



ISSN Print: 2394-7500
ISSN Online: 2394-5869
Impact Factor: 8.4
IJAR 2022; 8(5): 370-373
www.allresearchjournal.com
Received: 20-03-2022
Accepted: 19-04-2022

Dr. Basharat Ashraf
Physical Training Instructor,
Department of Physical
Education, Government
Degree College, Qazigund
Union Territory, Jammu and
Kashmir, India

Anthropometric profile of volleyball and cricket players

Dr. Basharat Ashraf

Abstract

BMI is employed globally to classify humans as normal, overweight and obese [5]. Compared with assessment methods of body fat percentage (BF), it is inexpensive and easily to administer. Present study was intended to explore the level of Anthropometric Profile of Volleyball and cricket Payers of Kashmir with special reference s to their body mass index. The study was carried in context of descriptive research. The total sample for the present study consists of 400 volleyball and cricket players. Whole data was collected by using Convenient Sampling Technique (CST). The collected data was put to suitable statistical treatment by using descriptive as well as comparative statistics. The results of the study indicate that there exists significant difference between volleyball and cricket players ion their body mass index. Volleyball players were seen with high level of body mass index as compared to cricket players.

Keywords: Body mass index, volleyball and cricket payers

Introduction

Obesity and overweight across the lifespan is an important public health issue. It has been suggested that they track from childhood and adolescence to adulthood, and are linked to many other diseases. For all kind of sports, players there are many important factors for success and it is difficult to detach anthropometric and physiological characteristics as crucial factors in sports performance. Nevertheless, evaluation of body composition in soccer players helps to improve their performance and evaluate applied training plan results, which is an important component of the athletes' individualized and periodized training process. Although there is an association between age and body composition, there does not seem to be consensus as to whether this relationship is positive or negative. It is possible to find declines in fat mass and increases in fat-free mass with advancing age. However, it is also possible to find the opposite in similar populations. There is also a relationship between some anthropometric characteristics, namely the fat mass and the risk for lesions. In addition to the relationship with the risk of injury, it is also possible to find a relationship between fat mass and some physiological performance characteristics, such as speed and power. With respect to this we know that a higher percentage of body fat (%BF) is negatively associated with velocity over 20 meters, an important determinant variable in the performance of soccer players in pursuance to same, Reco & Sanz, (1998) [29] argued "the innumerable variety of human physique, it has become a generalized consideration that some sports events are more suitable to individuals with specific physique than others". It has been well established that specific physical characteristics or anthropometric profiles indicate whether the player would be suitable for the competition at the highest level in a specific sport. These anthropometric and morphological parameters are the sensitive indicators of physical fitness and nutritional status of the athletes for their maximal performances. Physical fitness in the game of cricket is utmost important. In context to same, the investigator considers it vital to explore the study which reads as:

Statement of the research problem: The statement of research problem is as under:

Anthropometric Profile of Volleyball and Cricket Players

Objectives of the study: The objectives of the study are as under:

1. To explore the BMI of volleyball and cricket payers of Kashmir division.

Corresponding Author:
Dr. Basharat Ashraf
Physical Training Instructor,
Department of Physical
Education, Government
Degree College, Qazigund
Union Territory, Jammu and
Kashmir, India

Hypothesis: The researcher holds richness background of the knowledge in the same domain. Apart from this deep survey was conducted by the investigator in the relevant field. Accordingly, on the basis of the same, the present study consists of below mentioned hypothesis:

1. There seems significant impact of participation of different kind of games on the anthropometric profile of the respondents.

Operational definitions of terms and variables: The operational definitions of terms and variables are reported as under:

1. **Anthropometric characteristics:** In the presents study anthropometric characteristics means the achievement attained by the respondents on evaluation on “Body Mass Index BMI”.
2. **Volley ball players:** Volley ball players in the present study refers those players who are reading in university in arts and science faculties and are playing volleyball game since last four years in any outstanding team. All required volleyball players were selected within the age group of 23-26 years.
3. **Cricket players:** cricket players in the present study refers those players who are reading in university in arts and science faculties and are playing cricket game since last four years in any outstanding team. All required cricket players were selected within the age group of 23-26 years.

