

**INDIAN JOURNAL OF PHYSICAL EDUCATION, SPORTS AND APPLIED  
SCIENCES**

ISSN 2229-550X (P) & 2455-0175 (O)

JOURNAL DOI-05.2016-44975451

IMPACT FACTOR- 4.991 (SJIF) 5.013(IJIF)

---

---

**Volume 10**

**Number 4**

**October, 2020**

---

---

**EDITOR-IN-CHIEF**

Dr. Rajkumar Sharma

**EDITOR**

Dr. Ashish Kumar Nigam

**SUB-EDITOR**

Devarshi Kumar Chaubey

**EXECUTIVE EDITORIAL BOARD**

**Prof. Dr. Dilip K. Dureha**, Vice Chancellor, Laxmibai National Institute of Physical Education (Deemed University), Gwalior (M.P.) India

**Prof. Dr. Ravindra Kumar Yadav**, Department of Physical Education, Rani Durgawati Vishwavidyalaya Jabalpur (M.P.) India

**Prof. Dr. Rajendra Singh**, Director & Head Department of Physical Education Jiwaji University, Gwalior (M.P.) India

**Prof. Dr. S. K. Yadav**, Department of Physical Education D.A.V Vishwavidhyalya, Indore (M.P.) India

**Prof. Dr. Guru Dutt Ghai** Laxmibai National Institute of Physical Education (Deemed University), Gwalior (M.P.) India

**Prof. S. N. Sharma (Retd.)** Department of Physical Education, Punjab University, Chandigarh (U.T.) India

**Dr. H.S. Atwal**, Department of Physical Education, Awdesh pratap university. University, Rewa (M.P.) India

**Dr. R. K. Pathania**, Chief Coach, Sports Authority India, Netaji Subash National Institute of Sports, Motibagh, Patiala (Punjab) India

**Dr. Vishal O Banne**, Assistant Professor, Department of Physical Education, Rani Durga Wati University, Jabalpur (M.P.) India

**Dr. Gulbahar Khan**, Assistant Professor, Department of Physical Education, Noida College of Physical Education, Noida (U.P.) India.

**REVIEWERS**

**Dr. Ravi Bhushan** Dr. Babasaheb Ambedkar University, Marathwada University, Aurangabad (Mharashtra) India

**DR. Santosh Kumar Behera** Assistant Professor, Department of Education, Sidho-Kanho-Birsha University, Ranchi Road, Purulia, (West Bengal), India

**DR. Baljit Singh Sekhon**, Dy. Director Sports & Head, Nagaland University -A Central University, (Lumami), India

**Dr. Ramesh Chand Yadav** Lakshmbai National Institute of Physical Education, NERC, Tepesia, Sonapur, Guwahati (Assam) India

**Dr. Vinay Pawar** Director of Sports, Shirpur Education Society Shirpur Dist Dhule (Maharashtra) India

**Dr. Harbans Lal Godara** Department of Physical Education, Kendriya Vidyalaya Sangathan (Govt. Of India) Lalgarh Jattan - Sriganganagar (Rajasthan) India .

- Dr. Sachin Sinha, Director**, Department of Oral Pathology and Microbiology, Narain Oral and Dental Care ,Malleshwaram, Bangalore (Karnataka), India.
- Dr. Jaishanker Yadav**, Associate Professor, Department of Physical Education, Dr. C. V. Raman University, Kota Road Bilaspur (Chhattisgarh) India
- Dr. Sudhir Rajpal**, Associate Professor, Department of Physical Education, Dr. C. V. Raman University, Kota Road Bilaspur (Chhattisgarh) India
- Dr. Yuwraj Shrivastav**, Assistant Professor, Department of Physical Education, Dr. C. V. Raman University, Kota Road Bilaspur (Chhattisgarh) India
- Dr. Anil Kumar**, Assistant Professor, Department of Physical Education Shaheed Bhagat Singh Evening College, Shekh Sarai, Phase-II, New Delhi India
- Dr. Vishwashambhar Jadhav**, Assistant Professor, Department of Physical Education, University of Mumbai (M.S.), India.
- Dr. P. Satheesh kumar**: Department of Physical Education, Bharathidasan University, Tiruchirappalli (Tamil Nadu)
- Dr. G. Kumaresan**, Associate Professor, Department of Physical education Bharathiar University, Coimbatore (Tamilnadu)
- Dr. Dharmendra Narwaria**, Sports officer, Jawaharlal Nehru Krishi University, Jabalpur (M.P.)
- DR. Kuntal Barua**, Assistant Professor, Sangam University, Bhilwara (Rajasthan)
- Dr. Ramneek Jain**, Associate Professor, Dept. of Physical Education, APEX University, Jaipur (Raj.)

