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COMPARATIVE STUDY OF HEALTH RELATED PHYSICAL FITNESS PARAMETERS BETWEEN BADMINTON AND BALL BADMINTON PLAYERS

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Abstract

The main purpose of the study was to frame and compare the Health Related Physical Fitness Parameters (Abdominal Muscular Strength, Shoulder Muscular Strength, Agility and Flexibility) between Badminton and Ball Badminton Inter- College Players of Sant Gadge Baba Amravati University. The subjects for this study was taken 30, in which 15 were Badminton and 15 were Ball Badminton. It was hypothesized that, there will be significant difference in the Health Related Physical Fitness Parameters (Abdominal Muscular Strength, Shoulder Muscular Strength, Agility and Flexibility) between Badminton and Ball Badminton Players of Sant Gadge Baba Amravati University. The analysis of the data was done by applying T-test. The level of significance was set at 0.05 levels. The analysis of data has been presented in the following order Means, Standard Deviations, the range of scores was calculated and represented in tabular form. For testing the hypothesis and to find out the significant differences between the means of both groups, the T-test for independent samples was applied.

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Introduction:-

Physical fitness is the ability to carry out daily tasks with vigour and alertness without undue fatigue with ample energy to enjoy leisure time, pursuits and to met unforeseen emergencies. Physical fitness is defined as the state of general well being, physically sound and healthy, along with mental stability. I t is not only one of the most important keys to a healthy body, but also the basis of dynamic and creative intellectual activity. Physical fitness is an inseparable part of sports performance and achievements. The quality of its utilization value is directly proportional to the level of performance that means, greater the level of fitness the greater will be the ability of a person to attain higher level of performance.

Abdominal Muscular Strength:

It was measured by bend knee sit-ups test. In this test subject was sat down on the floor, back up right, hands clasped behind neck, was bent at 90 degrees heels and feet flat on the mat. Then was lie down on back, shoulder touching the mat, and returned to the sitting position with elbows out in front so that they touched knees kept clasped behind

neck the whole time when said "Read start " this action was repeated as rapidly as possible for 30 seconds continue until said "Stop". This test was done once.

Shoulder Muscular Strength:

It was measured by bent arms hang test. In this test subject was stood under the bar fingers on top, thumb underneath, and placed hands shoulder wide, on the bar with forward grip, up until your chin is above the bar, hold this position as long possible without resting chin on the bar the test ends when the eyes were gone below the bar.

Agility:

It was measured by shuttle run 10 x 4meter test. In this test subject was ready behind the line when the start signal was given, the subject run to the blocks and picked one block, then she was backed and picked up the second block, which he\she was back across the starting line, the test was done once .

Flexibility:

It was measured by sit and reach test. In this test subject was sat down and placed feet against the box, finger prints on the edge of the top plate. He\she was made to bend trunk and reached as far as possible keeping knees straight and slowly and gradually pushed the ruler in the front, without jerking and with hands stretched out ,he/ she was made to remain still in the further position can reach don't bounce. The test was done twice with the better result counting as the score.

Methodology:-

The study was designed out to find the health related physical fitness of 30 intercollegiate Badminton and Ball-Badminton Inter- College Players of Sant Gadge Baba Amravati University. The average age of subject was ranged from 18 to 25 years.

Sources of Data:

The researcher took the male subjects for the study. The sources of the data were made from the health related physical fitness of 30 inter collegiate Badminton and Ball-Badminton Players of Sant Gadge Baba Amravati University.

Selection of Subjects:

Thirty (30) subjects were selected for this study. Fifteen (15) subjects were taken from Badminton while the remaining Fifteen (15) were taken from Ball-Badminton Inter-College Players of Sant Gadge Baba Amravati University.

Sampling Method:

The 40 subjects were selected by the simple random sampling method.