Delimitation of the problem: The present study has been delimited to volleyball and cricket players only. Besides, the present study has been delimited to body mass index of players only.

Methodology: The methodology of the present study has been stated in the following heads-

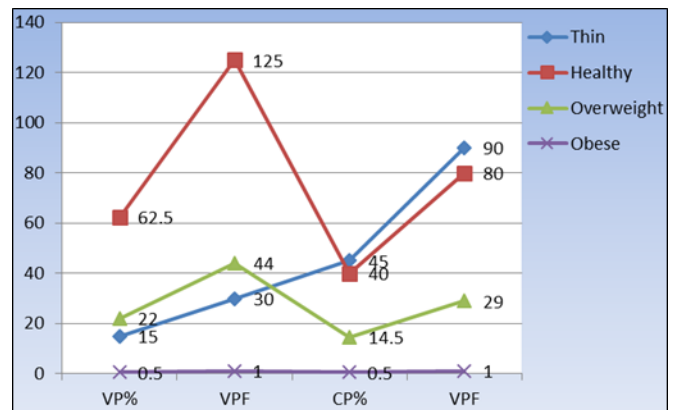
- **Method of the study:** Keeping the nature of the study under consideration, the descriptive method will be used by the researcher for the present study.
- **Sample:** Representative samples of 400 players were selected. However, due representation was given on the basis of type of game. More obviously 200 volley ball and 200 cricket players were selected by using convenient sampling technique.
- **Tools used:** The intention behind the study was to explore the level of anthropometric characteristics of the volleyball and cricket players. In context to same, the anthropometric characteristics were measured with the help of:
 - Weighing machine
 - Stadiometer
 - Scientific Calculator
 - Height calculation index
 - Weight calculation index:

Analysis and interpretation of the data: The data has been analysed with the help of descriptive and comparative

analysis. The detailed analysis and interpretation is reported as under:

Table 1: Showing the descriptive analysis of volleyball and cricket players (VB&CP) on various level of Body Mass Index (BMI) (N=200 each)

S. No.	Levels of BMI	Volleyball Players		cricket Players	
		Mean	Frequency	Mean	Frequency
1.	Thin	15	30	45	90
2.	Healthy	62.5	125	40	80
3.	Overweight	22	44	14.5	29
4.	Obese	0.5	01	0.5	01
Total		100	200	100	200



Index

- VBP=Volley Ball Players.
- CP= Cricket Players.

Fig 1: Showing the graphical representation of volleyball and cricket players (VB&CP) on various level of Body Mass Index (BMI)

The perusal of the table 1 (Please consult Table 1 associated with Fig. 1) reveal that the achievement of the volleyball and cricket players on their anthropometric profile with special reference to body mass index. The calculation of the body mass index reveal that among volleyball players 15% (F=30) were seen with thin profile. In context to same, It was found that 62.5% (F=125) volley ball payers were reported with healthy profile of their body mass index. Besides, the same table reveals that 22% (F=44) volley ball payers were seen with overweight body mass index. In pursuance to same, the results justify that 0.5% (F=01) volley ball payers were reported with obsessive level of body mass index. Coming towards the cricket players, it was found that 45% (F=90) cricket players were reported with thin level of body mass. Mean, the results presented in the same table report that 40% (F=80) cricket players were seen with healthy level of body mass. Further, the obtained results justify that 14.5% (F=29) cricket payers were seen with overweight body mass. Moreover, 0.5% (F=01) cricket payers were reported with obsessive level of body mass profile.

Table 2: Showing the significance of mean difference between volleyball and cricket players (M&AP) on composite score Body Mass Index (BMI). (N=200 each)

Variable	Volleyball players		Cricket players		't' value
	Mean	SD	Mean	SD	
BMI	33.48	3.14	21.42	4.06	6.90###
###= Significant at 0.01 level of confidence					

Index

- BMI= Body mass index.
- VP= Volleyball players.
- KP=cricket players.

