

**Comparison of Selected Physical Fitness and Anthropometric Variables between
Punjab and Haryana Fast Bowlers in Cricket**

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ABSTRACT

The main purpose and objective of the present study is to compare and analyzes the selected physical fitness and anthropometric variables between male Punjab fast bowlers and Haryana fast bowlers in cricket. A total of 30 state level male subjects age ranged between 16-18 years were selected for this study from Cricket Coaching Centre, Punjab and Haryana approved by BCCI. The purposive sampling method was used to obtain the objective of the study. All the subjects, after having been informed about the objective and protocol of the study, gave their consent and volunteered to participate in this study. They were further divided into two groups of 30 each (N1=15; Punjab fast bowlers and N2 =15; Haryana fast bowlers). The t- test was employed to find out the significant differences between male Punjab fast bowlers and Haryana fast bowlers. To test the hypotheses, the level of significance was set at 0.05. The results revealed significant differences between Punjab fast bowlers and Haryana fast bowlers on the selected physical fitness and anthropometric variables i.e. speed & agility and insignificant differences between flexibility, height, body weight

KEY WORDS: Punjab fast bowlers, Haryana fast bowlers, Speed, flexibility, Agility, Height, Body Weight,

INTRODUCTION

Cricket is essentially a game of skill but fitness gives the edge. A fit Player has a longer career like as kapil dev, Courtney walsh. There are two things that matter in cricket ability and fitness. If you have not got the first, then the second does not matter all that much. But, if a player has got two sides of equal ability, then obviously the fitter one is going to have the edge". (Chappell, 1978)

Cricket is a game in which fitness is traditionally not thought of as critical. Notwithstanding, the achievement in the 2000s of the world beating Australian group has been credited to their professionalism, and to some degree to the way they address their fitness. The other test playing nations have legitimately put more accentuation on fitness as of late and are receiving the rewards. With the presentation of one day Cricket and all the more as of late Twenty20, the game has experienced significant changes and the physical requests made on a cricketer's body have additionally expanded dramatically.

Anthropometry is that branch of anthropology that is concerned with the measurements of the human body. This discussion has been confined to the kinds of measurements commonly used in associating physical performance with body build. Anthropometry measures structural composition and determines the structural potential of cricket player. Most of the researchers, coaches and physical educationists emphasize that a cricket player must possess such characteristics of the body, which suit him the most in the cricket. This fact calls upon the coaches, trainers and physical education teachers to give due consideration to various anthropometric components while selecting a cricket player.

METHOD AND PROCEDURE

Selection of subjects

Subjects for the study were selected purposively from the Cricket Coaching Centre, Punjab and Haryana approved by BCCI. For the purpose of the study 15 Punjab fast bowlers and 15 Haryana fast bowlers age ranged between 16-18 were selected randomly. The Punjab fast bowlers and Haryana fast bowlers both the groups were

measured on the selected physical fitness anthropometric and physiological variables namely, speed, agility, Height, body weight, and peak flow rate, blood pressure. The Punjab fast bowlers and Haryana fast bowlers Speed was assessed by 50m dash test in seconds, Agility was assessed by shuttle run test in seconds and in anthropometric variables height was measured in centimeters, body weight was measured in kilograms.

STATISTICAL ANALYSIS

Descriptive statistics such as mean and standard deviation of the variables i.e. speed, flexibility, agility, and Height, body weight were calculated. Independent t-test was employed to compare between Punjab fast bowlers and Haryana fast bowlers. The level of significance was set at 0.05 level. The statistical analysis was conducted by using SPSS 16 software.

RESULTS

Table: 1 Mean, Standard Deviation, Standard Error of the Mean, t- value and p- value of Punjab and Haryana fast bowlers.

VARIABLES	Group	N	Mean	Std. Deviation	Std. Error Mean	t-value	p-value
SPEED	PANJAB	15	7.26	0.31773	0.08204	2.795	.009**
	HARYANA	15	6.94	0.32249	0.08327		
FLEXIBILITY	PANJAB	15	5.94	2.41566	0.62372	1.884	0.07
	HARYANA	15	7.28	1.32406	0.34187		
AGILITY	PANJAB	15	10.09	0.66812	0.17251	2.335	.027*
	HARYANA	15	9.60	0.45272	0.11689		
HEIGHT	PANJAB	15	176.74	5.09745	1.31616	1.804	0.082
	HARYANA	15	173.30	5.32628	1.37524		
BODY WEIGHT	PANJAB	15	61.13	8.81449	2.27589	0.253	0.802
	HARYANA	15	60.40	6.95701	1.79629		

*Significant at 0.05 level

Degree of freedom=28

SPEED

Table no. 1 the descriptive statistics shows the mean and SD value of Punjab fast bowlers on the variable of speed as 7.26 and .31 respectively. However, Haryana fast bowlers had mean and SD values as 6.94 and .32 respectively. The 't' - value -2.795 as shown in the table above was found statistically significant ($P > .05$).

FLEXIBILITY

The descriptive statistics shows the mean and SD value of Punjab fast bowlers on the variable of flexibility as 5.94 and 2.41 respectively. However, Haryana fast bowlers had mean and SD values as 7.28 and 1.32 respectively. The 't' - value -1.884 as shown in the table above was found statistically insignificant ($P > .05$).

