Shital S. Raut: Comparative Analysis of Positional Variations in Physical Fitness and Body Mass Index (BMI) Among Handball Players of Yavatmal District

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# Research and Development

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Research and Development / संशोधन आणि विकास / 2

10	Heat and Dust: Ruth Prawer Jhabvala's 'Insider-outsider' View		
11	- Dr. Vijay D. Bhange Biodiversity and Human Health: A Symbiotic Relationship - Rahul A. Sinha	99-115	
12	Dalit women feminism & Rebel traversed in Jyoti Langewar' Poem, 'Mother' & 'Caves' - Prof. P. S. Jawade	116-120	
13	Giants Through the Lens of Alienation in Rowling's Harry Potter series - Dr. S. S. Joshi	121-131	
14	Fuzzy Logic in Temperature Control Systems: Adaptive and Intelligent Solutions - Dr. Vicky Watkar	132-141	
15	National Education Policy 2020 and Research in Higher Education - Dr. Pavan Mandavkar	142-147	
16	Heavy Metals, their Health Effects and its Precautions - Dr. Dasharath M. Chavhan		
17	Schiff Base Ligands: Formation of a Thiadiazole Ring by Vanadium-Induced Cyclization of the Coordinated Ligand - Suraj A. Deshmukh		
18	Recent Advancements in the Spintronics 161 Application of Carbon Nanotube - Kailash Nemade		
19	Applications of Statistics in Research - Dr. Ved Ramesh Patki		
20	Comparative Analysis of Positional Variations 17 in Physical Fitness and Body Mass Index (BMI) Among Handball Players of Yavatmal District - Shital S. Raut		
21	A Comparative Study among Working and Non-Working Women with Respect to Life Satisfaction - Dr. Pandurang Ingle		

Research and Development / संशोधन आणि विकास / 5

## Comparative Analysis of Positional Variations in Physical Fitness and Body Mass Index (BMI) Among Handball Players of Yavatmal District

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#### Abstract

This research aims to investigate the comparison between physical fitness and BMI concerning the position of handball players in Yavatmal district. The study encompasses a total sample size of sixty subjects, with twenty players each from back, centre, and forward positions, practicing handball for a minimum of one year across various government and private clubs/grounds in Yavatmal (M.S.). The age range of the participants falls between 18 to 25 years, and random sampling techniques were employed for participant selection. The study's hypothesis postulates that there is a significant difference in physical fitness and BMI among players of different positions. Statistical analysis will involve an independent samples t-test to compare physical fitness and BMI scores across forward, centre, and back position players, the study seeks to identify any significant differences in physical fitness and BMI, thereby informing training strategies and player development programs in the sport.

Keywords: Handball, Physical Fitness, Body Mass Index (BMI), Playing Positions, Comparative Analysis, Yavatmal District.

Research and Development / संशोधन आणि विकास / 175

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