ISSN 2321-6557

RNI NO. : PUNENG/2012/47863

SPORTS RESEARCH

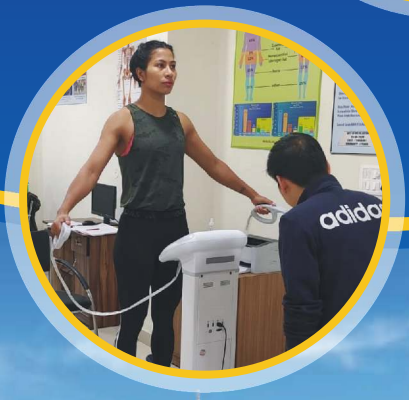
Vol.13 No. 1 & 2
Jan.-April, 2024

Quarterly













SPORTS AUTHORITY OF INDIA
Netaji Subhas National Institute of Sports Patiala

www.nsnis.org

SPORTS RESEARCH

The Quarterly Research Journal on Sports & Sports Science

Editor-in-Chief : **Vineet Kumar**
Editor : **Yumnam Momo Singh**

Printed and Published in January 2026
By SAI Netaji Subhas National Institute of Sports, Patiala

Printed at
Rajpura Printing Press
Arna Barna Bazar, Patiala-147001 (Punjab) India

RNI Regn. No. PUNENG / 2012 / 47863

Copyright © SAI Netaji Subhas National Institute of Sports

Telephone : 0175-2211539 Fax: 0175-2212070
E-mail : mail@nsnis.org, **Website :** http://www.nsnis.org

Subscription Rates

INDIA

SAI Coaches & Scientists.....	Rs. 250/- per Annum
NIS Students and outsiders.....	Rs. 300/- per Annum
	Rs. 550/- two years
	Rs. 800/- three years
Single Copy & Old issues----------	Rs. 60/- per copy

FOREIGN

By Air Mail.....	US$ 60 per annum
By surface mail.....	US$ 45 per annum
Single copy & old issues.....	US$ 15 per copy

The rates are subject to change without any notice.

SPORTS AUTHORITY OF INDIA
Netaji Subhas National Institute of Sports
MOTI BAGH, PATIALA, INDIA

Sports Research | Jan-April, 2024 | Vol. 13, No. 1 & 2

CONTENTS

01

A Crystalized Exposition On The Skills-Required And Motivational Tendencies Of Close-In Fielders: A Case Study Of Indian Cricket

Rajasekhara Mouly Potluri, Venkata Rama Krishna Prasad Yarlagadda

17

Anthropometric And Somatotype Profiles Of Wushu Taolu Athletes: A Comparative Study

Yumnam Momo Singh, Divya Mohan Pradhan, Annu Pathania, Ravi Prakash Tripathi, Sangeeta Rani

26

The Effect Of Imagery Intervention On Imagery Ability And Competitive Anxiety Of Badminton And Fencing Athletes

Mohd. Sultan

34

Steps Towards Establishing A Coach Communication Evaluation Criteria For Cricket In Japan: A Scoping Review

Shizuka Miyaji, Naoki Alex Miyaji, Randeep Rakwal

52

Effect Of Playing Position On Anaerobic Power Profile And Back Strength Measures Of Trained Male Roll Ball Athletes: A Pilot Study

Soubhory Ganguly, Surojit Sarkar, Debmalya Das, Tambi Medabala

Information for Subscribers / Contributors

- The Sports Research, an official organ of the Sports Authority of India Netaji Subhas National Institute of Sports, is a quarterly Journal published in the months of January, April, July and October.
- The Journal publishes original research and review articles on sports and allied sports sciences.
- The subscription should be renewed promptly. The publishers cannot guarantee the supply of back issues, on belated renewals.
- Any change of address must be notified immediately.
- Remittances should be made through bank draft, in the name of 'SAI NSNIS, Patiala', payable at Patiala.
- All correspondence concerning business and editorial matters should be addressed to the Managing Editor, Sports Research, SAI NSNIS, Motibagh, Patiala-147 001, India.
- Subscription rates are subject to change.
- The copyright of the published material rests with the Publishers. Any reproduction of the material, in any manner, requires prior permission of the Publishers.
- The authors are responsible for the correctness of the facts mentioned in the articles and advertisements. Acceptance of the advertisement material does not imply endorsement.
- The opinions expressed in the articles are of the authors and not necessarily those of the Publisher.