AGILITY

The descriptive statistics shows the mean and SD value of Punjab fast bowlers on the variable of agility as 10.09 and .66 respectively. However, Haryana fast bowlers had mean and SD values as 9.60 and .45 respectively. The 't' - value -2.335 as shown in the table above was found statistically significant ($P > .05$).

HEIGHT

Table no. 1 the descriptive statistics shows the mean and SD value of punjab fast bowlers on the variable of height as 176.7 and 5.09 respectively. However, Haryana fast bowlers had mean and SD values as 173.3 and 5.32 respectively. The 't' - value -1.804 as shown in the table above was found statistically insignificant ($P > .05$).

BODY WEIGHT

The descriptive statistics shows the mean and SD value of Punjab fast bowlers on the variable of body weight as 61.13 and 8.814 respectively. However, Haryana fast bowlers had mean and SD values as 60.4 and 6.95 respectively. The 't' - value .253 as shown in the table above was found statistically insignificant ($P > .05$).

The comparison of mean scores of both the groups has been presented graphically

in figure 1

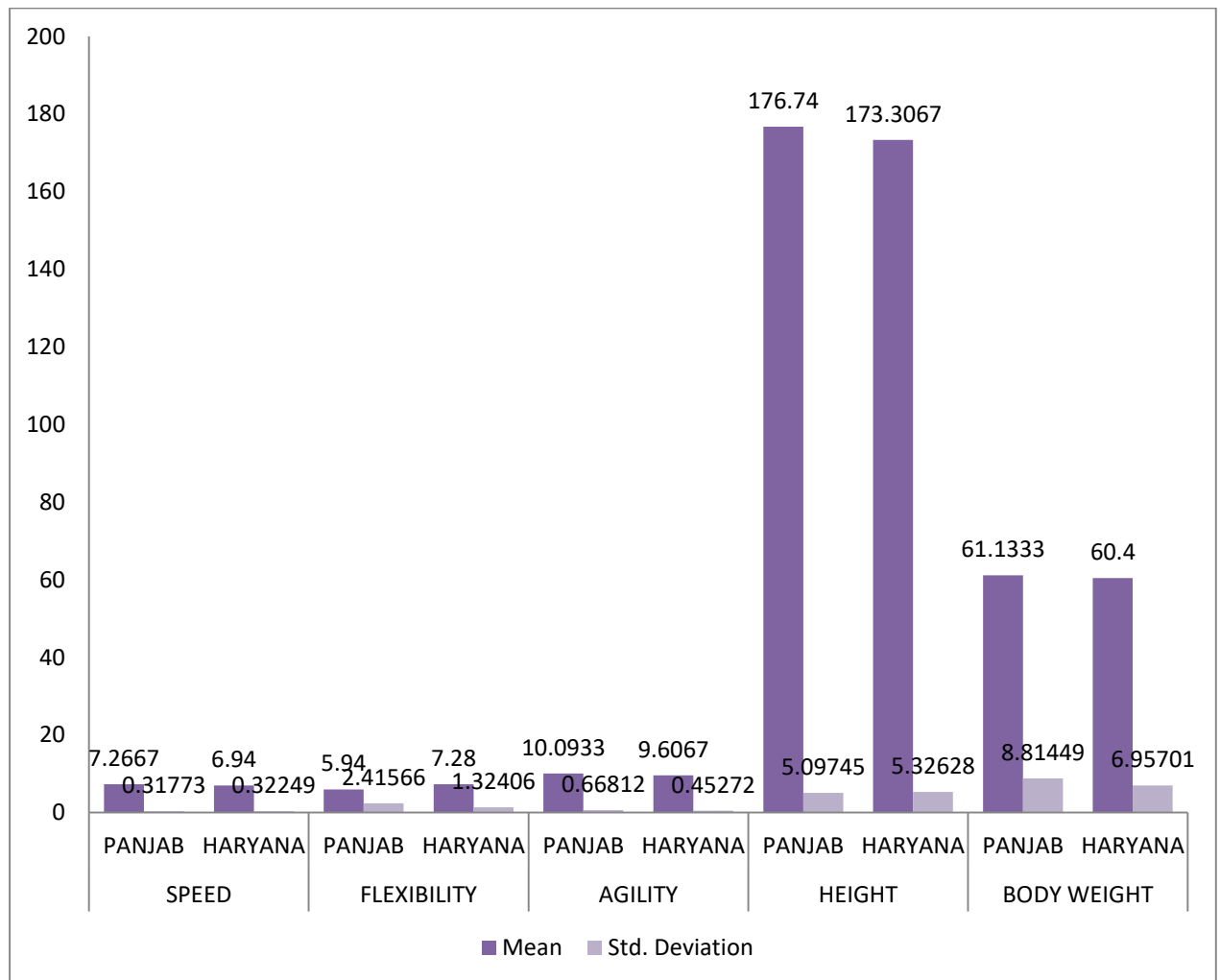


Figure 1 Graphical Representation Of Mean Scores Of Punjab And Haryana Fast Bowlers On The Variables I.E. Speed, Flexibility, Agility, And Height, Body Weight.

CONCLUSION

It is concluded from the above findings that the significant difference were found in the selected physical fitness variables i.e. speed and agility, and

insignificant difference were found in the selected physical fitness and anthropometric variables i.e. flexibility, height, body weight between Punjab and Haryana Male Fast bowlers.

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