conclusion were drawn:

1.There was no-significance difference in relation to the playing positions of the football players in respect to their age, height, weight, thigh circumference, upper, arm circumference.
2.There was no-significance difference in relation to playing positions of the football players in respect of the variables of physical performance i.e. 30 meter sprint, chin-ups and vertical jump.
3.In the component of strength variables of physical performance the half line players are possess more strength than the other players playing at different positions i.e. goal keepers, fullbacks, and forward line players.

RECOMMENDATIONS

Taking into consideration the findings of the present study the following recommendations are made:

1.Similar type of study may be carried out on women football players.
2.A similar kind of study may be conducted on school level players of football.
3.A similar type of study may be conducted on State level players.
4.A similar study may be undertaken by employing objects of high level of participation i.e. National, Inter-National.
5.A similar kind of study may be conducted by selecting other games.

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