EDITORIAL BOARD

Editor-in-Chief

Vineet Kumar

DDG/ Sr. Executive Director,
SAI NSNIS Patiala

Advisory Board

Prof. (Dr.) M.L. Kamlesh
Former Principal, LNCPE, Thiruvananthapuram

Prof. (Dr) G. L. Khanna
Former Pro Vice Chancellor, Manav Rachna International Institute of Research and Studies, Gurugram, Haryana

Editor
Yumnam Momo Singh
SAI NSNIS, Patiala

Managing Editor
Sibananda Mishra
SAI NSNIS, Patiala

Associate Editors

Dr. Pooja Gaur
Scientific Officer, Sports Nutrition, SAI NSNIS, Patiala

Dr. Deepak Mishra
Scientific Officer, Sports Psychology, SAI NSNIS, Patiala

Ms. G Vani Bhushnam
Scientific Officer, Sports Nutrition, SAI HQ, New Delhi

Dr. Athoni Rhetso
Scientific Officer, Anthropometry, SAI NSSC, Bangalore

Dr. Praveen Nair
Scientific Officer, Biomechanics, SAI NSSC, Bangalore

Mr. Tambi Medabala
Scientific Officer, Exercise Physiology, SAI NSNIS, Patiala

Dr. Snehunsu Adhikari
Scientific Officer, Exercise Physiology, SAI NSEC, Kolkata

Editorial Board Members

Dr. Masroo Jahan
Professor Clinical Psychology, Ranchi Institute of Neuro-Psychiatry and Allied Sciences (RINPAS), Ranchi, Jharkhand

Dr. H.B. Sharma, MD, DSM
Asst. Professor, Department of Physiology, Institute of Medical Sciences (IMS), Banaras Hindu University (BHU), Varanasi

Dr. Venugopal P N
Asst. Anthropologist,
Anthropological Survey of India, SRC Mysore

Dr Arijit Chakraborty
Assistant Professor, Dept. of Sports Physiology & Nutrition, National Sports University, Manipur

Dr. Viswanath Sunder
Assistant Professor, Department of Physical Education and Sports Science, Viswa Bharti University, West Bengal

Dr. Pintu Kumar Mahto
Assistant Professor, Yoga,
Sri Sri University, Odisha

Dr. Surojit Sarkar
HPA Exercise Physiology,
Sports Authority of India, NSNIS, Patiala

Dr. Nishi Mishra
Deputy Director, Defense Institute of Psychological Research, DRDO, New Delhi

Dr. Shivani Chandel
Associate Professor, Department of Anthropology,
Delhi University, Delhi

Dr. Harish Kumar
Assistant Professor, Department of Sports Science
Punjabi University, Patiala

Dr. Sunil G. Purohit
Assistant Professor,
Central University of Rajasthan, Rajasthan

Dr Sameer Kumar Yadav
Assistant Professor, Dept. of Sports Management and Coaching, LNIPE, Gwalior

Dr. Sarika Alreja
Assistant Professor, Thapar School of Liberal Arts and Sciences, Thapar Institute of Engineering & Technology (Deemed University), Patiala, Punjab

Dr Mithilesh Kumar Tiwari
Assistant Professor, Department of Psychology
S.M. College, Bhagalpur, T.M. Bhagalpur University, Bihar

Publication Assistant

Surinder Kaur

Vikrant Surve

Editorial

Greetings to the readers

The current issue comprises five research articles. The first article investigates the physical, physiological, technical, and mental skills, along with motivational factors, essential for close-in fielders in Indian cricket. A self-administered, validated questionnaire and Bayesian analysis were used to assess perceptions among players, ex-players, and specialized coaches. Findings highlight that multiple skill sets and motivations are crucial for excelling in close-in fielding roles. The study offers a pioneering insight into this specialized aspect of cricket within the southern Indian context.

In the second article, the researchers examine anthropometric and somatotype differences among Chang, Nan, and Taiji Taolu athletes in Wushu. Significant variations were found in height and arm span, while somatotype analysis showed Nan athletes were more muscular, and Taiji athletes had leaner physiques. The findings highlight that different Taolu events suit distinct body types, aiding athlete selection and training.

The third article explores the effect of imagery intervention on imagery ability and competitive anxiety among badminton and fencing athletes. Using pre- and post-test assessments with the SIAQ and SCAT, participants completed a four-week imagery training program. Results showed significant improvement in imagery ability and a reduction in competitive anxiety in both groups. The findings indicate that imagery training is an effective psychological strategy to enhance athletic performance.

The fourth article is a scoping review that examines coach communication in sport, highlighting its impact on leadership, athlete well-being, and coaching quality, particularly in Japanese cricket. It emphasizes the need for culturally sensitive coach education, clear behavioral standards, and continuous professional development to foster player-centered coaching and sustainable sport growth.

The fifth article examined positional differences in anaerobic power and strength among male Roll Ball players. Lower-body power showed no significant variation, while upper-body power differed, with forwards displaying higher outputs and midfielders greater fatigue resistance. Back strength and heart rate correlated positively with lower-body peak power, suggesting position-specific conditioning focused on power, endurance, or explosiveness.

We hope the readers will find these research articles interesting and useful.



Vineet Kumar
DDG/SED
SAI NSNIS, PATIALA
Editor-in-Chief