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A comparative study of I.Q., B.M.I. and fat of inter-university female players of basketball and handball

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Abstract
Objective of the study was to know the I.Q., B.M.I. and Fat% of Basketball and Handball female players. For this study 12 Basketball players and 12 Handball female players who were selected for inter-university level were selected for the study. To test the I.Q. of the subjects Dr. Krushnakant Gopalji Desai's Asabdik Samuh Buddhi Test Questionnaire was used. B.M.I. and Fat was tested by Body Composition Analyzer taken from the laboratory of M.D.S.S. Mahavidhyalaya Laboratory. Statistical analysis was done of the raw scores and Mean, Mean Difference and Standard Deviation was found by using "T" test. Result indicates that I.Q. Mean of Basketball female players and Handball female players was 116.66 and 112.83 which shows that Basketball female players I.Q. was good than Handball female players selected for Inter-University. B.M.I. Mean of Basketball female players and Handball female players was 17.16 and 21.01 which shows that Handball female players B.M.I. was good than Basketball female players selected for Inter-University. Fat% Mean of Basketball female players and Handball female players was 11.64 and 23.56, which shows that Handball female players Fat% was good than Basketball female players selected for Inter-University. At the end of the study, I.Q. of Basketball female players were seen more than Handball female players. B.M.I. and Fat% of Handball female players was seen more than Basketball female players.

Keywords: I.Q., B.M.I. fat % and female players

Introduction

An Intelligence Quotient or IQ is a score derived from one of several different standardized tests attempting to measure intelligence. The history of our development of our knowledge about intelligence is fascinating. Although leading thinkers have been searching for a long time for any clues as to 'what makes us tick?' and ' what makes us smart?', amazingly, the concept of the Intelligence Quotient has been around for less than 100 years-the first experiments of intelligence testing by' scientific means' started only at the beginning of the 20th century.

Scientists have been studying body composition since the beginning of the 20th century, but research has increased dramatically in the last 25 years as methods for measuring and analyzing the body have grown in accuracy. There is growing evidence that clearly links body composition with health risks and the development of certain diseases. New research indicates that fat loss, not weight loss, can extend human longevity.

Also, some research suggests that excessive accumulation of fat at specific body sites may be an important health risk factor (Wilmore, Buskirk, DiGirolamo, & Lohman, 1986). For instance, it appears that extra fat around the abdomen and waist is associated with higher risk of diabetes, heart disease, and hyperlipidemia. Individuals who accumulate a lot of fat around the waist (apple-shaped) are worse off than those who tend to accumulate fat in the thighs and buttocks (pear-shaped). The apple-shaped pattern of fat deposition is more commonly seen in men; whereas women tend to be pear-shaped.

Fats are organic compounds that are made up of carbon, hydrogen, and oxygen. They are a source of energy in foods. Fats belong to a group of substances called lipids, and come in liquid or solid form. All fats are combinations of saturated and unsaturated fatty acids.

Fat serves as the storage substance for the body's extra calories. It fills the fat cells (adipose tissue) that help insulate the body. Fats are also an important energy source.

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When the body has used up the calories from carbohydrates, which occurs after the first 20 minutes of exercise, it begins to depend on the calories from fat.

Healthy skin and hair are maintained by fat. Fat helps the body absorb and move the vitamins A, D, E, and K through the bloodstream.

Objective of the Study
Objective of the study was to know the I.Q., B.M.I. and Fat of Basketball and Handball female players.

Method
For this study 12 Basketball players and 12 Handball female players who were selected for inter-university level were selected for the study. To test the I.Q. of the subjects Dr. Krushnakant Gopalji Desai's Asabdik Samuh Buddhi Test Questionnaire was used. B.M.I. and Fat was tested by Body Composition Analyzer taken from the laboratory of M.D.S.S. Mahavidyalaya Laboratory.

Hypothesis
It was hypothesis that there will be significant difference between B.M.I. compared to I.Q. of Basketball and Handball female players selected for inter-university level. It was also hypothesis that there will be significant difference between B.M.I. compared to Fat of Basketball and Handball female players selected for inter-university level.

Statistical Procedure
Statistical analysis was done of the raw scores and Mean, Mean Difference and Standard Deviation was found by using "T" test.

Findings

Table 1: Table Showing I.Q., B.M.I. and Fat Mean, Mean Difference, Standard Deviation and "T" Ratio of Basketball and Handball selected for Inter-University.

No.	Component	Group	Mean	M. D.	S.D.	T-Ratio
1	I.Q.	Basketball	116.66	3.83	8.71	1.07
		Handball	112.83			
2	B.M.I.	Basketball	17.16	3.75	2.28	4.06*
		Handball	21.01			
3	Fat	Basketball	11.64	11.72	7.45	3.84*
		Handball	23.56			

Level of Significance-0.05 = 2.07
I.Q. Mean of Basketball female players and Handball female players was 116.66 and 112.83 respectively, S.D. was 3.83.Received "T" Ratio was 1.07 which was found not significant at 0.05 level. It indicates that there is no significant difference in I.Q. of Basketball and Handball female players. It shows that Basketball female players I.Q. was good than Handball female players selected for Inter-University.

B.M.I. Mean of Basketball female players and Handball female players was 17.16 and 21.01 respectively, S.D. was 2.28.Received "T" Ratio was 4.06 which was found significant at 0.05 level. It indicates that there is significant difference in B.M.I. of Basketball and Handball female players. It shows that Handball female players B.M.I. was good than Basketball female players selected for Inter-University.

Fat Mean of Basketball female players and Handball female players was 11.64 and 23.56 respectively, S.D. was 7.45.Received "T" Ratio was 3.84 which was found

significant at 0.05 level. It indicates that there is significant difference in Fat of Basketball and Handball female players. It shows that Handball female players Fatwas good than Basketball female players selected for Inter-University.

Result
1. I.Q. of Basketball female players was seen more than Handball female players.
2. B.M.I. of Handball female players was seen more than Basketball female players.
3. Fat of Handball female players was seen more than Basketball female players.

Conclusion
The hypothesis that there will be significant difference between B.M.I. compared to I.Q. of Basketball and Handball female players selected for inter-university level was rejected. The hypothesis that there will be significant difference between B.M.I. compared to B.M.I. of Basketball and Handball female players selected for inter-university level was accepted.
The hypothesis that there will be significant difference between B.M.I. compared to Fat of Basketball and Handball female players selected for inter-university level was accepted.

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