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COMPARATIVE STUDY OF AGILITY, DEPTH PERCEPTION AND SHOULDER STRENGTH AMONG ATHLETES[p.p.85-89]


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ABSTRACT

The objective of the study was to compare agility, depth perception and shoulder strength among athletes. Hypothesis; There might be significant difference in selected variables among athletes. The players were selected from Department of Physical Education, Victoria College of Education, Bhopal (M.P). The age of the subjects ranges from18 to 25 years. 15-15 athletes were selected from respective sports on the bases of systematic sampling method. The athletes were selected by using simple random sampling method. To test the hypothesis agility was measured by using Sumo agility test and measured in seconds, depth perception by using depth perception box and measured in seconds, and shoulder strength was measured by using medicine ball throw and measured in foots on the selected subjects. The test was successfully administered with the help of assistants and under the supervision. 't' test was employed to determine the difference of athletes for each variable independently. Significant difference observed in Agility (t =2.195) and shoulder strength (t = 2.162) of selected athletes but insignificant in depth perception (t = 0.334) in tabulated t-value of 2.048 at 0.05 level of confidence of 28 degree of freedom. Basketball athletes were good in Agility but Volleyball athletes were also better in shoulder strength.

Keywords: Agility, Depth Perception, Shoulder Strength, & Selected Athletes.

INTRODUCTION

The scientific research in the field of physical education and sports is a born to the athletes, players, trainer and coaches. It has already reached a new height of technical knowledge. One of the main objectives of physical education is the training for improved physical fitness. In the performance of physical activity, sports and games we will have to take into consideration first the development of various components of

physical fitness. The different components of physical fitness are strength, endurance, speed, agility, flexibility, balance, reaction time. Motor fitness is regarded as the preparedness for performance with special regard for big muscle activity, is a more general phase of physical fitness. Motor fitness is judged by performance and its common factors are strength, endurance, power, speed, agility, balance, flexibility and stamina. Motor fitness is gauged by performance and this performance is based on a composite of many factors. The most commonly mentioned fitness factors are strength, endurance, power, speed, agility, balance, flexibility and co-ordination. Some of these factors evidently are more dominant than others and thus have a higher relationship with motor fitness. The importance of motor fitness for the proper growth and development of an individual is never questioned. Motor fitness permits a greater freedom of body movements and is helpful for the maintenance of working capacity for a longer duration/time. It helps in preventing injuries, increasing coordination of movements and shortening the place for acquiring and perfecting movements. It contributes to the formation of concepts and ideas and development of confidence. Agility is the ability to perform a series of explosive power movements in rapid succession in opposing direction. Different games required different body position, quick agile movement to execute any skill successfully. The ball game of players is necessary of the entire mention variable as to how well control and to give pass or shot at the target successfully. The perception of movement in space is a function of the size of the object and their speed.

HYPOTHESIS

It is hypothesized that, there might be significant difference in selected variables among athletes.

DESIGN OF THE STUDY

The players were selected from Department of Physical Education, Victoria College of Education, Bhopal (M.P). The age of the subjects ranges from18 to 25 years. 15-15 athletes were selected from respective sports on the bases of systematic sampling method. The athletes were selected by using simple random sampling method. To test the hypothesis agility was measured by using Sumo agility test and measured in seconds,

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depth perception by using depth perception box and measured in seconds, and shoulder strength was measured by using medicine ball throw and measured in foots on the selected subjects. The test was successfully administered with the help of assistants and under the supervision. 't' test was employed to determine the difference of athletes for each variable independently.

Table No: I

Summary of Mean, Standard Deviation and t-ratio for the Data on Agility, Depth Perception and Shoulder Strength among Athletes

Components	Players	Mean	Standard Deviation	Mean Difference	S.E.	't'-ratio
Agility	Basketball	25.467	1.727	1.400	0.638	2.195*
	Volleyball	26.867	1.767			
Depth Perception	Basketball	0.471	0.238	0.028	0.084	0.334@
	Volleyball	0.443	0.221			
Shoulder Strength	Basketball	18.907	1.666	1.117	0.516	2.162*
	Volleyball	20.023	1.107			

* Significant at 0.05 level
Tabulated $t_{0.05(28)} = 2.048$
@ Not significant at 0.05 level

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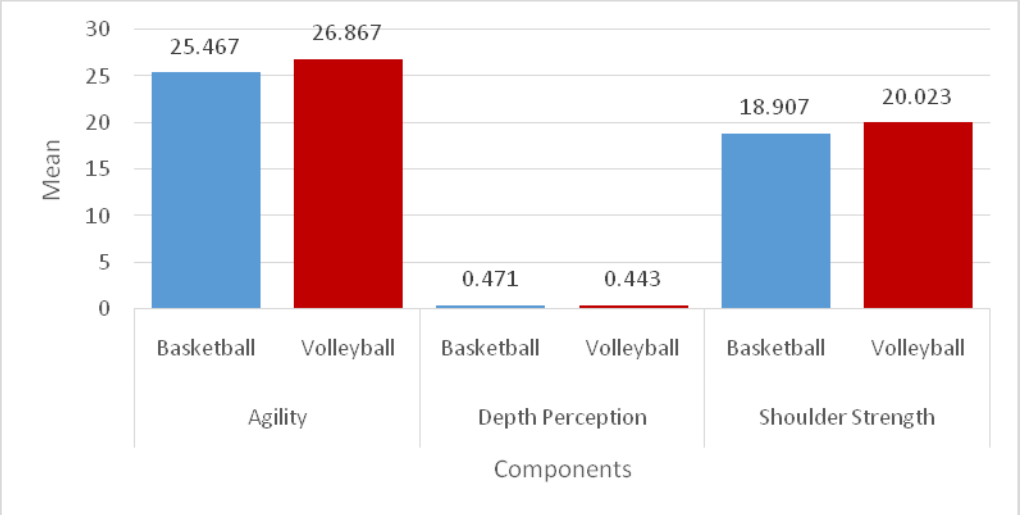

Figure 1: Means of Agility, Depth Perception and Shoulder Strength among athletes

FINDINGS

The above table show that, significant difference among athletes in the variables of agility and shoulder strength, but insignificant in Depth perception.

DISCUSSION ON HYPOTHESIS

In the beginning of the study, it was hypothesized that there might be significant difference in agility, depth perception and shoulder strength between Basketball and Volleyball player. But the result of the findings revealed that significant difference occurred in between Basketball and Volleyball in agility and shoulder strength but not in depth perception. Hence the researcher hypothesis was partially accepted.

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