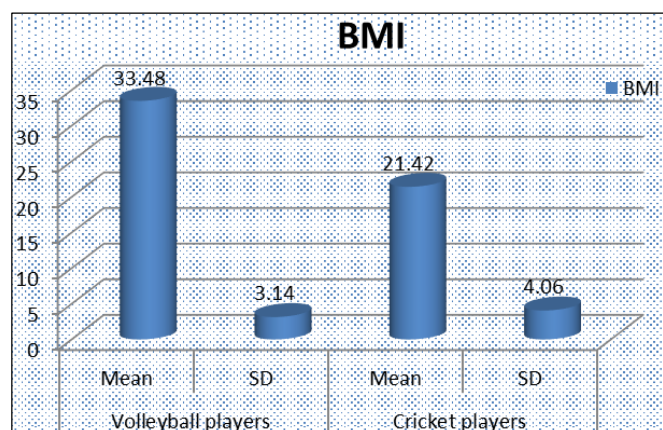


Fig 2: Showing the graphical representation of volleyball and cricket players (M&AP) on composite score Body Mass Index (BMI)

Interpretation: While glancing towards the table 2, (Please consult table 2, associated with Fig. 2) gives information about the mean comparison of volleyball players and cricket players on their anthropometric profile. The perusal of the obtained results indicate that the mean score of volleyball players was reported 33.48, which is relatively higher than the mean value of cricket players (M=21.42, SD. 4.06). When the both groups were analysed with the help of independent 't' test, the results indicate that the calculated 't' value came out to be 5.86, which is higher than the table value at 0.01 level of confidence. Thus, the perusal of the same table justify that exists significant impact of type of game on profile of body mass of the players. Volleyball players were reported with high level of anthropometric profile relatively that their counter parts (Cricket players). Thus, from the above reported result the investigator can generalise that volleyball game has significant association with the body mass level of the respondents. Thus, from the above reported results significant difference has been reported between volleyball and football players on their anthropometric profile. Accordingly, the status of hypothesis is reported as under:

Conclusions of the study: Significant difference between volleyball and football players on their anthropometric profile. Volleyball players were seen with high level of body mass index as compared to cricket players.

Competing interest: The research declared that no potential if interest with respect to authorship, research and publication of this article.