**CORRESPONDANCE ADDRESS:**

Dr. Rajkumar Sharma, Editor-in-Chief, 284/1, In front of Main I. T. I. Gate, Near Evergreen Nursery, Centre Koni, Bilaspur (CG) -495009 INDIA  
E-mail: sharmagym59@yahoo.co.in  
Wsbsite-www.sportscientistsviews.com

## INDEXING AND IMPACT FACTOR BY RENOWNED INSTITUTIONS

 <b>INNO SPACE</b> SJIF Scientific Journal Impact Factor SJIF-4.991 (2016)	 International Innovative Journal Impact Factor (IIJIF) <b>Impact Factor- 5.013 (2016-17)</b>
 International Institute For Research Impact Factor Journals (IFJ) <b>Impact Factor-3.992 (2015-16)</b>	 Measure Of Journal Quality <b>Impact. Factor-3.715 (2016-17)</b>
 IJIS	 GENERAL IMPACT FACTOR
 slideshare	 <b>J-Gate</b> <i>The Largest E-Journal Database &amp; Gateway</i>
 CiteFactor Academic Scientific Journals	JOURNALS IMPACT FACTOR 
 Google Scholar	 Academic Resource Index ResearchBib
 Directory of Science	 AcademicKeys UNLOCKING ACADEMIC CAREERS
Impact Factor-1.03   DIIF DRJI	Digital Online Identifier- Database System  <b>DOIJIF-3.71 (2015-2016)</b>
  INTERNATIONAL STANDARD SERIAL NUMBER Indexing   JIF Evaluation	 Present Yourself
 INDIANScience.in	 OCLC WorldCat®
  DIRECTORY OF OPEN ACCESS SCHOLARLY RESOURCES Indexed Turkish Education	  DESTINATION GUIDES TO CITY AND STATE Yellow Browser JOURNAL FACTOR
 ADVANCED SCIENCE INDEX	 Indian Citation Index

NEXT ISSUE IS GOING TO RELEASE IN THE MONTH OF January , 2020

**Aims & Scope :** The Indian Journal of Physical Education, Sports and Applied Sciences (IJPEAS) is a scientific printed and electronic journal established by Physical Educationist and Sports Scientist of India , publishing both research and review articles in the fields of sports and exercise sciences as well as Applied Sciences. IJPEAS also publishes: progress articles, case studies, technical articles, editorials, letters to the editor, abstracts from international and national congresses. IJPEAS is published quarterly in Jan., April, July and October. Supplemental issues are published according when needed.

IJPEAS is printed and electronic journal dedicated to promoting scientific knowledge in the multidisciplinary field of sports and applied sciences. According to policy of publishing and format of IJPEAS , the delay in the publishing process is minimal and IJPEAS is unique discussion panel for researchers in the field. IJPEAS covers all aspects of sports and applied sciences including kin- anthropometry, sports medicine, biomechanics and biophysical investigation of sports performance, coaching & performance, motor control & learning, exercise physiology, sports nutrition & biochemistry, sports psychology, historical, philosophical and sociological perspectives of sport, management , sport law, physics, chemistry, zoology as the applied sciences etc.

**Instructions for authors :** Indian Journal of Physical Education, Sports and Applied Sciences is a broad quarterly journal that aims to bridge the gap between all professionals in the fields of sports sciences. The journal serves an international audience and is of interest to professionals worldwide. The journal covers major aspects of sports sciences - biomechanics, motor learning & control, sports medicine, Sports and exercise physiology, sport testing and performance, sports psychology, Sports Sociology, Sports Anthropometry, sports management, Physical Education, Yoga, other such subjects having inter-disciplinary perspective with specific application to sports and applied sciences etc.

