

Comparative Study of Physical Fitness Components of Shooter and Football Players

^aJaswinder Singh, ^bNeelam Paul

^aResearch scholar Panjab university Chandigarh, India

^bAssistant Professor, Govt. Education college 20 Sector Chandigarh, India

Abstract

Physical fitness it is recognized that the various of fitness are closely interrelated, for purposes of discussion physical fitness is dealt with separately because of its close relationship to our professional field of endeavor. The purpose of the study was to compare the study of physical fitness components between inter college level shooter and football players components (Abdominal Strength, Shoulder Strength, Body Fat, Cardio-respiratory Endurance and Flexibility) among Inter-University level shooter and football players. For this purpose, total number of 30 players (15 shooter(Air Pistol Men) and 15 football players Men) were selected. Their age ranged between 18 to 26 years. The selected variables were assessed using sit-ups, push –up, skin fold, 1 mile run, sit and reach test. To determine the significant differences of physical fitness components between Inter-college level shooter and football players, unpaired t-test was employed for data analyses. To test the hypothesis, the level of significance was set at 0.05. The result showed that there were insignificant differences in all the selected physical fitness components among Shooter and Football players.

KEYWORDS: Abdominal Strength, Shoulder Strength, Body Fat, Cardio-respiratory Endurance and Flexibility.

Brief Introduction

The Shooter and Football players need to prepare various components of fitness. Thus, the athlete will Concurrently perform various fitness training (e.g., Muscular Strength, Muscular Endurance, Body Fat, Cardio-respiratory Endurance and Flexibility). (Lawson 2001). Physical fitness is a general state of health and well-being and, more specifically, the ability to perform aspects of sports or occupations. Physical fitness is generally achieved through correct nutrition, exercise and rest. It is a set of attributes or characteristics seen in people and which relate to the ability to perform a given set of physical activities. Physical fitness is the capacity of heart, blood vessels, lungs and muscles to function at optimum efficiency. In previous years, fitness was defined as the capacity to carry out the day's activities undue fatigue. Physical fitness is now defined as the body's ability to function efficiently and effectively in work and leisure activities, to resist hypo kinetic diseases, and to meet the emergency situations (Corbin and Lindsey,1994). Fitness concepts in elementary physical education center on children's understanding of fitness as good health, and a working knowledge of activities that promote a healthy level of fitness. However, with increased leisure time, and changes in life styles wrought by the industrial revolution, which took a large proportion of the population away from farm life and into more urban areas, this definition is no longer considered comprehensive enough. The definition for physical fitness is now defined as the body's ability to function efficiently and effectively in work and leisure activities, not only at a set point in time, but at various ages and stages within a person's life cycle. The key is in finding optimum health within the limits of one's lifestyle, in order to be able to

resist hypo kinetic diseases. The purpose of this study was to compare the physical fitness of boxing and wrestling players of Chandigarh City

SELECTION OF SUBJECTS

For the purpose of the present study, thirty (N=30), Male Inter-college Level Shooter(Air Pistol Men) and football(Men) players between the age group of 18-26 years were selected. The purposive sampling technique was used to attain the objectives of the study. All the subjects were further divided into two groups of 15 each (i.e., N1=15; Shooters and N2=15; Football players).

Selection Of Variables

A feasibility analysis as to which of the variables could be taken up for the investigation, keeping in view the availability of tools, adequacy to the subjects and the legitimate time that could be devoted for tests and to keep the entire study unitary and integrated was made in consultation with experts. With the above criteria in mind, the following variables were selected for the present study:

Health Related Components:

- i. Abdominal Strength
- ii. Shoulder Strength
- iii. Body Fat
- iv. Cardio-respiratory Endurance
- v. Flexibility

Statistical Technique Employed

To determine the significant differences of Physical Fitness Components between Inter-college level Shooter and Football players, unpaired t-test was employed for data analyses. To test the hypothesis, the level of significance was set at 0.05.

RESULTS

The results of Physical Fitness Components Inter-college level Shooter and Football players are presented in the following tables and their interpretations are given accordingly. Graphical representation of each variable is also presented for mean comparison. Further discussion of finding is initiated for better understanding of results.

Table-1

Significant Differences in the Mean Scores of State of Health Related Physical Fitness Components of Shooting and Football Players

Variables		Mean \pm SD	t-value	P-value
Abdominal Strength	Shooter	15.36 \pm 1.15	2.2930	0.0296
	Footballer	16.29 \pm 1.07		
Shoulder Strength	Shooter	26.21 \pm 2.12	1.1810	0.2475
	Footballer	27.07 \pm 1.86		
Body Fat	Shooter	95.86 \pm 2.32	2.8586	0.0079
	Footballer	93.57 \pm 2.06		
Cardio	Shooter	1.520 \pm 0.04	0.7746	0.4451

respiratory Endurance	Footballer	1.510±0.03		
Flexibility	Shooter	12.36±1.69	3.9224	0.0005
	Footballer	14.71±1.59		