References

1. Ahmad CM, Cassady JC, McConnell TJ. Predicting Problem Solving Ability from Metacognition and Self-Efficacy Beliefs on a Cross Validated Sample. *British Journal of Education*. 2014;2(1):49-72.
2. Atkins L, Wallac S. *Qualitative Research in Education*. SAGE Publication. Ausubel DP. *Educational Psychology: A Cognitive View*. New York: Holt, Rinehart and Winston; c1968.
3. Bryman A. *Social Research Methods*. New York: Oxford University Press. Bryman A. *Social Research Methods*. (3rd ed). New York: Oxford University Press; c2008. p. 10-12.
4. Denscombe M. *The Good Research for Small-Scale Social Research Project*. Philadelphia: Open University Press; c1998.
5. Frank J, Wanner KL. Promoting Experimental Problem-Solving Ability in Sixth-Grade Students through Problem Oriented Teaching of Ecology': Findings of an intervention study on a complex domain. *International Journal of Science Education*. 2015;37(4):577-598.
6. Nandna AZ. *Research Methodology in Physical Education*. Universal publishers. 2018;2:18-41.
7. Newsom JT, Mcfarland BH, Kaplan MS, Huguet N, Zani B. The Health Consciousness Myth. Implications of the Near Independence of Major Health Behaviours in the North American Population. *The Journals of Gerontology*. 2005;60(6):304-312.
8. Ofole NM. Training For Power Events. In: *Strength & Power in Sport* P Komi, Ed. London: Blackwell Scientific; c2014. p. 381-395.
9. Oili K. A Structural Equation Model of Latent Segmentation & Product Choice for Cross-sectional Revealed Preference Choice Data. *Journal of Retailing & Consumer Services*. 2015;1(2):77-89.
10. Olynk NJ, Tonsor GT, Wolf CA. Verifying Credence Attributes In Livestock Production. *Journal of Agricultural & Applied Economics*. 2010;42(03):439-452.
11. Ortega FB, Artero EG, Ruiz JR, España-Romero V, Jiménez-Pavón D, Vicente-Rodríguez G, *et al*. Physical fitness levels among European adolescents: the Helena study. *British journal of sports Medicine*. 2011;45(1):20-29.
12. Ouma E, Abdulai A, Drucker A. Measuring Heterogeneous Preferences for Cattle Traits Among Cattle-Keeping Households in East Africa. *American Journal of Agricultural Economics*. 2007;89(4):1005-1019.
13. Panda SK. Impact of Circuit Training on the Physical Fitness of Volleyball Players. *Journal of Sports Psychology*. 2014;15(25):35-40.
14. Paulsen G, Myklestad D, Raastad T. The Influence of Volume of Exercise on Early Adaptations to Strength Training. *Journal of Creative Research*. 2003;12(15):17-23.
15. Peter JP. Reliability: A Review of Psychometric Basics and Recent Marketing Practices. *Journal of Marketing Research*. 1979;16(02):64-73.
16. Pope L, Hanks AS, Just DR, Wansink B. New Year's Res-Illusions: Food Shopping in the New Year Competes with Healthy Intentions. *Plosone Vol*. 2014;9(12):1-7.
17. Pratibha D. Critical Survey of Yoga Attitude among the Students of Smt. Khadse GG College, Muktanagar (M.S) Studying In Different Courses. *International Journal of Yogic, Human Movement and Sports Sciences*. 2015;2(2):234-235.
18. Ruiz JR, Rizzo NS, Hurtig Wennlöf A, Ortega FB, Wärnberg J, Sjöström M. Relations of Total Physical Activity & Intensity to Fitness & Fatness in Children:

- the European Youth Heart Study. The American journal of clinical Nutrition. 2006;84(2):299-303.
19. Rutherford OM, Greig CA, Sargeant AJ, Jones DA. Strength Training and Power Output: Transference Effects in the Human Quadriceps Muscle. Journal of Sports Psychology. 2015;15(25):35-40.
 20. Sanjib KB, Diwakar P, GP. Effect of Vinyasa Sun Salutation on Flexibility among School Children. Yoga Mimamsa. 2010;115(12):109-112.
 21. Sat Bir S Khalsa. Sleep-Relaxation-Yoga-Insomnia. Applied Psychophysiology and Biofeedback. 2009;29(4):269-278.
 22. Sharma PD. A study of Health Consciousness of Adolescents. International Journal of Health Science. 2018;15(21):12-31.
 23. Singh, *et al.*, Theory and Method in Health Audience Segmentation. Journal of Health Communication. 2014;1(3):267-283.
 24. Slater MD. Theory & Method in Health Audience Segmentation. Journal of Health Communication. 1996;1(3):267-283.
 25. Stephanie JS, Julie BS, Leslie D. Development of the Beliefs about Yoga Scale. International Journal of Yoga Therapy. 2011;(21):85-91.
 26. Toji H, Suei K, Kaneko M. Community relations and issues management: An issue orientation approach to segmenting publics. Journal of Public Relations Research. 2012;6(2):105-123.
 27. Toji H, Suei K, Kaneko M. Effects of Combined Training Loads on Relations among Force, Velocity, and Power Development. Journal of Sports Psychology. 2012;12(15):35-40.
 28. Vaid S, Kaur P, Lehri A. A study of Body Mass Index in Boys of 10-17 years in age. Journal of Exercise Science and Physiotherapy. 2009;5(2):132.
 29. Uria JS, Sanz-Medel A. Inorganic and methylmercury speciation in environmental samples. Talanta. 1998 Nov 1;47(3):509-24.