The journal publishes original research utilizing a wide range of techniques and approaches, reviews, commentaries and short communications. Submission of Manuscripts. Authors are strongly encouraged to submit manuscripts in electronic files, emailed to the Editor-in-Chief, Dr. Rajkumar Sharma at e-mail address: [sharmagym59@yahoo.co.in](mailto:sharmagym59@yahoo.co.in) or [www.sportscientistsviews.com](http://www.sportscientistsviews.com) Each manuscript must be accompanied by a statement that it has not been published elsewhere and that it has not been submitted! simultaneously for publication elsewhere. Authors are responsible for obtaining permission to reproduce copyrighted material from other sources and are required to sign an agreement transferring the copyright to the publisher.

All accepted manuscripts, artwork, and photographs become the property of the publisher. Authors are asked to submit with the manuscript the names, mailing addresses, and e-mail addresses of the individuals that would be suitable independent reviewers.

# INDIAN JOURNAL OF PHYSICAL EDUCATION, SPORTS AND APPLIED SCIENCES

(Quarterly Publication)

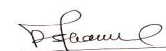
## VOLUME 10, NO. 4, October, 2020

S. NO.	TITLE OF PAPER & AUTHORS	State / Country	P. NO.
1	RELATIONSHIP OF SELECTED PHYSIOLOGICAL VARIABLES WITH SWIMMING PERFORMANCE: A PILOT STUDY Meriline Gogoi and Kiriti Kamal Bora	Assam	1-5
2	COMPARISON OF AGILITY BETWEEN FOOTBALL AND VOLLEYBALL NORTH-ZONE PLAYERS Deepak Prakash	Utra.khand.	6-8
3	COMPARISON OF BODY FAT PERCENTAGE OF U/21 SOCCER TEAMS OF BHUTAN, BANGLADESH AND INTER-UNIVERSITY TEAM OF INDIA Avinash Kharel & Dr. Sujay Bisht	Assam	9-13
4	COMPARATIVE STUDY OF LEADERSHIP QUALITIES BETWEEN PROFESSIONAL AND NON-PROFESSIONAL STUDENTS Tasleem Arif Sheikh & Dr.Minakshi Pathak	M.P.	14-21
5	COMPARATIVE STUDY OF PHYSICAL FITNESS VARIABLES OF SCHOOL LEVEL RURAL AND URBAN FOOTBALL PLAYERS Gayas Ul Din Wani & Dr. Minakshi Pathak	M.P.	22-29
6	ESTIMATION OF BLOOD LACTATE WITH THE PROGRESSION OF A FOOTBALL MATCH. Sumit Kumar Murmu & Dr Kallol Chatterjee	West Bengal	30-35
7.	IMPACT OF CLIMATIC PARAMETERS ON OUTDOOR SPORT ACTIVITIES IN NAMSAL, ARUNACHAL PRADESH Dr. Biplob Tripathy and Sandip Sinha	Arunachal Pradesh	36-46
8.	COMPARISON OF ATTITUDE BETWEEN BOYS AND GIRLS STUDENTS TOWARDS PHYSICAL ACTIVITY Harjinder Kaur	Chandigarh	47-53
9.	<b>IMPACT OF SPORTS CULTURE ON HUMAN HELATH</b> <b>Dr. Ravindra Baliram Khandare</b>	<b>Maharastra</b>	<b>54-57</b>
10	A STUDY OF KNOWLEDGE AND PRACTICE OF BALANCED DIET ON NATIONAL LEVEL MALE ATHLETES OF TEAM GAME AND INDIVIDUAL GAME Basanti Bamaniya Dr. Vivek B. Sathe & Dr. V.F. Peter	M.P.	58-64
11	BOOK REVIEW-ESSENTIALS OF SPORTS PSYCHOLOGY Dr. Ashish Kumar Nigam	M.P.	65-67
12	EFFECTIVENESS OF 6 WEEKS FOOTBALL TRAINING ON FLEXIBILITY OF MALE STUDENTS Amit Kumar Paras & Dr. Alka Nayak	M.P.	68-71
13	A STUDY ON THE PSYCHOSOCIAL IMPACT OF SPORTS INJURIES ON COLLEGE ATHLETES IN KERALA, Devan. C. H	Tamil Nadu	72-79
14	EFFECTIVENESS OF SIX WEEKS FOOTBALL TRAINING ON MUSCULAR ENDURANCE OF MALE FOOTBALL PLAYERS OF RAIGARH DISTRICT Amit Kumar Paras & Dr. Alka Nayak	M.P.	80-83
15	A STUDY ON HEALTH RELATED PHYSICAL FITNESS STATUS OF MALE PHYSICAL EDUCATION STUDENTS OF DIFFERENT AGE GROUPS , Biswanath Garai	West Bengal	84-88

