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## Study of selected physical fitness component between Chandigarh and Punjab badminton female players

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### Abstract

The purpose of the study was to compare the physical fitness components between Chandigarh and Punjab badminton Female players. Total one hundred female badminton players (Chandigarh 75 and Punjab 75) of 17-24 years ago were randomly selected from different badminton academies and different colleges of Chandigarh and Punjab state. Only selected physical fitness components i.e. the flexibility was measured by using respective techniques and equipment. The between-group differences were assessed by using independent 't' test. The level of  $p \leq 0.05$  was considered significant. The study revealed that Badminton female players of Haryana and Delhi almost have same type of flexibility.

**Keywords:** Physical fitness, Haryana, Delhi and badminton

### Introduction

Physical fitness is most easily understood by examining the four basic parts: Cardiorespiratory Endurance, muscular strength, muscular endurance and flexibility. Cardiorespiratory Endurance is the ability to deliver oxygen and nutrients to tissues and to remove wastes over sustained periods of time. Long runs and swims are among the methods employed in measuring this component. Muscular strength is the ability of a muscle to exert force for a brief period of time. Upper body strength, for example, can be measured by various weightlifting exercises. Muscular endurance is the ability of a muscle, or group of muscles, to sustain repeated contractions or to continue applying force against a fixed object."

### Statement of the Problem

The problem is entitled as "Comparative study of physical fitness components of Chandigarh and Punjab Badminton male players "

### Method and procedure

Total one hundred and fifty male badminton players (Haryana 75 and Delhi 75) of 17-24 years age were randomly selected from different badminton academies and different colleges of Haryana and Delhi state. Only selected physical fitness components i.e. the Flexibility were measured by using respective techniques and equipment.

### Statistical technique

The between-group differences were assessed by using independent 't' test. The level of  $p \leq 0.05$  was considered significant.

**Table 1:** Comparison of flexibility (sit and reach test) between Badminton male players of Haryana and Delhi

| Group                             | N  | Mean | S.D  | S.E.D | 't' Ratio           |
|-----------------------------------|----|------|------|-------|---------------------|
| Chandigarh Badminton Male Players | 75 | 7.70 | 3.29 | 0.380 | 1.192 <sup>NS</sup> |
| Punjab Badminton Male Players     | 75 | 7.20 | 3.14 |       |                     |

NS = Not Significant

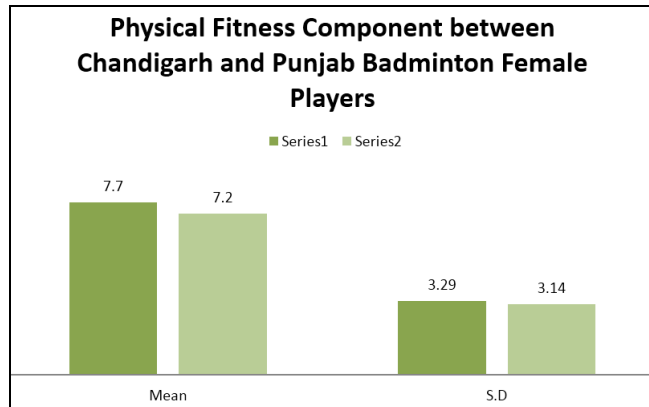
Table value of 't' at 0.05 = 1.96; 0.01 = 2.58

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Table-1 explains about the comparison between badminton male players of Haryana and Delhi on flexibility. The mean score 7.70 of the flexibility of Haryana badminton male players is higher than the mean score 7.20 of Delhi badminton male players which shows no significant difference between the mean score of both the groups.

Here table value (1.96 at 0.05 and 2.58 at 0.01) greater than the calculated value (1.525). The null hypothesis is accepted. Hence, there is no significance difference between Badminton male players of Haryana and Delhi on flexibility (sit and reach test). So it can be concluded badminton male players of Chandigarh and Punjab almost have same type of flexibility.

The graphical representation of data has been shown in figure 1



**Fig 1:** Graphical representation of flexibility (sit and reach test) between Badminton male players of Haryana and Delhi

### Conclusion

On the basis of the findings of the present study, the following conclusions have been drawn:

1. Badminton male players of Chandigarh and Punjab almost have same type of flexibility.

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