

# Relation of Physical Fitness Index with Body Mass Index: Study Among Female Students of Balwant College Vita, Dist. Sangli, (M.S.), India

Rahul Patil<sup>1</sup>, Satyawar Patil<sup>2</sup>, Yogita Patil<sup>3</sup>, Rajaram Atigre<sup>4</sup>

Department of Zoology, Balwant College, Vita<sup>1,3</sup>

P.G. Department of Zoology, A.S.C. College, Palus<sup>2</sup>

Department of Zoology, Shri. Vijaysinha Yadav College, Pethvadgaon<sup>4</sup>

**Abstract:** The present study was undertaken to find out the correlation between Physical Fitness Index (PFI) and Body Mass Index (BMI). Physical Fitness Index was measured using the Modified Harvard step test. BMI was calculated by the Quetelet Index. In the present study total 85 female students having the age group between 18 to 25 years were selected from Balwant College, Vita. The present study showed that 64.70 % students were having low average PFI. 28.23 % students were having poor average PFI. 5.88% students were having high average PFI. 1.75 % Students were having good PFI. This study showed that there was no correlation between BMI and Physical Fitness.

**Keywords:** PFI, Harvard Step Test, BMI, Quetelet Index, etc.

## REFERENCES

- [1] Apoorva Uday Munagekar, Apoorva Likhite (2021). Comparison of Physical Fitness Index (PFI) between Spinning (indoor cycling) female practitioners and Zumba female practitioners using Modified Harvard's Step Test: A pilot study. Int J Physiother Res 9 (2), 3800-3807. DOI: 10.16965/ijpr.2021.114.
- [2] Caspersen, C.J., Powell, K.E., Christenson, G.M. (1985). Physical activity, exercise, and physical fitness: definitions and distinctions for health-related research. Public Health Rep., 100(2):126-131.
- [3] Dharmesh Parmar and Vishwas Vaghela (2015). Study of physical fitness index using modified harvard step test in relation with body mass index in physiotherapy students. IJRMR, 2 (12), 1075-1077.
- [4] Jyoti P Khodnapur et al. (2012). Status of Physical Fitness Index (PFI %) and Anthropometric Parameters in Residential School Children Compared to Nonresidential School Children, Journal of Krishna Institute of Medical Sciences University 1 (2) 137 -141.
- [5] Mahajan and Rawat (2020). Physical fitness index and Body mass index among physiotherapy students, Physiotherapy-The Journal of Indian Association of Physiotherapists, 84-88. DOI: 10.4103/PJIAP.PJIAP\_25\_19.
- [6] Srivastava, S., Dhar, U., Malhotra, V. (2013). Correlation between physical fitness and body mass index. IJCR., 5(23): 44-48.
- [7] Shashiala, L. and Geetanjali, H. (2014). Efficiency of Recovery pulse rate as an index of physical fitness. Indian Journal of fundamental and applied life science. vol 4(2), April-June, pp 216-219.
- [8] Summaya Saeed et al., (2013). Relationship Between Bmi and Blood Pressure Among Students Of 3rd Year at Institute of Medical Technology (Duhs), Quarterly Medical Channel 19 (4)., 5-8.
- [9] Pescatello, L. (2014). American College of Sports Medicine: ACSM's guidelines for exercise testing and prescription. Philadelphia: Wolters Kluwer/Lippincott Williams & Wilkins Health.
- [10] Powell, K.E. and Blair S.N. (1994). The public health burdens of sedentary living habits: theoretical but realistic estimates. Med.Sci.Sports Exerc., 26:851.
- [11] Valerija Puskas et. al (2020). Body Mass Index and Blood Pressure-to-Height Ratio in Predicting Incidence of Hypertension in Serbian Children. Children, 7, 254; doi:10.3390/children7120254.
- [12] Wolters Kluwer (2018). ACSM's guidelines for exercise testing and prescription. Philadelphia.