## **EDITORIAL**

I feel pleasure that the **Volume 10, N0.4, October, 2020** of “Indian Journal of Physical Education, Sports and Applied Sciences” from the state of Chhatisgarh is out for the readers. This issue of IJPESAS contains 08 research articles on important aspect of physical education, sports and applied sciences. The lead article by the young physical educationist are given below:

**Gogoi and Bora** (Assam) showed that heart rate and blood lactate had a positive correlation to swim performance, which determines increase in heart rate and blood lactate will increase the swim time whereas core temperature has shown to have a negative correlation to swim time which determines increase in core temperature will decrease swim time. **Prakash** (Utrakhand.) indicated the significant difference between Football and Volleyball players. Male University Football players are more Agile (good agility) in Comparison to male University Volleyball players. **Kharel & Bisht** (Assam) significant finding was identified. Bhutan team had the lowest BF% in comparison to Bangladesh team and Inter-university team of India. Assessment of body composition is an important component of an ongoing monitoring of athletes interested to improve soccer performance. **Sheikh & Pathak** (M.P.) concluded that the percentage of responses are found difference between the professional and non-professional students towards leadership qualities, like, communication skill, decision making, co-operation etc. as the calculated Chi-square values are greater than the tabulated values. It is also indicated that professional students have positively higher leadership qualities in comparison to non-professional students. **Wani & Pathak** (M.P.) revealed that significant difference found in between Rural and Urban Football players. It was also observed that Rural Football players are better than the and Urban Football players in physical fitness variables, Hence the researcher stated hypothesis is accepted. **Murmu & Chatterjee** (W. B.) revealed that there is a significant change in the concentration of blood lactate with the progression of a football match. **Tripathy and Sinha** (Arunachal Pradesh) reviewed the environmental relate factors those are susceptible to increase with climatic conditions while exercising, participating in sports and recommendations to combat them appropriately. To gain the optimum results in sports performance with minimal sports injuries by understanding Sports Science and Exercise Physiology. **Kaur** (Chandigarh) revealed that the variables namely general attitude, physical education, and scientific basis were found significantly different in boys and girls students. **Garai** (West Bengal) revealed that the cardio-respiratory endurance, muscular strength-endurance and flexibility were found better in high age group male physical education students than their counter parts. The BMI was found better in low age group male physical education students than their counter parts. **Khandare** (MH) expressed that sports and culture are widely perceived to generate impacts, sports bring competition, teach morality, integrity and ambition, are exciting amusing and challenging. **Bamaniya, Sathe & Peter** (M.P.) revealed that Kho-kho, hockey, and basketball players were found to have good knowledge of balanced diet than kabaddi players. Kho-kho, and kabaddi players have good practice of balanced diet than hockey and basketball players. Athletic and tennis players were found to have good knowledge of balanced diet as compared to badminton and wrestling players. Badminton players have good practice of balanced diet than Tennis and Wrestling players. **Nigam** (M.P.) reviewed the book entitled “Essential of Sports Psychology” written by Dr. Rajkumar Sharma Ex-Chief Coach Gymnastics, Sport Authority of India, New Delhi. He felt that this book draws information from various sport science fields neatly together and provides an up-to-date account of assessment options for field sports, fulfilling its aim of providing an interface between the academic and applied aspects of science and coaching. **Paras & Nayak** (M. P.) found that there was significant difference in flexibility component of as physical fitness in experimental group and Control group. **Devan** (T. N.) concluded that the college athletes perceive their injury experiences differently from one another according to their personal traits and living circumstances, and complete social support and recognition is of paramount importance for the wellbeing of both injured and uninjured athletes. As a matter of fact, it is not only the psychological factors, but the sociological aspects also inextricably connected to sports injuries. **Paras & Nayak** (M.P.) assessed the effect of football training, on muscular endurance of male footballers of Raigarh district of Chattisgarh studying in various institutions. They concluded that 6 weeks of football training is effective in improvement of muscular endurance of athletes. **Garai** (W.B.) revealed that the cardio-respiratory endurance, muscular strength-endurance and flexibility were found better in high age group male physical education students than their counter parts. The BMI was found better in low age group male physical education students than their counter parts .



**Dr. Rajkumar Sharma**  
Editor-in-Chief