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Comparison of Selected Physical Characteristics between Basketball and Handball Players

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Abstract

In this context, the investigator made an attempt to compare the selected physical characteristics of basketball and handball players. To achieve the purpose of the study, 50 players (25 women basketball and 25 women handball players) were randomly selected as subjects from Sri Sarada College for Women, Salem. The age of the subjects were ranged from 18 to 21 years. The obtained data were statistically analyzed with independent 't' test. The level of confidence which was fixed at 0.05 levels was considered as an appropriate one for this study. The result reveals that there was significant mean difference found on flexibility among women basketball and handball players and found insignificant difference on speed.

Keywords: Speed, Flexibility, Basketball, Handball.

Introduction

Basketball and handball are multifaceted and complex team games that combine cyclic and acyclic movement structures. The movement structures consist of movements with the ball and without it (Erculj and Bracic; 2007). Many basketball and handball movements that are performed either with the ball or without it (such as short sprints, abrupt stops, fast changes in direction, acceleration, and different vertical jumps) have a very explosive character. The same is true of movements with hands, such as dribbling, different shots and passes (Abdelkrim et al., 2007; Zwierko and Lesiakowski, 2007). The successful and efficient execution of all these movements and, consequently, the playing performance of basketball and handball players chiefly depends on the following motor and functional abilities: the explosive strength and take-off power of the legs, strength of the arms and shoulder girdle, agility with the ball and without it, coordination, speed of cyclic and acyclic movements, anaerobic lactate and alactate capacities, shooting accuracy, and ability to handle the ball (Dezman and Erculj, 2005; Erculj, et al., 2003). The playing performance of male and female basketball players is also determined the most by their mass and height structure (Karpowicz, 2006).

Sports is "carrying away from work", suggesting an absolute freedom of activity. The major aim of sports is recreation. Having become highly competitive, sports today are seen in a much broader perspective than ever before. Sport, in fact, is an attitude of mind. For most people, a sport is recreation, for the 'genetically endowed' ones it is competition – the means to excel and achieve high standards in performance. Sports are largely individual events such as athletics, archery, swimming, shooting etc. wherein the participant tries to compete against his own previous standards as well as those of others. Today, sports are highly organized. They are institutionalized. Rules of organization and competition are well-defined for each sport discipline. With research and scientific inputs, there is constant effort by athletes to improve standard in performance and achieve perfection in skill. Several sports have carry-over value. They can be played even in old age depending upon the physical condition of the person.

Methodology

In this context, the investigator made an attempt to compare the selected physical characteristics of basketball and handball players. To achieve the purpose of the study, 50 players (25 women basketball and 25 women handball players) were randomly selected as subjects from Sri Sarada College for Women, Salem. The age of the subjects were ranged from 18 to 21 years. The obtained data were statistically analyzed with independent 't' test. The level of confidence which was fixed at 0.05 levels was considered as an appropriate one for this study.

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Results

TABLE I
THE MEAN, STANDARD DEVIATION AND 'T' TEST VALUES BETWEEN WOMEN BASKETBALL PLAYERS AND HANDBALL PLAYERS ON SPEED

Groups	Mean	Standard Deviation	Mean Difference	Standard Error Difference	't' test value
basketball Players	7.64	1.41	0.26	0.36	0.69
handball Players	7.89	1.15			

* Significant at .05 level of confidence.
(The table values required for significance at .05 level of confidence with df 48 was 2.01).

The table I shows that the mean and standard deviation values on speed for women basketball players and handball players were 7.64 and 7.89 & 1.14 and 1.15 respectively. The obtained 't' test value on speed 0.69 which was lesser than the table value required for significance with df 48 was 2.01. The results of the study showed that there was no significant difference between women basketball and handball players on speed. The mean values of women basketball players and handball players on speed were graphically represented in Figure I.