***Significant at 0.05 level, t.05 (28)**

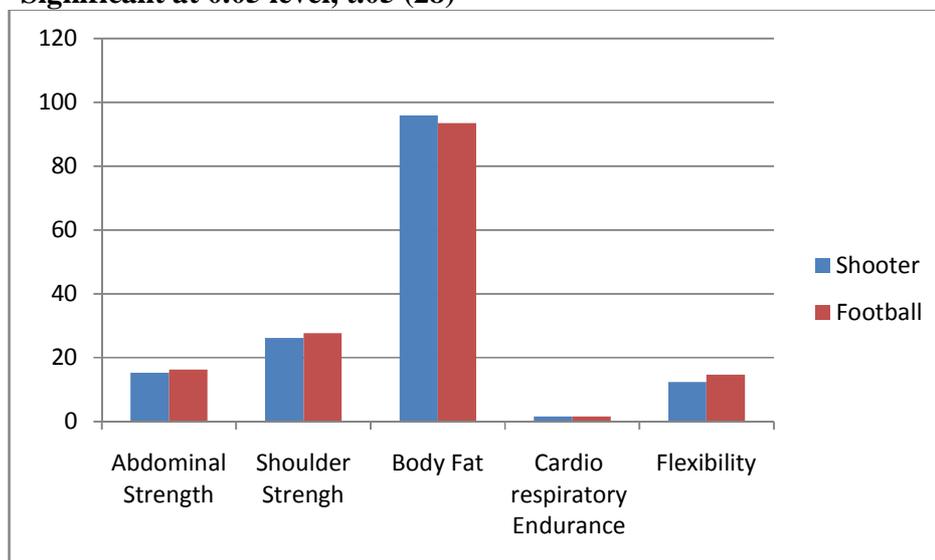


Figure: 1
Graphical Representations in the Mean Scores of Inter-College Level Shooter and Football Players on the Variables of Health Related Physical Fitness Components

Abdominal Strength

A glance at table-1 shows the results of Inter-college Level Shooter and Football Players with regard to health related physical fitness components. The descriptive statics shows the Mean and SD values of Shooter on the variables of Abdominal Strength as 15.36 and 1.15 respectively. However Football Players had Mean and SD values as 16.29 and 1.07 respectively. The ‘t’-value 2.2930 as shown in the table above was found statistically insignificant (P>.05). It has been observed from the above results that Inter-college Level Football Players have demonstrated better on the variable Abdominal Strength than the Inter-college Level Shooters.

Shoulder Strength

The descriptive statistics shows the Mean and SD values of shooter on the variable of Shoulder Strength as 26.21 and 2.12 respectively. However, Football Players had Mean and SD values as 27.07 and 1.86 respectively The ‘t’-value 1.1810 as shown in the table above was found statistically insignificant (p>0.05). It has been observed from the above results that Inter-college Level Football Players have demonstrated better on the variable Muscular Strength than the the Inter-college Level Shooters. though insignificantly.

Body Fat

The descriptive statistics shows the Mean and SD values of shooter on the variable of Body fat as 95.86 and 2.32 respectively. However, Football Players had Mean and SD values as 93.57 and 2.06 respectively The ‘t’-value 2.8586 as shown in the table above

was found statistically insignificant ($p > 0.05$). It has been observed from the above results that Inter-college Level Football Players have demonstrated better on the variable Muscular Endurance than the Inter-college Level Shooters. Though insignificantly.

Cardio-respiratory Endurance

The descriptive statistics shows the Mean and SD values of shooter on the variable of Shoulder Strength as 1.520 and 1.69 respectively. However, football Players had Mean and SD values as 1.510 and 0.03 respectively The 't'-value **0.7746** as shown in the table above was found statistically insignificant ($p > 0.05$). It has been observed from the above results that Inter-college Level Football Players have demonstrated better on the Cardio-respiratory Endurance than the Inter-college Level Shooters though insignificantly.

Flexibility

The descriptive statistics shows the Mean and SD values of shooter on the variable of Shoulder Strength as 12.36 and 0.04 respectively. However, Football Players had Mean and SD values as 14.71 and 1.59 respectively The 't'-value **3.9224** as shown in the table above was found statistically insignificant ($p > 0.05$). It has been observed from the above results that Inter-college Level Football Players have demonstrated better on the Flexibility than the Inter-college Level Shooters though insignificantly.

Conclusions of the Study

Based on the findings of this study, the following conclusions were drawn: To conclude, it is significant to mention in relation to Physical Fitness Components that insignificant differences occur between Inter-College Level Shooter and Football Players on the sub variable i.e., Abdominal Strength, Shoulder Strength, Body Fat, Cardio-respiratory Endurance and Flexibility..Football players is better than Shooters in comparing the physical fitness components results.

REFERENCES

1. Lawson, E. (2001). Incorporating sports-specific drills into conditioning. In B. Foran (Ed.), High performance sports conditioning (pp. 215-266). Champaign, IL: Human Kinetics.
2. President's Council on Physical Fitness and Sports Definitions for Health, Fitness, and Physical Activity. Patel, M. M., & Datta, N. K. A Review on Selected Physical and Physiological Components of Inter Collegiate Kabaddi and Kho-Kho Players.
3. Kumar, S., Singh, S., Gore, R. S., & Dhotre, B. (2011). A Comparative Study on Selected Psycho Physical Fitness Components of Kabaddi and Kho Kho Players of Delhi Schools. International Journal of Research
4. Gole, Y. A. (1978). Handbook on Kho-Kho. Maharashtra State Kabaddi Association.
5. Rao, C. V. (1971). Kho-Kho: Native Indian Sport. Patiala]: N [ational] I [nstitute of] S [ports] Publication. Reddy, B. R. (1974). Scientific Kho-Kho (Vol. 1). sn (sl).

6. Thakur, V. (2010). Talent identification in kabaddi & Kho-Kho. *British Journal of Sports Medicine*, 44(Suppl1), i66-i66.
7. Caudhuri, N., Dhanapāndiyan, D. A., Kalaiccezljiyan, P., & Gandhe, S. V. (1987). 790—RECREATION, SPORTS, ENTERTAINMENT. *Indian national bibliography*.
8. Verma, A., Rana, D., & Singh, A. (2011). To develop physical profile of kabaddi & Kho-Kho players: the descriptive study. *Indian Journal of Movement Education and Exercises Sciences*.
9. Sharma, A. (1999). *Encyclopedia of Sports*. Reliance Publishing House.