REVIEW OF RESEARCH
ISSN: 2249-894X
IMPACT FACTOR : 5.7631(UIF)
VOLUME - 14 | ISSUE - 4 | JANUARY - 2025

A COMPARATIVE STUDY OF SELECTED PHYSICAL FITNESS VARIABLES OF BASKETBALL AND HANDBALL PLAYERS OF BU BHOPAL

Dr. Sanjay S. Tirathkar
Associate Professor, D. C. P. E. Amravati.

ABSTRACT

The purpose of the study was to compare the physical fitness variable of Basketball Player and Handball Player. To fulfil the objective of the study 20 Basketball Players and 20 Handball Players of different colleges under BU, Bhopal who have represented inter university competition were selected. The age of the selected subjects ranged from 19 to 24 years. Only (Standing Board Jump and 50 yard dash tests) were used to measures the selected physical fitness variables of the players. The study was delimited to AAPHER youth fitness test. In order to analyse the data t-test was used to analyse the data and investigator observed the significant different Basketball Players and Handball Players.

KEYWORDS: *Standing Board Jump and 50 yard dash tests.*

INTRODUCTION :

Basketball and handball are sports that require both muscular strength and endurance, so when training with physical fitness exercises, it's essential to focus on building strong muscles with high endurance. Sports are recognized as a cultural phenomenon, and there is a continuous drive to improve performance standards. Today, sports demand optimal fitness levels and peak performance. Sports, in general, involve competitive physical activities aimed at using, maintaining, or improving physical abilities and skills, often providing entertainment for both participants and spectators. With hundreds of sports ranging from those requiring only two participants to those with large groups, sports can be either individual or team-based.

Physical fitness isn't just a goal on its own, but rather a means to an end. It lays the foundation for optimal physiological health and the ability to live a full, active life. Not only is physical fitness crucial for excellence in competitive sports, but it is also closely tied to a nation's defense capabilities, economic strength, and the overall quality of life. Physical fitness is a broad concept, defined in different ways by various experts, but it is commonly categorized into two areas: general fitness (the state of health and well-being) and specific fitness (task-oriented, based on the ability to perform certain aspects of sports or jobs). Achieving physical fitness typically involves proper nutrition, exercise, hygiene, and adequate rest.Physical fitness can be understood in two closely related ways: general fitness (which refers to overall health and well-being) and specific fitness (which focuses on the ability to perform particular tasks related to sports or occupations). Engaging in sports and physical education activities not only promotes good health and a high level of physical fitness but also boosts an individual's productivity. It is essential for everyone, regardless of age or gender, to participate in and

enjoy recreational games and sports. In endurance sports, coordination skills enhance movement effectiveness and efficiency, while in competitive sports; they help achieve higher movement frequencies with explosiveness and force. In strength-focused sports, coordination is key to applying maximum strength in short bursts.

Physical fitness refers to the ability of the heart, blood vessels, lungs, and muscles to function at their most efficient level. In the past, fitness was defined as the capacity to perform daily activities without excessive fatigue. However, due to automation, more leisure time, and lifestyle changes after the industrial revolution, this definition became insufficient. Today, physical fitness is defined as the body's ability to function efficiently in both work and leisure, maintain good health, and prevent diseases linked to inactivity, and handle emergency situations effectively. When imagining someone who is highly physically fit, do you think of an ultra-marathoner, a sprinter, a weightlifter, a gymnast, a professional football player, or maybe someone with a six-pack on the beach?

MATERIAL METHOD

The purpose of the study was to compare the physical fitness variable of Basketball Player and Handball Player. To fulfil the objective of the study 20 Basketball Players and 20 Handball Players .of different colleges under BU, Bhopal who have represented inter university competition were selected. The age of the selected subjects ranged from 19 to 24 years. Only (Standing Board Jump and 50 yard dash tests) were used to measures the selected physical fitness variables of the players. The study was delimited to AAPHER youth fitness test. In order to analyze the data t-test was used to analyze the data.

RESULTS AND DISCUSSION:

Table No: I Comparison of Explosive Strength Component of Basketball Player and Handball Player in Standing Broad Jump Variable

Variable	Basketball Player		Handball Player		SEd.	t-ratio	Levelof significant
Strength (Standing Broad Jump)	Mean	S.D.	Mean	S.D.			
	2.38	0.23	2.31	0.1	0.05	1.4	Significant

*significant at 0.05 level

The mean score (2.38) of the explosive strength component of physical fitness basketball Player is higher than the mean score (2.31) of handball Player. However, the value of t-ratio is1.4, which is significant at 0.05 level. Higher the score better the Explosive strength. It means that basketball Player had better Explosive strength than the Handball players.