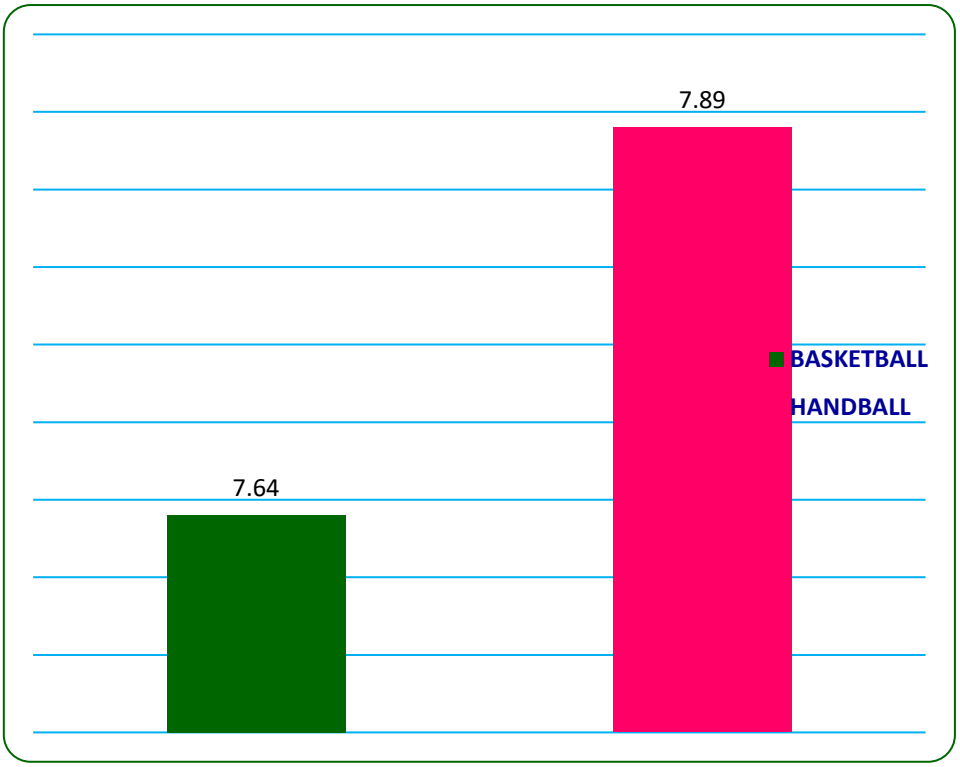

FIGURE:I BAR DIAGRAM SHOWING THE MEAN VALUES OF WOMEN BASKETBALL AND HANDBALL PLAYERS ON SPEED

TABLE II
THE MEAN, STANDARD DEVIATION AND 'T' TEST VALUES BETWEEN WOMEN BASKETBALL PLAYERS AND HANDBALL PLAYERS ON FLEXIBILITY

Groups	Mean	Standard Deviation	Mean Difference	Standard Error Difference	't' test value
basketball Players	22.08	1.86	7.08	0.46	15.50*
handball Players	29.16	1.32			

* Significant at .05 level of confidence.
(The table values required for significance at .05 level of confidence with df 48 was 2.01).

The table II shows that the mean and standard deviation values on flexibility for women basketball players and handball players were 22.08 and 29.16 & 1.86 and 1.32 respectively. The obtained 't' test value on flexibility 15.50 which was greater than the table value required for significance with df 48 was 2.01. The results of the study showed that there was a significant difference between women basketball and handball players on flexibility. The mean values of women basketball players and handball players on flexibility were graphically represented in Figure II.

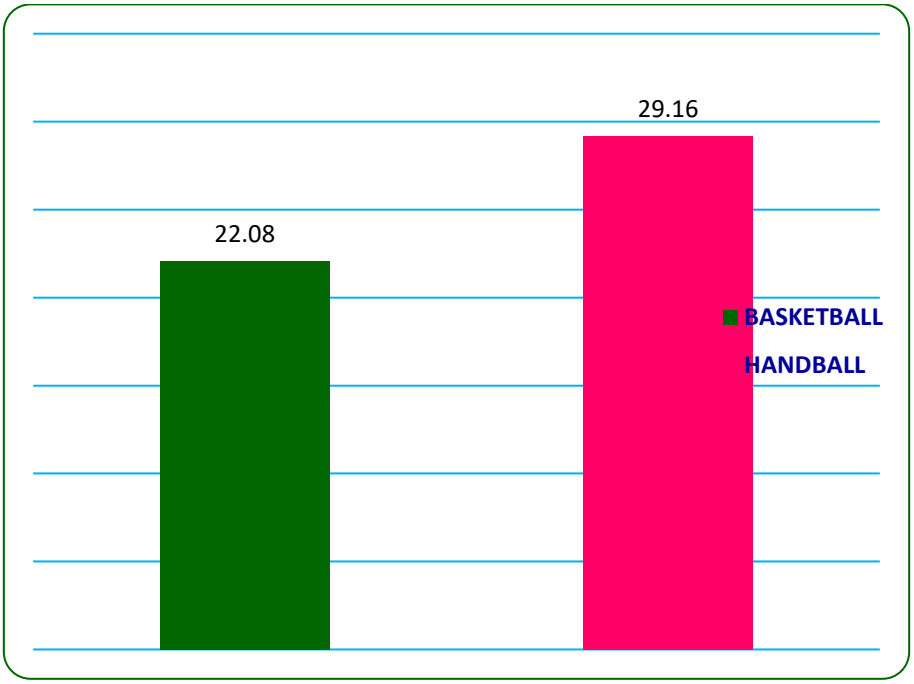

FIGURE:II BAR DIAGRAM SHOWING THE MEAN VALUES OF WOMEN BASKETBALL AND HANDBALL PLAYERS ON FLEXIBILITY

Conclusion

1. The result reveals that there was significant mean difference found on flexibility among women basketball and handball players and found insignificant difference on speed.

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