Analysis And Interpretation Of Data:

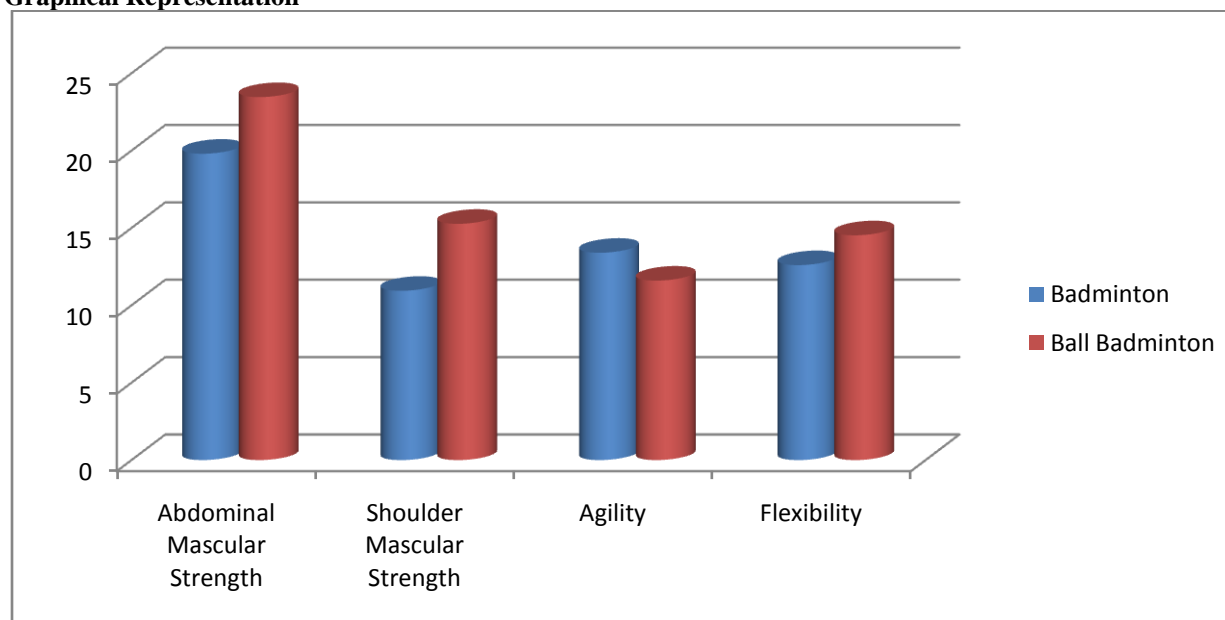
The data shall be collected from the subjects by the researcher under the guidance of experts and guide and analysis and interpretation will be carried out on the basis of special statistical techniques viz. mean, standard deviation and T- test.

Level of Significance:

The level of significance will be set at 0.05, for the present study in order to test the hypothesis given by the researcher on the basis of his experience and observation.

Table-1:- Comparison of Health Related Physical Fitness between Inter Collegiate Badminton and Ball-Badminton Players of Sant Gadge Baba University, Amravati.

Group	Players	Mean	S.D.	M.D.	O.T.	T.T.
Abdominal Muscular Strength	Badminton	19.8	1.04	3.66	3.52	2.05
	Ball-Badminton	23.46	2.06			
Shoulder Muscular Strength	Badminton	10.94	0.129	04.33	3.35	2.05
	Ball-Badminton	15.27	0.74			
Agility	Badminton	13.4	0.24	0.18	7.50	2.05
	Ball-Badminton	11.6	0.46			
Flexibility	Badminton	12.6	0.48	2.47	5.15	2.05
	Ball-Badminton	14.53	0.64			

Graphical Representation**Conclusion:-**

Within the limitations of the study and from statistical analysis the following conclusion was drawn.

There was found significant difference in health related physical fitness of 30 Inter collegiate Badminton and Ball-Badminton Players of Sant Gadge Baba Amravati University. It is found that there is significant difference between Badminton and Ball-Badminton Inter-College Players of Sant Gadge Baba Amravati University. Hence the researcher's hypothesis was accepted.

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