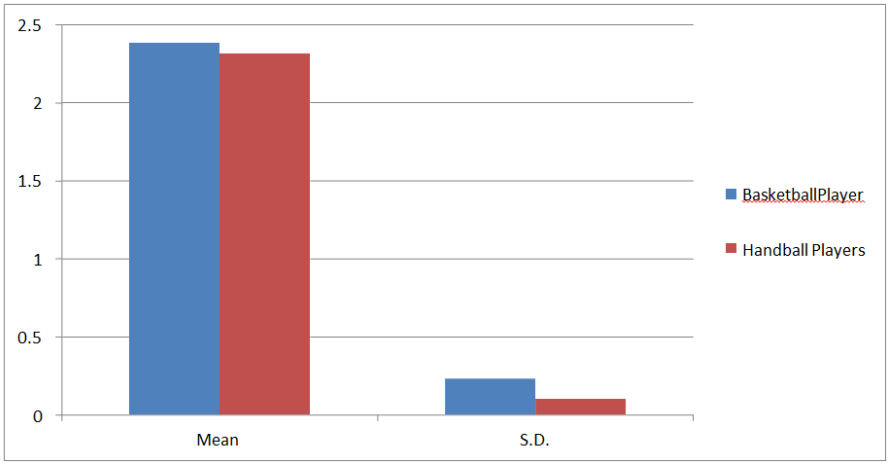

Fig-I:Comparison of Explosive Strength Component of Basketball Player and Handball Player

Table No: II Comparison of Speed Component of Basketball Player and Handball Player in Standing Broad Jump Variable

Variable	BasketballPlayer		HandballPlayer		SEd.	t-ratio	Level of significant
50yard dash	Mean	S.D.	Mean	S.D.			
	7.79	0.55	7.17	0.51	0.16	3.88	Significant

*Significant at 0.05 level

The mean score (7.79) of the speed component of physical fitness of basketball Player is higher than the mean score(7.17) of Handball Player of. However, the t-ratio is 3.88 which were found to besignificant at 0.05 level. Higher the score better the speed. It means that Basketball Player have better speed than the Handball Player.

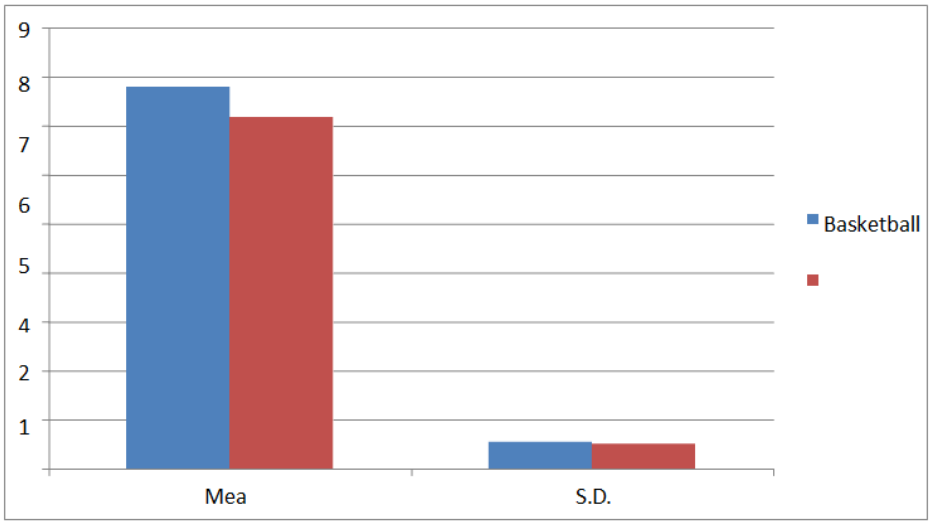

Fig-I: Comparison of Explosive Strength Component of Basket ball Player and Handball Player.

CONCLUSION:

On the basis of the analysis of data the Basket
Ball Players were having better mean values among speed and Explosive strength than Handball Players.

REFERENCE:

- Berdene Wyse, "Relationship Between Hand Arm Shoulder Strength, Height-Weight Ratio and Ability to Perform the Bent Arm Hang", Unpublished Master's Thesis, IOWA University of IOWA, M.A. in Physical Education, 1964, Completed Research in Health,Physical Education and Recreation, Vol.7 (1965).
- Chui, Edward F. "Effect of Isometric and Dynamic Weight Training Exercises Upon Strength and Speed of Movement", 1964.
- Daniel P. McNair, "Effect of Different Exercise Programme on the Development of Cardio-Vascular Fitness, Strength and Muscular Endurance", Completed Research in Health, Physical Education and Recreation, X (1968).
- Hartman E et al., The effect of age on physical fitness of deaf elementary school children, paediatric exercise science, 2007; 19:267-278.
- Gaurav V, Singh A, Singh S. A study of physical fitness variables among baseball players at different level of achievement scientific. Journal in sports and exercise 2011; 7(2):34-38.
- Gentova L. 'Energy and Macro nutrient requirements for physical fitness in exercising subjects.' Journal of clinical nutritional, 2010.
- Habbinen A. Association of physical fitness with health related quality of life in finish young men. Journal of health and quality of life outcomes 2010; 10:1477-7525.
- Haga M. Physical fitness in children with high competence is different from that in children with low motor competence. Journal of physiological therapy 2009;89(10):1089-1097.
- Iahinone M, Mito R, Satio K. Physical activity fitness and health: Obesity and Lifestyle in Mamaica International collaboration in community health 2004; 1267:39- 50.
- Koutedakis Y, Bouziotas C. National Physical education curriculum Motor and cardiovascular health related fitness in Greek adolescents. British Journal of Sports Medicine 2003; 37:311-314.